Antennas and Accessories

General Product Catalogue 2015

SKYMASTS™

PROCOM

A part of the PROCOM group

Skymasts Antennas is a world-class, innovative and agile UK antenna manufacturer, supplying outstanding wireless base station antenna products and accessories to a global market.

Skymasts antenna products are used within a wide range of industries and applications, within the frequency range of 25 MHz to 5.8 GHz. This ranges from small two way communications systems or a simple wireless application, to large-scale and complex national infrastructure.

Working with some of the world's most respected OEMs, system integrators and network infrastructure operators, Skymasts has built a well-earned reputation for producing quality, reliable and innovative products. This reputation has afforded Skymasts numerous accolades, such as being the preferred supplier to some of the world's largest Critical Communications infrastructures.

Skymasts covers a wide selection of industry sectors across both civil and defence wireless communications. Our commitment to the on-going research and development in the latest technologies ensures we continue to add value to these sectors, helping to establish us as a global market leader.

Skymasts currently supports products and services within the following business sectors:

- **Private Mobile Radio** PMR, TETRA, DMR, P25, MPT1327
- **Telemetery** Wireless Infrastructure & Metering Systems / MPT1411
- **Aviation** Defense and civil communications
- **Broadcast** FM, DAB and UHF TV
- **Public Transport** Vehicle logistics and real-time information
- **Cellular** In-building and repeater applications
- **Military** communication systems
- **Marine** communications and AIS systems

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Directional Antenna Product Range

Standard Range Aluminium Yagi Antennas

Type Designation	Description	Frequency band	Gain, dBd	Page
S.2Y	Two element Yagi antenna	Manufactured between 68-500MHz	3	8
S.3Y	Three element Yagi antenna	Manufactured between 68-500MHz	6	9
S.4Y	Four element Yagi antenna	Manufactured between 68-500MHz	7.5	10
S.6Y	Six element Yagi antenna	Manufactured between 88-500MHz	8.5	11
S.8Y	Eight element Yagi antenna	Manufactured between 145-500MHz	10	12
S.8YS	SHF Eight element Yagi antenna	Manufactured between 790-1200MHz	10	13
S.12Y	Twelve element Yagi antenna	Manufactured between 300-500MHz	12	14
S.12Y4B-460	Twelve element Yagi antenna, UHF Link	450-470MHz	12	15
S.12YS	SHF Twelve element Yagi antenna	Manufactured between 790-1200MHz	12	16
S.18Y	Eighteen element Yagi antenna	Manufactured between 300-500MHz	14.7	17
S.18YS	SHF Eighteen element Yagi antenna	Manufactured between 790-1200MHz	14.7	18

Circular and Cross Polar Yagi Antennas

Type Designation	Description	Frequency band	Gain, dBd	Page
S.PAGE	Circular downfire ‘paging’ antenna	Manufactured between 68-500MHz	6	19
S.3YX	Three element circular Yagi antenna	Manufactured between 68-500MHz	6	20
S.8YX	Eight element circular Yagi antenna	Manufactured between 240-500MHz	10	21
S.12YX	Twelve element circular Yagi antenna	Manufactured between 300-500MHz	12	22
S.8YX-MM	Eight element Cross Polar Yagi antenna, MimoMax	Manufactured between 300-500MHz	10	23
S.12YX-MM	Twelve element Cross Polar Yagi antenna, MimoMax	Manufactured between 300-500MHz	12	24

Shrouded Yagi Antennas

Type Designation	Description	Frequency band	Gain, dBd	Page
744.01	GSM900 Shrouded yagi antenna	790 - 960 MHz	15	25
744.02	1.5GHz Shrouded yagi antenna	1300 - 1560 MHz	17	26
744.03	DCS1800 Shrouded yagi antenna	1710 - 1880 MHz	17	27
744.05	1 - 1.1GHz Shrouded yagi antenna	1000 - 1100 MHz	15	28
744.06	UMTS Shrouded yagi antenna	1900 - 2170 MHz	17	29
744.08	710-777MHz Shrouded yagi antenna	710 - 777 MHz	13.5	30
726.01	GSM900 Shrouded yagi antenna	790 - 960 MHz	11	31
726.02	1.5GHz Shrouded yagi antenna	1200 - 1600 MHz	13	32
726.03	DCS1800 Shrouded yagi antenna	1700 - 1900 MHz	13	33

Directional Antenna Product Range

UHF Panel Antennas, X-POL

Type Designation	Description	Frequency band	Gain, dBi	HBW, º	Page
766.65.15.00	Cross polar UHF 65º panel antenna	380 - 470MHz	15	65	34
766.90.13.00	Cross polar UHF 90º panel antenna	380 - 470MHz	13	90	35
766.12.11.00	Cross polar UHF 120º panel antenna	380 - 470MHz	11	120	36
766.65.12.00	Cross polar UHF 65º panel antenna	380 - 470MHz	12	65	37
766.90.10.00	Cross polar UHF 90º panel antenna	380 - 470MHz	10	90	38
766.12.08.00	Cross polar UHF 120º panel antenna	380 - 470MHz	8	120	39

UHF Panel Antennas, V-POL

Type Designation	Description	Frequency band	Gain, dBi	HBW, º	Page
760.65.15.00	V-Pol UHF 65º panel antenna	380 - 470MHz	15	65	40
760.90.13.00	V-Pol UHF 90º panel antenna	380 - 470MHz	13	90	41
760.12.11.00	V-Pol UHF 120º panel antenna	380 - 470MHz	11	120	42
760.65.12.00	V-Pol UHF 65º panel antenna	380 - 470MHz	12	65	43
760.90.10.00	V-Pol UHF 90º panel antenna	380 - 470MHz	10	90	44
760.12.09.00	V-Pol UHF 120º panel antenna	380 - 470MHz	8	120	45

Log Periodic Antennas

Type Designation	Description	Frequency band	Gain, dBi	Page
S.LPA-98	FM Broadcast Log Periodic	87.5 - 108 MHz	8	46
S.LPA-675	UHF TV Broadcast Log Periodic	468 - 870 MHz	10	47
S.LPA-118	VHF Ground to Air Log Periodic	118 - 162 MHz	10	48
S.LPA-225	UHF Ground to Air Log Periodic	225 - 400 MHz	10	49
734.02	Cellular Log Periodic Antenna	870 - 2700 MHz	12	50

Corner Reflector Antennas

Type Designation	Description	Frequency band	Gain, dBd	Page
S.CR-90	45º VHF/UHF Corner reflector	Manufactured between 138-500MHz	10	51
S.CR-120	60º VHF/UHF Corner reflector	Manufactured between 138-500MHz	8	52
755.01	GSM900 22º Corner reflector antenna	890 - 960 MHz	15	53
755.04	GSM900 45º Corner reflector antenna	890 - 960 MHz	12	54
755.02	DCS1800 22º Corner reflector antenna	1710 - 1880 MHz	15	55
755.05	DCS1800 45º Corner reflector antenna	1710 - 1880 MHz	12	56

Directional Antenna Product Range

Light Duty Range Yagi Antennas / Cellular Subscriber Antennas

Type Designation	Description	Frequency band	Gain, dBd	Page
7161.3	GSM900 Light duty Yagi antenna	870-960MHz	8.5	57
7161.4	DCS1800 Light duty Yagi antenna	1710-1880MHz	10	58
7161.31	GSM High gain light duty Yagi antenna	870-960MHz	10	59
7161.41	DCS High gain light duty Yagi antenna	1710-1880MHz	12	60
7161.5	UMTS/3G light duty Yagi antenna	1900-2170MHz	12	61

Omnidirectional Antenna Product Range

End Fed Dipole and Colinear Antennas, Standard Range

Type Designation	Description	Frequency band	Gain, dBd	Page
S.EFX	Broadband glassfibre end-fed dipole	Manufactured between 68-500MHz	0	62
S.C3B	Broadband 3dBd glassfibre colinear antenna	Manufactured between 118-960MHz	3	63
S.C6B	Broadband 6dBd glassfibre colinear antenna	Manufactured between 300-500MHz	6	64

End Fed Colinear Antennas, Low PIM Heavy Duty Range, TETRA / P25

Type Designation	Description	Frequency band	Gain, dBd	Page
4220.03	Low PIM 3dBd HD Colinear	380 - 430 MHz, 420 - 470 MHz	3	65
4220.06	Low PIM 6dBd HD Colinear	380 - 430 MHz, 420 - 470 MHz	6	66
4220.09	Low PIM 9dBd HD Colinear	380 - 430 MHz, 420 - 470 MHz	9	67

Broadband HD End Fed Dipole and Colinear Antennas, Ground to Air, DAB

Type Designation	Description	Frequency band	Gain, dBd	Page
438 Series	Broadband ground plane antenna	Bands between 68-224MHz	0	68
470.01.05.00	Broadband VHF ground-air dipole	108 - 175 MHz	0	69
470.02.05.00	Broadband UHF ground-air dipole	225 - 400MHz	0	70
470.05.05.00	Broadband ground-air dipole	100 - 400 MHz	0	71
470.04.33.00	High power DAB dipole antenna	208 - 235 MHz	0	72
470.34.33.00	3dB High power DAB dipole antenna	208 - 235 MHz	3	73

Centre-Fed Dipoles and Dipole Arrays Antenna Product Range

Centre-Fed Dipole Antennas

Type Designation	Description	Frequency band	Gain, dBd	Page
S.1	Centre-fed folded dipole antenna	Manufactured between 68-700MHz	2	74
S.1H	Heavy duty centre-fed folded dipole	Manufactured between 68-176MHz	2	75

Stacked Dipole Arrays

Type Designation	Description	Frequency band	Gain, dBd	Page
S.M2	Two element stacked dipole array	Manufactured between 68-500MHz	5	76
S.M2C	Two-stack cardioid dipole array	Manufactured between 68-500MHz	2.7	77
S.M4	Four element stacked dipole array	Manufactured between 117-500MHz	8.7	78
414.04	TETRA 4-Stack Dipole (Unidirectional)	380 - 430 MHz	8.7	79
4104.04	TETRA 4-Stack Dipole (Omnidirectional)	380 - 430 MHz	5.7	80
S.M4C	Four-stack cardioid dipole array	Manufactured between 117-500MHz	5.7	81
SM8	Eight element stacked dipole array	Manufactured between 138-500MHz	11.5	82
S.M2/4	Two-stacked four dipole array	Manufactured between 138-500MHz	3	83
S.M4/8	Four-stacked eight dipole array	Manufactured between 138-500MHz	5.7	84

Miscellaneous Dipole Arrays

Type Designation	Description	Frequency band	Gain, dBd	Page
S.H6	Horizontally polarised dipole array	450 - 470 MHz	3	85
S.CDA	Cardioid dipole array	Manufactured between 68 - 208 MHz	2.7	86
S.LBLAD	FM Radio Broadcast Lindenblad Array	Manufactured between 87.5 - 108 MHz	0	87

Vehicle Antennas Antenna Product Range

Heavy Duty Vehicle Antennas

Type Designation	Description	Frequency band	Gain, dBd	Page
401	VHF HD low profile vehicle antenna	158 - 162 MHz	0	88
403.02	VHF low profile vehicle antenna	Manufactured between 138-220MHz	-1	89
472.01.05.00	UHF vehicle antenna	380 - 470 MHz	0	90
4142	GSM / GPS ehicle antenna	806 - 870 MHz, 870 - 960 MHz	0	91
4172.01.05.00	GSM vehicle antenna	870 - 960 MHz	0	92

Indoor Antennas Antenna Product Range

Wall and Ceiling Mount Indoor Antennas

Type Designation	Description	Frequency band	Gain, dBi	Page
752.01.05.00	UHF / TETRA Indoor panel antenna	380 - 470 MHz	4	93
802.00.05.00	TETRA / UHF ceiling mount antenna	380 - 470 MHz	1	94
802.01.05.00	TETRA ceiling mount antenna	380 - 430 MHz	2	95
802.02.05.00	UHF ceiling mount antenna	420 - 470 MHz	2	96

Antenna Accessories Power Splitters and Antenna Installation Equipment

Power Splitters

Type Designation	Description	Frequency band	Page
CPS2	Two Way Cable Power Divider	Manufactured between 27-500MHz	97
CPS3	Three Way Cable Power Divider	Manufactured between 27-500MHz	98
CPS4	Four Way Cable Power Divider	Manufactured between 27-500MHz	99
MM Series	Machined Equal and Unequal Power Splitters	Manufactured between 27-960MHz	100

Antenna Installation Equipment

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Mounting steelwork and accessories	103

S.2Y

Two Element Yagi Antenna

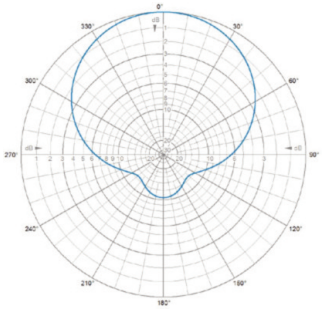
The S.2Y Series are of a rugged and reliable construction for communication networks at both VHF & UHF. The one piece folded dipole incorporates a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. These antennas give a gain of 3dBd with front to back ratio typically 13 dB. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket, although cable and connector options are available upon request.

Lightning Resistant Certified

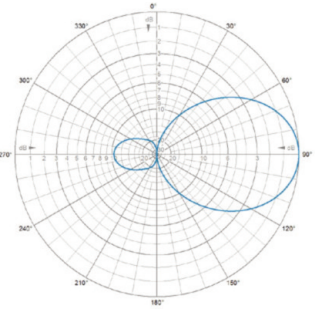
Frequency range	Manufactured between 68 - 500 MHz	
Input Impedance	50Ω	
Typical Bandwidth	±6% of centre frequency	
VSWR	<1.5:1	
Front to Back Ratio	13 dB	
Maximum Input Power	150 Watts	
Polarisation	Vertical & horizontal	
Forward Gain	3 dBd	
3 dB Beamwidth	E Plane 72°	
	H Plane 144°	
Standard Connection	3m Length of RG213 c/w 'N' type socket	
Elements	**<138MHz** 19.1mm dia.x 1.6mm wall Al. alloy 6063T6	
	>138MHz 12.7mm dia. x 1.6mm wall Al. alloy 6063T6	
Support Boom	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Saddle clamps	Diecast Al / Zinc alloy	
Balun Encapsulant	Polyurethane Resin U-600	
Lightning protection	Direct grounded	
Typical Weight	**VHF** 3.5 kg	**UHF** 1.3 kg
Typical Length	**VHF** 1.5 m	**UHF** 0.6 m
Typical Wind loading @ 45m/s	**VHF** 180 N	**UHF** 50 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

COP54
Galvanised steel cross clamp 32/50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
S.2Y-78	71-85MHz
S.2Y-127	117-137MHz
S.2Y-165	155-175MHz
S.2Y-184	176-192MHz
S.2Y-200	192-208MHz
S.2Y-395	380-410MHz
S.2Y-420	410-430MHz
S.2Y-445	420-470MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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S.3Y
Three Element Yagi Antenna

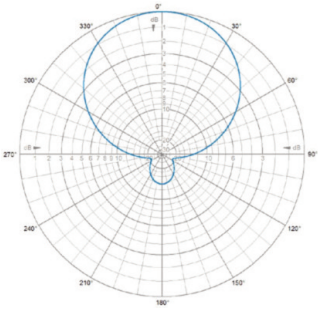
The S.3Y Series are of a rugged and reliable construction for communication networks at both VHF & UHF. The one piece folded dipole incorporates a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. These antennas give a gain of 6dBd with front to back ratio typically 15 dB. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket, although cable and connector options are available upon request.

Frequency range	Manufactured between 68 - 500 MHz	
Input Impedance	50Ω	
Typical Bandwidth	±6% of centre frequency	
VSWR	<1.5:1	
Front to Back Ratio	15 dB	
Maximum Input Power	150 Watts	
Polarisation	Vertical & horizontal	
Forward Gain	6 dBd	
3 dB Beamwidth	E Plane 62°	
	H Plane 84°	
Standard Connection	3m Length of RG213 c/w 'N' type socket	
Elements	**<138MHz** 19.1mm dia.x 1.6mm wall Al. alloy 6063T6	
	>138MHz 12.7mm dia. x 1.6mm wall Al. alloy 6063T6	
Support Boom	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Saddle clamps	Diecast Al / Zinc alloy	
Balun Encapsulant	Polyurethane Resin U-600	
Lightning protection	Direct grounded	
Typical Weight	**VHF** 4.5 kg	**UHF** 1.5 kg
Typical Length	**VHF** 2.2 m	**UHF** 0.7 m
Typical Wind loading @ 45m/s	**VHF** 240 N	**UHF** 52 N

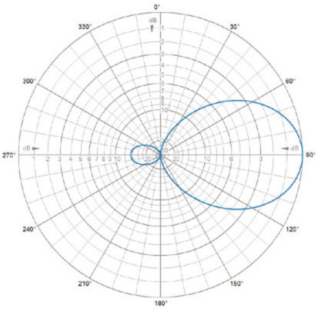
Lightning Resistant Certified

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

COP54
Galvanised steel cross clamp 32/50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
S.3Y-78	71-85MHz
S.3Y-127	117-137MHz
S.3Y-165	155-175MHz
S.3Y-184	176-192MHz
S.3Y-200	192-208MHz
S.3Y-395	380-410MHz
S.3Y-420	410-430MHz
S.3Y-445	420-470MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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S.4Y
Four Element Yagi Antenna

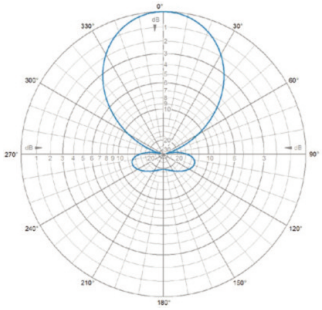
The S.4Y Series are of a rugged and reliable construction for communication networks at both VHF & UHF. The one piece folded dipole incorporates a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. These antennas give a gain of 7.5dBd with front to back ratio typically 15 dB. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket, although cable and connector options are available upon request.

Frequency range	Manufactured between 68 - 500 MHz	
Input Impedance	50Ω	
Typical Bandwidth	±6% of centre frequency	
VSWR	<1.5:1	
Front to Back Ratio	15 dB	
Maximum Input Power	150 Watts	
Polarisation	Vertical & horizontal	
Forward Gain	7.5 dBd	
3 dB Beamwidth	E Plane 57°	
	H Plane 74°	
Standard Connection	3m Length of RG213 c/w 'N' type socket	
Elements	**<138MHz** 19.1mm dia.x 1.6mm wall Al. alloy 6063T6	
	>138MHz 12.7mm dia. x 1.6mm wall Al. alloy 6063T6	
Support Boom	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Saddle clamps	Diecast Al / Zinc alloy	
Balun Encapsulant	Polyurethane Resin U-600	
Lightning protection	Direct grounded	
Typical Weight	**VHF** 6 kg	**UHF** 2.3 kg
Typical Length	**VHF** 3 m	**UHF** 0.9 m
Typical Wind loading @ 45m/s	**VHF** 340 N	**UHF** 60 N

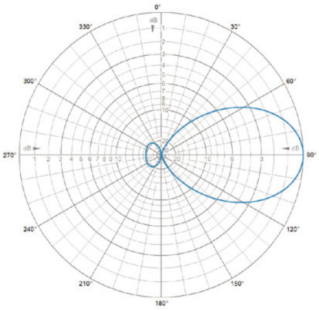
Lightning Resistant Certified

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

COP54
Galvanised steel cross clamp 32/50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
S.4Y-127	117-137MHz
S.4Y-165	155-175MHz
S.4Y-184	176-192MHz
S.4Y-200	192-208MHz
S.4Y-395	380-410MHz
S.4Y-420	410-430MHz
S.4Y-445	420-470MHz

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S.6Y

Six Element Yagi Antenna

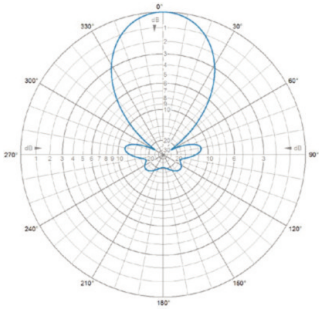
The S.6Y Series are of a rugged and reliable construction for communication networks at both VHF & UHF. The one piece folded dipole incorporates a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. These antennas give a gain of 8.5dBd with front to back ratio typically 16 dB. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket, although cable and connector options are available upon request.

Lightning Resistant Certified

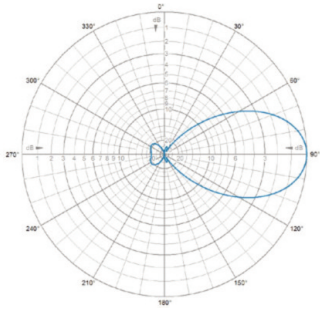
Frequency range	Manufactured between 88 - 500 MHz	
Input Impedance	50Ω	
Typical Bandwidth	±5% of centre frequency	
VSWR	<1.5:1	
Front to Back Ratio	16 dB	
Maximum Input Power	150 Watts	
Polarisation	Vertical & horizontal	
Forward Gain	8.5 dBd	
3 dB Beamwidth	E Plane 56°	
	H Plane 63°	
Standard Connection	3m Length of RG213 c/w 'N' type socket	
Elements	**<138MHz** 19.1mm dia.x 1.6mm wall Al. alloy 6063T6	
	>138MHz 12.7mm dia. x 1.6mm wall Al. alloy 6063T6	
Support Boom	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Saddle clamps	Diecast Al / Zinc alloy	
Balun Encapsulant	Polyurethane Resin U-600	
Lightning protection	Direct grounded	
Typical Weight	**VHF** 5.5 kg	**UHF** 1.7 kg
Typical Length	**VHF** 4 m	**UHF** 1.3 m
Typical Wind loading @ 45m/s	**VHF** 208 N	**UHF** 100 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

COP54
Galvanised steel cross clamp 32/50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
S.6Y-165	156-174MHz
S.6Y-184	176-192MHz
S.6Y-200	192-208MHz
S.6Y-395	380-410MHz
S.6Y-420	410-430MHz
S.6Y-445	420-470MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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S.8Y

Eight Element Yagi Antenna

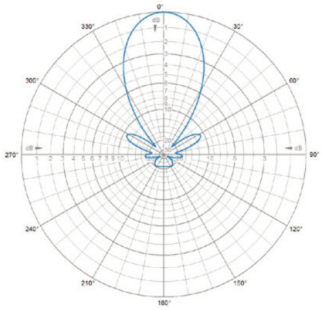
The S.8Y Series are of a rugged and reliable construction for long range communication networks at both VHF & UHF. The one piece folded dipole incorporates a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. These antennas give a gain of 10dBd with front to back ratio typically 18dB. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket, although cable and connector options are available upon request.
The S.8Y-445 is approved to MPT1411: Part 2.

Lightning Resistant Certified

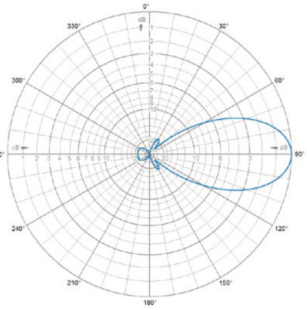
Frequency range	Manufactured between 145 - 500 MHz	
Input Impedance	50Ω	
Typical Bandwidth	±4% of centre frequency	
VSWR	<1.5:1	
Front to Back Ratio	18 dB	
Maximum Input Power	150 Watts	
Polarisation	Vertical & horizontal	
Forward Gain	10 dBd	
3 dB Beamwidth	E Plane 43°	
	H Plane 50°	
Standard Connection	3m Length of RG213 c/w 'N' type socket	
Elements	12.7mm dia. x 1.6mm wall Al. alloy 6063T6	
Support Boom	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Saddle clamps	Diecast Al / Zinc alloy	
Balun Encapsulant	Polyurethane Resin U-600	
Lightning protection	Direct grounded	
Typical Weight	**VHF** 5.2 kg	**UHF** 3 kg
Typical Length	**VHF** 4 m	**UHF** 1.6 m
Typical Wind loading @ 45m/s	**VHF** 230 N	**UHF** 127 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

COP54
Galvanised steel cross clamp 32/50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
S.8Y-165	155-175MHz
S.8Y-395	380-410MHz
S.8Y-420	410-430MHz
S.8Y-445	420-470MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

S.8YS

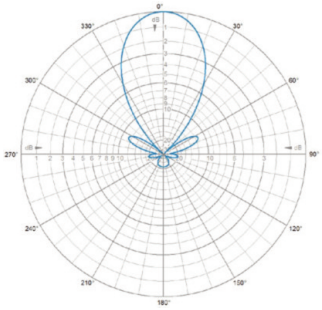
SHF Eight Element Yagi Antenna

The S.8YS SHF yagi offers a high gain directive pattern for long range SHF links. The folded dipole incorporates a d.c. short to minimise static interference. The balun assembly is completely encapsulated in a closed cell foam, preventing moisture ingress. The all welded polyester coated construction lends itself to marine environments. They are supplied as standard with 1 metre of RG213 cable terminated with an 'N' type socket.

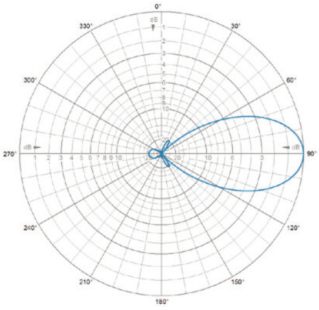
Frequency range	Manufactured between 790-1200 MHz
Input impedance	50Ω
Typical Bandwidth	±4% of centre frequency
VSWR	<1.5:1
Front to back ratio	18 dB
Maximum input power	100 Watts
Polarisation	Vertical & horizontal
Forward gain	10 dBd
3dB Beamwidth	E Plane 43°
	H Plane 50°
Standard connection	1m Length of RG213 c/w 'N' type socket
Elements	9.6mm dia aluminium alloy bar grade 6063T6
Support boom	25.4 mm dia. x 3.2 mm wall aluminium alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Construction	All welded
Finish	Polyester coated white
Balun Encapsulant	Closed cell foam
Lightning protection	Direct grounded
Mounting Brackets	Fixed norstel clamp & increasing sleeve (supplied)
Typical Weight	2.8 kg
Typical Length	0.8 m
Typical Wind loading @ 45m/s	55 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
S.8YS-915	870-960MHz
S.8YS-1050	1000-1100MHz

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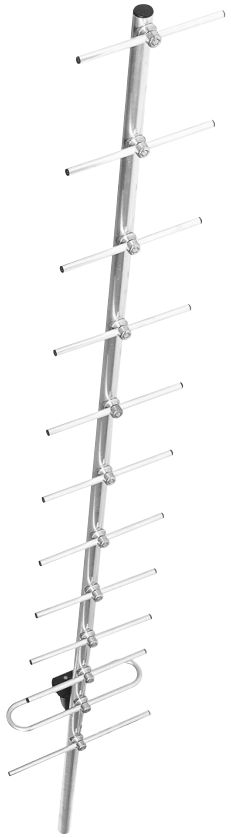
S.12Y

Twelve Element Yagi Antenna

The S.12Y Series offer high gain from a highly directive radiation pattern for use in UHF link systems The one piece folded dipole incorporates a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. These antennas give a gain of 12dBd with front to back ratio typically 20dB. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket, although cable and connector options are available upon request.

The S.12Y-445 is approved to MPT1411: Part 2, Figure 2.

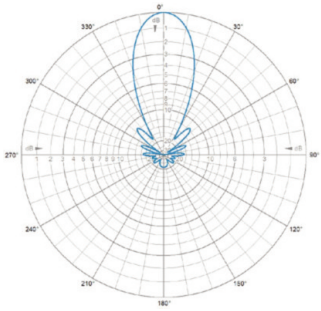


Frequency range	Manufactured between 300 - 500 MHz
Input Impedance	50Ω
Typical Bandwidth	±4% of centre frequency
VSWR	<1.5:1
Front to Back Ratio	20 dB
Maximum Input Power	150 Watts
Polarisation	Vertical & horizontal
Forward Gain	12 dBd
3 dB Beamwidth	E Plane 34º
	H Plane 40º
Standard Connection	3m Length of RG213 c/w 'N' type socket
Elements	12.7mm dia. x 1.6mm wall Al. alloy 6063T6
Support Boom	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Saddle clamps	Diecast Al / Zinc alloy
Balun Encapsulant	Polyurethane Resin U-600
Lightning protection	Direct grounded
Typical Weight	4.5 kg
Typical Length	2.5 m
Typical Wind loading @ 45m/s	150 N

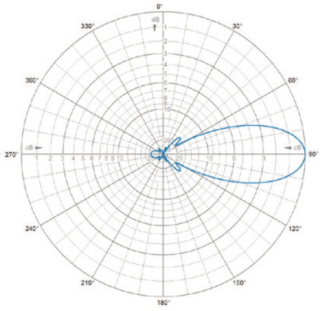
Lightning Resistant Certified

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

COP54
Galvanised steel cross clamp 32/50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
S.12Y-395	380-410MHz
S.12Y-420	410-430MHz
S.12Y-445	420-470MHz

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S.12Y4B-460

Twelve Element Yagi Antenna, UHF Link

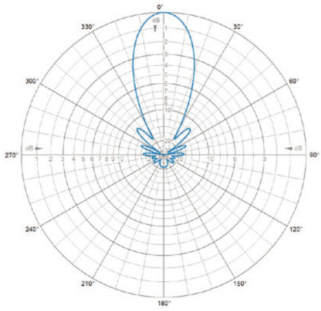
The S.12Y4B Series offer high gain from a highly directive radiation pattern for use in UHF link systems utilising a four-bar reflector to increase directivity and reject unwanted signals. The one piece folded dipole incorporates a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. These antennas give again of 12dBd with front to back ratio better than 22dB. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N'type socket, although cable and connector options are available upon request.

Frequency range	450 - 470 MHz
Input Impedance	50Ω
VSWR	<1.5:1
Front to Back Ratio	>22 dB
Maximum Input Power	150 Watts
Polarisation	Vertical & horizontal
Forward Gain	12 dBd
3 dB Beamwidth	E Plane 34º
	H Plane 40º
Standard Connection	3m Length of RG213 c/w 'N' type socket
Elements	12.7mm dia. x 1.6mm wall Al. alloy 6063T6
Reflector Elements	.6mm dia. rod aluminium alloy grade 6063T6
Support Boom	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Saddle clamps	Diecast Al / Zinc alloy
Balun Encapsulant	Polyurethane Resin U-600
Lightning protection	Direct grounded
Weight	4.9 kg
Length	2.38 m
Wind loading @ 45m/s	168 N

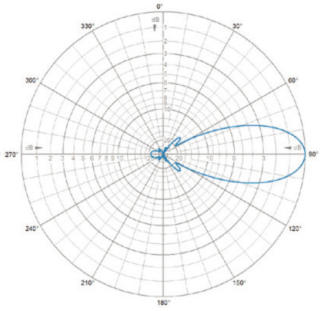
Lightning Resistant Certified

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

COP54
Galvanised steel cross clamp 32/50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
S.12Y4B-460	450-470MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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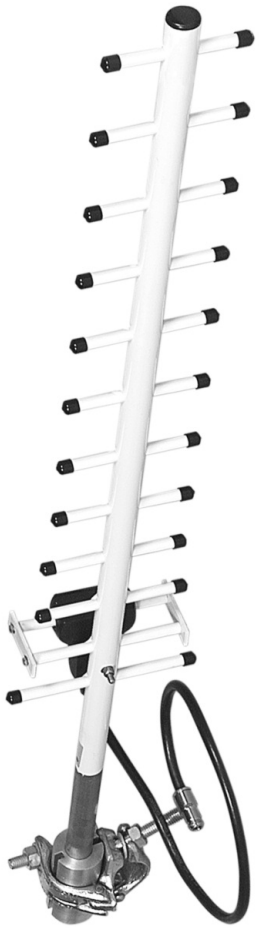
S.12YS

SHF Twelve Element Yagi Antenna

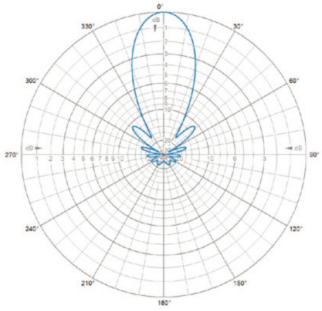
The S.12YS SHF yagi offers a high gain directive pattern for long range SHF links. The folded dipole incorporates a d.c. short to minimise static interference. The balun assembly is completely encapsulated in a closed cell foam, preventing moisture ingress. The all welded polyester coated construction lends itself to marine environments. They are supplied as standard with 1 metre of RG213 cable terminated with an 'N' type socket.



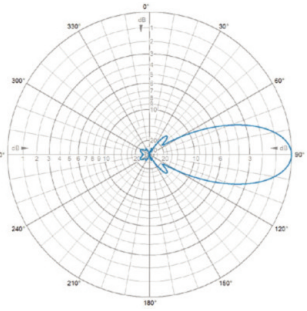
Frequency range	Manufactured between 790-1200 MHz
Input impedance	50Ω
Typical Bandwidth	±4% of centre frequency
VSWR	<1.5:1
Front to back ratio	20 dB
Maximum input power	100 Watts
Polarisation	Vertical & horizontal
Forward gain	12 dBd
3dB Beamwidth	E Plane 34°
	H Plane 40°
Standard connection	1m Length of RG213 c/w 'N' type socket.
Elements	9.6mm dia aluminium alloy bar grade 6063T6
Support boom	25.4 mm dia. x 3.2 mm wall aluminium alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Construction	All welded
Finish	Polyester coated white
Balun Encapsulant	Closed cell foam
Lightning protection	Direct grounded
Mounting Brackets	Fixed norstel clamp & increasing sleeve (supplied)
Typical Weight	3.1 kg
Typical Length	1.2 m
Typical Wind loading @ 45m/s	77 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
S.12YS-915	870-960MHz
S.12YS-1050	1000-1100MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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S.18Y

Eighteen Element Yagi Antenna

The S.18Y series offer high gain from a highly directive radiation pattern for use in UHF link systems gain together with a four element reflector giving high protection from unwanted signals. The one piece folded dipole incorporates a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. These antennas give a gain of 14.7dBd with front to back ratio typically 25dB. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket, although cable and connector options are available upon request.

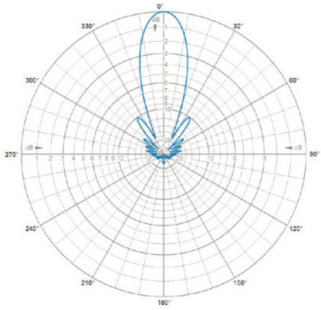
Lightning Resistant Certified

Frequency range	Manufactured between 300 - 500 MHz
Input Impedance	50Ω
Typical Bandwidth	±4% of centre frequency
VSWR	<1.5:1
Front to Back Ratio	25 dB
Maximum Input Power	150 Watts
Polarisation	Vertical & horizontal
Forward Gain	14.7 dBd
3 dB Beamwidth	E Plane 24°
	H Plane 32°
Standard Connection	3m Length of RG213 c/w 'N' type socket
Elements	12.7mm dia. x 1.6mm wall Al. alloy 6063T6
Support Boom	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Saddle clamps	Diecast Al / Zinc alloy
Balun Encapsulant	Polyurethane Resin U-600
Lightning protection	Direct grounded
Typical Weight	7.0 kg
Typical Length	3.2 m
Typical Wind loading @ 45m/s	248 N

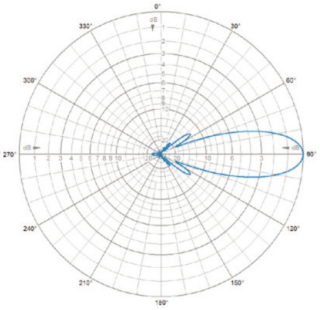
An underboom (UB3) or non-conductive support kit (MG18-KIT) is recommended when end-mounting this antenna.

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

UA66-24
Cast aluminium cross clamp 25-115mm

UB3
Aluminium Underboom

Ordering Codes

Stock code	Frequency
S.18Y-395	380-410MHz
S.18Y-420	410-430MHz
S.18Y-445	420-470MHz

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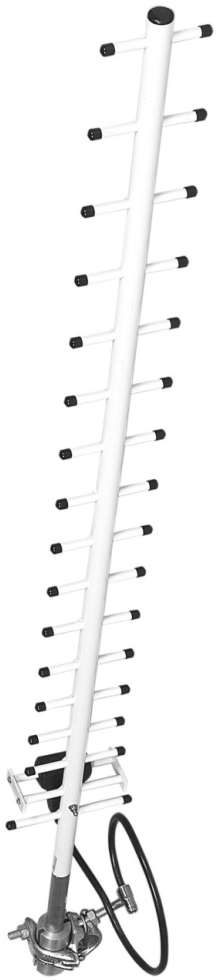
S.18YS

SHF Eighteen Element Yagi Antenna

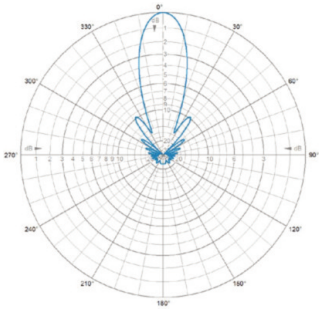
The S.18YS SHF yagi offers a high gain directive pattern for long range SHF links. The folded dipole incorporates a d.c. short to minimise static interference. The balun assembly is completely encapsulated in a closed cell foam, preventing moisture ingress. The all welded polyester coated construction lends itself to marine environments. They are supplied as standard with 1 metre of RG213 cable terminated with an 'N' type socket.



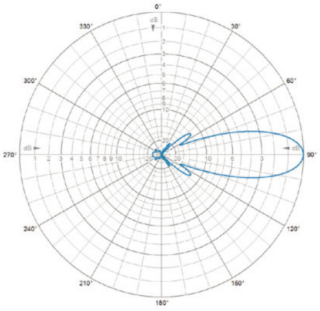
Frequency range	Manufactured between 790-1200 MHz
Input impedance	50Ω
Typical Bandwidthh	±4% of centre frequency
VSWR	<1.5:1
Front to back ratio	25 dB
Maximum input power	150 Watts
Polarisation	Vertical & horizontal
Forward gain	14.7 dBd
3dB Beamwidth	E Plane 24°
	H Plane 32°
Standard connection	1 m Length of RG 213 c/w 'N' type socket.
Elements	9.6mm dia aluminium alloy bar grade 6063T6
Support boom	25.4 mm dia. x 3.2 mm wall aluminium alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Construction	All welded
Finish	Polyester coated white
Balun Encapsulant	Closed cell foam
Lightning protection	Direct grounded
Mounting Brackets	Fixed norstel clamp & increasing sleeve (supplied)
Typical Weight	3.7 kg
Typical Length	1.8 m
Typical Wind loading @ 45m/s	112 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
S.18YS-915	870-960MHz
S.18YS-1050	1000-1100MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

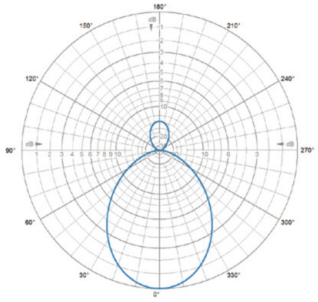
S.PAGE
Circular downfire antenna

The S.PAGE is based on the S.3Y yagi, and is specifically designed for in - building RF coverage requirements. The one piece folded dipoles incorporate a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. These antennæ are circular polarised, and fire down for on site coverage. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket.

Lightning Resistant Certified

Frequency range	Manufactured between 68 - 500 MHz	
Input Impedance	50Ω	
Typical Bandwidth	±6% of centre frequency	
VSWR	<1.5:1	
Front to Back Ratio	15 dB	
Maximum Input Power	150 Watts	
Polarisation	Right hand circular	
Forward Gain	6 dBd	
3 dB Beamwidth	62°	
Standard Connection	3m Length of RG213 c/w 'N' type socket	
Elements	**<138MHz** 19.1mm dia.x 1.6mm wall Al. alloy 6063T6	
	>138MHz 12.7mm dia. x 1.6mm wall Al. alloy 6063T6	
Support Boom	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Saddle clamps	Diecast Al / Zinc alloy	
Balun Encapsulant	Polyurethane Resin U-600	
Lightning protection	Direct grounded	
Typical Weight	**VHF** 7.0 kg	**UHF** 2.5 kg
Typical Length	**VHF** 2.4 m	**UHF** 1.0 m
Typical Wind loading @ 45m/s	**VHF** 380 N	**UHF** 85 N

Free Space Radiation Patterns



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

COP54
Galvanised steel cross clamp 32/50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
S.PAGE-160	145-175MHz
S.PAGE-445	420-470MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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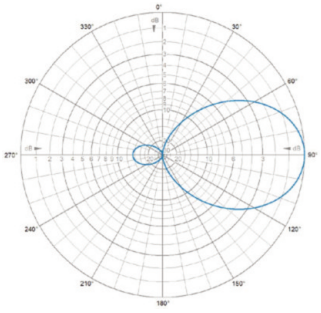
S.3YX
Three element circular Yagi antenna

The S.3YX is based on the S.3Y yagi. It consists of two yagis at 90°, fed in quadrature to achieve either right or left hand polarisation. The one piece folded dipoles incorporate a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket.

Frequency range	Manufactured between 68 - 500 MHz	
Input Impedance	50Ω	
Typical Bandwidth	±6% of centre frequency	
VSWR	<1.5:1	
Front to Back Ratio	15 dB	
Maximum Input Power	150 Watts	
Polarisation	Right or Left hand circular (Specify at time of ordering)	
Forward Gain	6 dBd	
3 dB Beamwidth	62°	
Standard Connection	3m Length of RG213 c/w 'N' type socket	
Elements	**<138MHz** 19.1mm dia.x 1.6mm wall Al. alloy 6063T6	
	>138MHz 12.7mm dia. x 1.6mm wall Al. alloy 6063T6	
Support Boom	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Saddle clamps	Diecast Al / Zinc alloy	
Balun Encapsulant	Polyurethane Resin U-600	
Lightning protection	Direct grounded	
Typical Weight	**VHF** 7.0 kg	**UHF** 2.5 kg
Typical Length	**VHF** 2.4 m	**UHF** 1.0 m
Typical Wind loading @ 45m/s	**VHF** 380 N	**UHF** 85 N

Lightning Resistant Certified

Free Space Radiation Patterns



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

COP54
Galvanised steel cross clamp 32/50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
S.3YX-255	240-270MHz
S.3YX-305	290-320MHz
S.3YX-445	420-470MHz

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

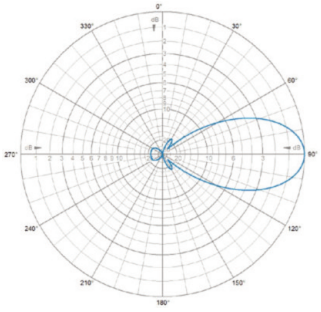
S.8YX
Eight element circular Yagi antenna

The S.8YX is based on the S.8Y yagi. It consists of two yagis at 90°, fed in quadrature to achieve either right or left hand polarisation. The one piece folded dipoles incorporate a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket.

Frequency range	Manufactured between 240 - 500 MHz	
Input Impedance	50Ω	
Typical Bandwidth	±6% of centre frequency	
VSWR	<1.5:1	
Front to Back Ratio	18 dB	
Maximum Input Power	150 Watts	
Polarisation	Right or Left hand circular (Specify at time of ordering)	
Forward Gain	10 dBd	
3 dB Beamwidth	43°	
Standard Connection	3m Length of RG213 c/w 'N' type socket	
Elements	19.1mm dia.x 1.6mm wall Al. alloy 6063T6	
Support Boom	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Saddle clamps	Diecast Al / Zinc alloy	
Balun Encapsulant	Polyurethane Resin U-600	
Lightning protection	Direct grounded	
Typical Weight	**VHF** 8.2 kg	**UHF** 4.5 kg
Typical Length	**VHF** 4.0 m	**UHF** 1.6 m
Typical Wind loading @ 45m/s	**VHF** 470 N	**UHF** 174 N

Lightning Resistant Certified

Free Space Radiation Patterns



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

COP54
Galvanised steel cross clamp 32/50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
S.8YX-255	240-270MHz
S.8YX-305	290-320MHz
S.8YX-445	420-470MHz

Issue 1. E&OE ROHS This product is RoHS compliant

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

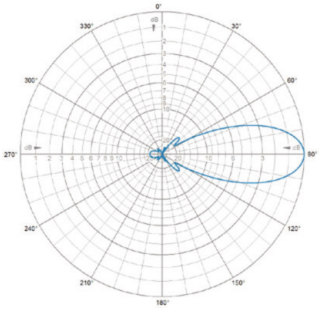
S.12YX
Twelve element circular Yagi antenna

The S.12YX is based on the S.12Y yagi. It consists of two yagis at 90°, fed in quadrature to achieve either right or left hand polarisation. The one piece folded dipoles incorporate a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket.

Frequency range	Manufactured between 300 - 500 MHz
Input Impedance	50Ω
Typical Bandwidth	±4% of centre frequency
VSWR	<1.5:1
Front to Back Ratio	20 dB
Maximum Input Power	150 Watts
Polarisation	Right or Left hand circular (Specify at time of ordering)
Forward Gain	12 dBd
3 dB Beamwidth	34°
Standard Connection	3m Length of RG213 c/w 'N' type socket
Elements	19.1mm dia.x 1.6mm wall Al. alloy 6063T6
Support Boom	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Saddle clamps	Diecast Al / Zinc alloy
Balun Encapsulant	Polyurethane Resin U-600
Lightning protection	Direct grounded
Typical Weight	6.5 kg
Typical Length	2.1 m
Typical Wind loading @ 45m/s	225 N

Lightning Resistant Certified

Free Space Radiation Patterns



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
S.12YX-445	420-470MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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S.8YX-MM

Eight element cross polar Yagi antenna

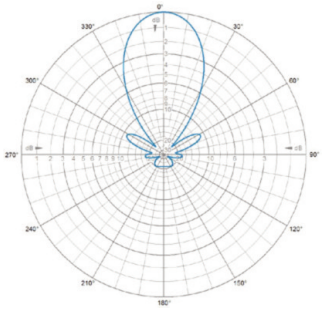
The S.8YX is based on the S.8Y yagi. It consists of two yagis at 90º, fed separately for applications such as MimoMax. The one piece folded dipoles incorporate a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket.

Lightning Resistant Certified

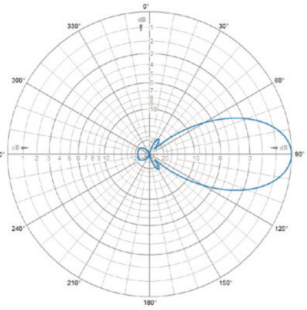
Frequency range	Manufactured between 380 - 500 MHz
Input Impedance	50Ω
Typical Bandwidth	±6% of centre frequency
VSWR	<1.5:1
Front to Back Ratio	18 dB
Maximum Input Power	150 Watts
Polarisation	Horizontal and Vertical
Forward Gain	10 dBd
Isolation between inputs	>20dB
3 dB Beamwidth	E Plane 43º
	H Plane 50º
Standard Connection	2 x 3m Length of RG213 c/w 'N' type socket
Elements	19.1mm dia.x 1.6mm wall Al. alloy 6063T6
Support Boom	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Saddle clamps	Diecast Al / Zinc alloy
Balun Encapsulant	Polyurethane Resin U-600
Lightning protection	Direct grounded
Typical Weight	4.5 kg
Typical Length	1.6 m
Typical Wind loading @ 45m/s	174 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
S.8YX-MM-395	380-410MHz
S.8YX-MM-420	410-430MHz
S.8YX-MM-445	420-470MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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S.12YX-MM

Twelve element cross polar Yagi antenna

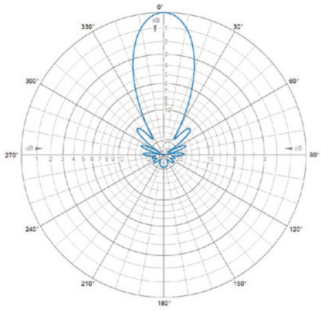
The S.12YX is based on the S.12Y yagi. It consists of two yagis at 90º, fed separately for applications such as MimoMax. The one piece folded dipoles incorporate a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket.

Lightning Resistant Certified

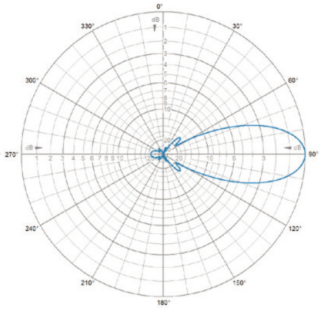
Frequency range	Manufactured between 380 - 500 MHz
Input Impedance	50Ω
Typical Bandwidth	±4% of centre frequency
VSWR	<1.5:1
Front to Back Ratio	20 dB
Maximum Input Power	150 Watts
Polarisation	Horizontal and Vertical
Forward Gain	12 dBd
Isolation between inputs	>20dB
3 dB Beamwidth	E Plane 34º
	H Plane 40º
Standard Connection	2 x 3m Length of RG213 c/w 'N' type socket
Elements	19.1mm dia.x 1.6mm wall Al. alloy 6063T6
Support Boom	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Saddle clamps	Diecast Al / Zinc alloy
Balun Encapsulant	Polyurethane Resin U-600
Lightning protection	Direct grounded
Typical Weight	6.5 kg
Typical Length	2.1 m
Typical Wind loading @ 45m/s	225 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

UA66-24
Cast aluminium cross clamp 25-115mm

MG12-KIT
Non-condutive rope support kit

Ordering Codes

Stock code	Frequency
S.12YX-MM-395	380-410MHz
S.12YX-MM-420	410-430MHz
S.12YX-MM-445	420-470MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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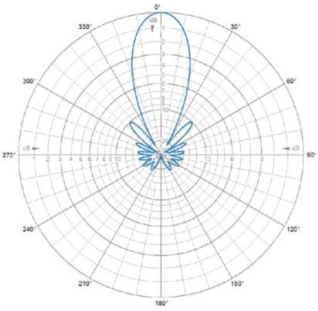
744.01
GSM Shrouded Yagi antenna

The 744 series of antennas have been designed with high quality fixed link applications in mind. They are characterised by outstanding electrical and mechanical performance. The high quality PTFE printed circuit feed and element train offers outstanding reliability and allows for extremely wide band operation. The robust design of the 744 which includes drainage and ventilation capabilities make these antennas ideally suited for use in all environments and weather conditions. A tough corrosion proof integral aluminium cast clamp allows for accurate horizontal or vertical mounting with a lifting eye to ease site installation. The antenna is protected by a radome made of high quality polyurethane to offer excellent weather protection and compliance for in – building or tunnel applications. Available for GSM, PCN, PCS and microwave fixed link applications.

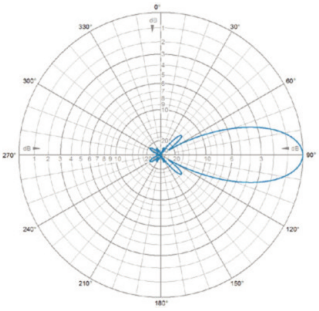
Frequency range	790 - 960 MHz
Input impedance	50
Return loss	>14 dB
Front to back ratio	20 dB
Maximum input power	250 Watts
Polarisation	Vertical & Horizontal
Forward gain	15 dBi
3 dB Beamwidth	E Plane 37°
	H Plane 39°
Connection	744.01.05.** N socket 744.01.33.** 7/16 socket
Radiator	PTFE printed circuit
Elements	Aluminium alloy
Radiator feed	Conformable .141" PTFE Cable
Antenna base	Sandcast aluminium alloy grade LM25
Radome	Polyurethane rotational moulding grey
Fasteners	Stainless steel grade A2-70
Lightning protection	Direct grounded
Mounting brackets	Hot gip galvanised steel
	744.01.**.00 38 - 60mm. dia.
	744.01.**.12 38 - 120mm. dia.
Typical weight	6 kg (inc. clamp)
Typical length	1.3 m
Typical wind loading @ 45m/s	202 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
744.01	790-960MHz
744.02	1300-1560MHz
744.03	1710-1880MHz
744.05	1000-1100MHz
744.06	1900-2170MHz
744.08	710-777MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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744.02
1.5GHz Shrouded Yagi antenna

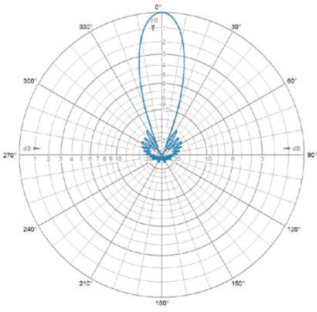
The 744 series of antennas have been designed with high quality fixed link applications in mind. They are characterised by outstanding electrical and mechanical performance. The high quality PTFE printed circuit feed and element train offers outstanding reliability and allows for extremely wide band operation. The robust design of the 744 which includes drainage and ventilation capabilities make these antennas ideally suited for use in all environments and weather conditions. A tough corrosion proof integral aluminium cast clamp allows for accurate horizontal or vertical mounting with a lifting eye to ease site installation. The antenna is protected by a radome made of high quality polyurethane to offer excellent weather protection and compliance for in – building or tunnel applications. Available for GSM, PCN, PCS and microwave fixed link applications.

Frequency range	1300-1560 MHz
Input impedance	50
Return loss	>14 dB
Front to back ratio	20 dB
Maximum input power	250 Watts
Polarisation	Vertical & horizontal
Forward gain	17 dBi
3 dB Beamwidth	E Plane 23°
	H Plane 26°
Connection	744.02.05.** N socket 744.02.33.** 7/16 socket
Radiator	PTFE printed circuit
Elements	Aluminium alloy
Radiator feed	Conformable .141" PTFE Cable
Antenna base	Sandcast aluminium alloy grade LM25
Radome	Polyurethane rotational moulding grey
Fasteners	Stainless steel grade A2-70
Lightning protection	Direct grounded
Mounting brackets	Hot gip galvanised steel
	744.02.**.00 38 - 60mm. dia.
	744.02.**.12 38 - 120mm. dia.
Typical weight	6 kg (inc. clamp)
Typical length	1.3 m
Typical wind loading @ 45m/s	202 N

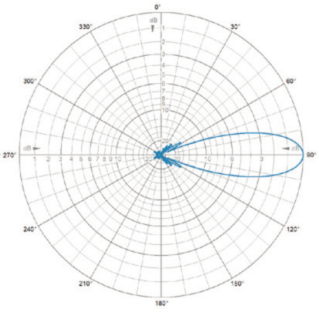
MPT1717 Approved

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
744.01	790-960MHz
744.02	1300-1560MHz
744.03	1710-1880MHz
744.05	1000-1100MHz
744.06	1900-2170MHz
744.08	710-777MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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744.03
DCS/PCN Shrouded Yagi antenna

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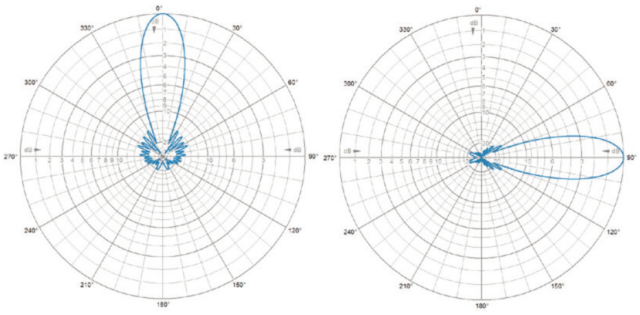
Frequency range	1710-1880 MHz
Input impedance	50
Return loss	>14 dB
Front to back ratio	20 dB
Maximum input power	250 Watts
Polarisation	Vertical & horizontal
Forward gain	17 dBi
3 dB Beamwidth	E Plane 23°
	H Plane 26°
Connection	744.03.05.** N socket 744.03.33.** 7/16 socket
Radiator	PTFE printed circuit
Elements	Aluminium alloy
Radiator feed	Conformable .141" PTFE Cable
Antenna base	Sandcast aluminium alloy grade LM25
Radome	Polyurethane rotational moulding grey
Fasteners	Stainless steel grade A2-70
Lightning protection	Direct grounded
Mounting brackets	Hot gip galvanised steel
	744.03.**.00 38 - 60mm. dia.
	744.03.**.12 38 - 120mm. dia.
Typical weight	6 kg (inc. clamp)
Typical length	1.3 m
Typical wind loading @ 45m/s	202 N

Free Space Radiation Patterns

H-Plane **E-Plane**



Mounting Accessories

Ordering Codes

Stock code	Frequency
744.01	790-960MHz
744.02	1300-1560MHz
744.03	1710-1880MHz
744.05	1000-1100MHz
744.06	1900-2170MHz
744.08	710-777MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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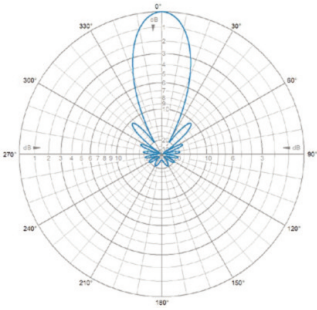
744.05
1 - 1.1 GHz Shrouded Yagi antenna

The 744 series of antennas have been designed with high quality fixed link applications in mind. They are characterised by outstanding electrical and mechanical performance. The high quality PTFE printed circuit feed and element train offers outstanding reliability and allows for extremely wide band operation. The robust design of the 744 which includes drainage and ventilation capabilities make these antennas ideally suited for use in all environments and weather conditions. A tough corrosion proof integral aluminium cast clamp allows for accurate horizontal or vertical mounting with a lifting eye to ease site installation. The antenna is protected by a radome made of high quality polyurethane to offer excellent weather protection and compliance for in – building or tunnel applications. Available for GSM, PCN, PCS and microwave fixed link applications.

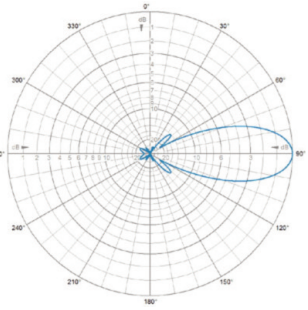
Frequency range	1000-1100 MHz
Input impedance	50
Return loss	>14 dB
Front to back ratio	20 dB
Maximum input power	250 Watts
Polarisation	Vertical & horizontal
Forward gain	15 dBi
3 dB Beamwidth	E Plane 37°
	H Plane 39°
Connection	744.05.05.** N socket 744.05.33.** 7/16 socket
Radiator	PTFE printed circuit
Elements	Aluminium alloy
Radiator feed	Conformable .141" PTFE Cable
Antenna base	Sandcast aluminium alloy grade LM25
Radome	Polyurethane rotational moulding grey
Fasteners	Stainless steel grade A2-70
Lightning protection	Direct grounded
Mounting brackets	Hot gip galvanised steel
	744.05.**.00 38 - 60mm. dia.
	744.05.**.12 38 - 120mm. dia.
Typical weight	6 kg (inc. clamp)
Typical length	1.3 m
Typical wind loading @ 45m/s	202 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
744.01	790-960MHz
744.02	1300-1560MHz
744.03	1710-1880MHz
744.05	1000-1100MHz
744.06	1900-2170MHz
744.08	710-777MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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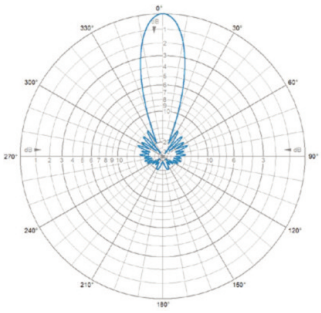
744.06
UMTS Shrouded Yagi antenna

The 744 series of antennas have been designed with high quality fixed link applications in mind. They are characterised by outstanding electrical and mechanical performance. The high quality PTFE printed circuit feed and element train offers outstanding reliability and allows for extremely wide band operation. The robust design of the 744 which includes drainage and ventilation capabilities make these antennas ideally suited for use in all environments and weather conditions. A tough corrosion proof integral aluminium cast clamp allows for accurate horizontal or vertical mounting with a lifting eye to ease site installation. The antenna is protected by a radome made of high quality polyurethane to offer excellent weather protection and compliance for in – building or tunnel applications. Available for GSM, PCN, PCS and microwave fixed link applications.

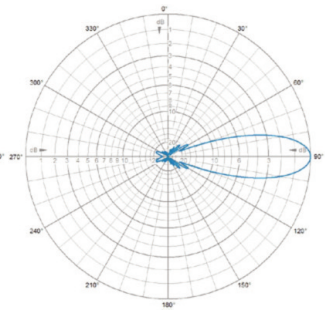
Frequency range	1900-2170 MHz
Input impedance	50
Return loss	>14 dB
Front to back ratio	20 dB
Maximum input power	250 Watts
Polarisation	Vertical & horizontal
Forward gain	17 dBi
3 dB Beamwidth	E Plane 23º
	H Plane 26º
Connection	744.06.05.** N socket 744.06.33.** 7/16 socket
Radiator	PTFE printed circuit
Elements	Aluminium alloy
Radiator feed	Conformable .141" PTFE Cable
Antenna base	Sandcast aluminium alloy grade LM25
Radome	Polyurethane rotational moulding grey
Fasteners	Stainless steel grade A2-70
Lightning protection	Direct grounded
Mounting brackets	Hot gip galvanised steel
	744.06.**.00 38 - 60mm. dia.
	744.06.**.12 38 - 120mm. dia.
Typical weight	6 kg (inc. clamp)
Typical length	1.3 m
Typical wind loading @ 45m/s	202 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
744.01	790-960MHz
744.02	1300-1560MHz
744.03	1710-1880MHz
744.05	1000-1100MHz
744.06	1900-2170MHz
744.08	710-777MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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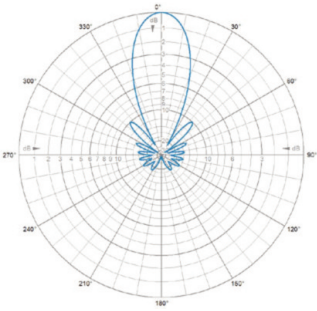
744.08
710-777MHz Shrouded Yagi antenna

The 744 series of antennas have been designed with high quality fixed link applications in mind. They are characterised by outstanding electrical and mechanical performance. The high quality PTFE printed circuit feed and element train offers outstanding reliability and allows for extremely wide band operation. The robust design of the 744 which includes drainage and ventilation capabilities make these antennas ideally suited for use in all environments and weather conditions. A tough corrosion proof integral aluminium cast clamp allows for accurate horizontal or vertical mounting with a lifting eye to ease site installation. The antenna is protected by a radome made of high quality polyurethane to offer excellent weather protection and compliance for in – building or tunnel applications. Available for GSM, PCN, PCS and microwave fixed link applications.

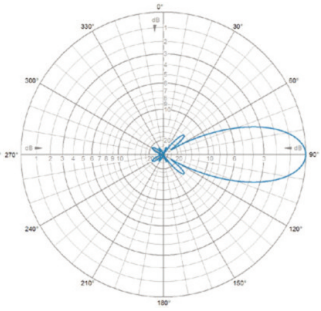
Frequency range	710 - 777 MHz
Input impedance	50
Return loss	>14 dB
Front to back ratio	20 dB
Maximum input power	250 Watts
Polarisation	Vertical & horizontal
Forward gain	13.5 dBi
3 dB Beamwidth	E Plane 37°
	H Plane 39°
Connection	744.08.05.** N socket 744.08.33.** 7/16 socket
Radiator	PTFE printed circuit
Elements	Aluminium alloy
Radiator feed	Conformable .141" PTFE Cable
Antenna base	Sandcast aluminium alloy grade LM25
Radome	Polyurethane rotational moulding grey
Fasteners	Stainless steel grade A2-70
Lightning protection	Direct grounded
Mounting brackets	Hot gip galvanised steel
	744.08.**.00 38 - 60mm. dia.
	744.08.**.12 38 - 120mm. dia.
Typical weight	6 kg (inc. clamp)
Typical length	1.3 m
Typical wind loading @ 45m/s	202 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
744.01	790-960MHz
744.02	1300-1560MHz
744.03	1710-1880MHz
744.05	1000-1100MHz
744.06	1900-2170MHz
744.08	710-777MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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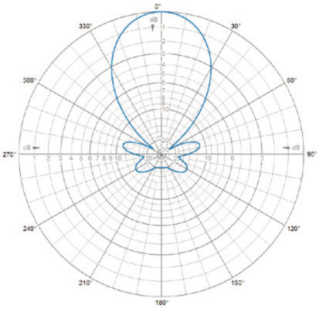
726.01
GSM Shrouded Yagi antenna

The 726 SHF yagi is based on the successful 744 range, offering a directive solution for long range SHF fixed links. The “aircraft wing” geometry of the radome minimises wind area. The use of a PTFE printed circuit feed allows wide band operation, and increases antenna power handling capability. The radome protects the antenna from severe weather conditions, reduces precipitation noise, and deters the formation of ice.

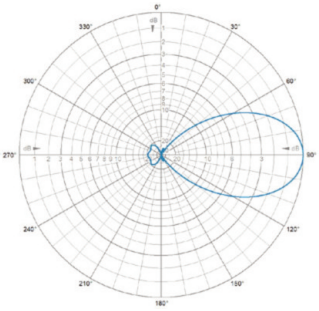
Frequency range	790 - 960 MHz
Input impedance	50
Return loss	>14 dB
Front to back ratio	20 dB
Maximum input power	250 Watts
Polarisation	Vertical & horizontal
Forward gain	11 dBi
3 dB Beamwidth	E Plane 41°
	H Plane 47°
Connection	726.01.05.** N socket 726.01.33.** 7/16 socket
Radiator	PTFE printed circuit
Elements	Aluminium alloy
Radiator feed	Conformable .141” PTFE Cable
Antenna base	Sandcast aluminium alloy grade LM25
Radome	Polyurethane rotational moulding grey
Fasteners	Stainless steel grade A2-70
Lightning protection	Direct grounded
Mounting brackets	Hot gip galvanised steel
	726.01.**.00 38 - 60mm. dia.
	726.01.**.12 38 - 120mm. dia.
Typical weight	5 kg (inc. clamp)
Typical length	0.7 m
Typical wind loading @ 45m/s	132 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
726.01	790-960MHz
726.02	1200-1600MHz
726.03	1700-1900MHz

Issue 1. E&OE ROHS This product is RoHS compliant

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

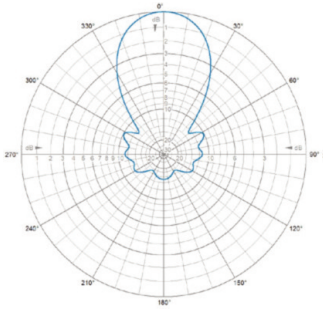
726.02
1.5GHz Shrouded Yagi antenna

The 726 SHF yagi is based on the successful 744 range, offering a directive solution for long range SHF fixed links. The “aircraft wing” geometry of the radome minimises wind area. The use of a PTFE printed circuit feed allows wide band operation, and increases antenna power handling capability. The radome protects the antenna from severe weather conditions, reduces precipitation noise, and deters the formation of ice.

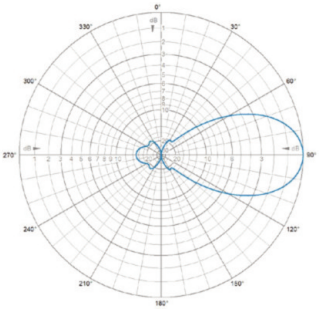
Frequency range	1200 - 1600 MHz
Input impedance	50
Return loss	>14 dB
Front to back ratio	20 dB
Maximum input power	250 Watts
Polarisation	Vertical & horizontal
Forward gain	13 dBi
3 dB Beamwidth	E Plane 39º
	H Plane 45º
Connection	726.02.05.** N socket 726.02.33.** 7/16 socket
Radiator	PTFE printed circuit
Elements	Aluminium alloy
Radiator feed	Conformable .141” PTFE Cable
Antenna base	Sandcast aluminium alloy grade LM25
Radome	Polyurethane rotational moulding grey
Fasteners	Stainless steel grade A2-70
Lightning protection	Direct grounded
Mounting brackets	Hot gip galvanised steel
	726.02.**.00 38 - 60mm. dia.
	726.02.**.12 38 - 120mm. dia.
Typical weight	5 kg (inc. clamp)
Typical length	0.7 m
Typical wind loading @ 45m/s	132 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
726.01	790-960MHz
726.02	1200-1600MHz
726.03	1700-1900MHz

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
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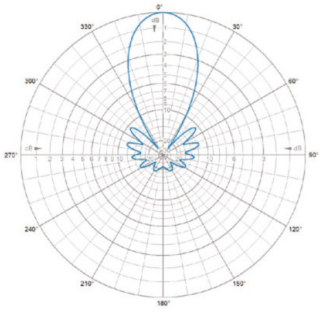
726.03
DCS/PCN Shrouded Yagi antenna

The 726 SHF yagi is based on the successful 744 range, offering a directive solution for long range SHF fixed links. The “aircraft wing” geometry of the radome minimises wind area. The use of a PTFE printed circuit feed allows wide band operation, and increases antenna power handling capability. The radome protects the antenna from severe weather conditions, reduces precipitation noise, and deters the formation of ice.

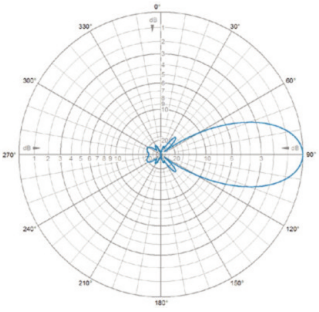
Frequency range	1700 - 1900 MHz
Input impedance	50
Return loss	>14 dB
Front to back ratio	20 dB
Maximum input power	250 Watts
Polarisation	Vertical & horizontal
Forward gain	13 dBi
3 dB Beamwidth	E Plane 39º
	H Plane 45º
Connection	726.03.05.** N socket 726.03.33.** 7/16 socket
Radiator	PTFE printed circuit
Elements	Aluminium alloy
Radiator feed	Conformable .141” PTFE Cable
Antenna base	Sandcast aluminium alloy grade LM25
Radome	Polyurethane rotational moulding grey
Fasteners	Stainless steel grade A2-70
Lightning protection	Direct grounded
Mounting brackets	Hot gip galvanised steel
	726.03.**.00 38 - 60mm. dia.
	726.03.**.12 38 - 120mm. dia.
Typical weight	5 kg (inc. clamp)
Typical length	0.7 m
Typical wind loading @ 45m/s	132 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
726.01	790-960MHz
726.02	1200-1600MHz
726.03	1700-1900MHz

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766.65.15.00

Cross polar UHF 65º panel antenna

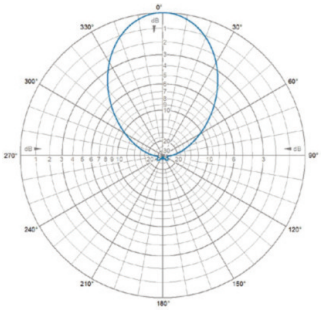
The 766 series of UHF Panel antenna has been designed to offer a very stable radiation pattern whilst giving a very wide bandwidth of operation. This approach enables the use of the antenna for multi carrier operation, and for use where site sharing is also a requirement. The antenna features carefully selected high quality components throughout including the main housing of the antenna being made from corrosion resistant marine grade aluminium. The antennas compact design gives very low wind loading characteristics, and combined with the low weight of the antenna, aids in the reduction of structural loading.

Low PIM Certified

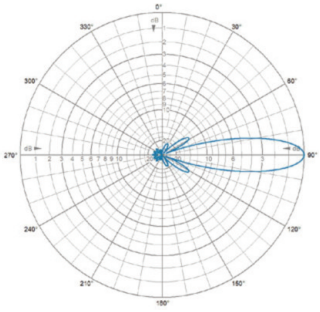
Frequency range	380 - 470MHz
Input Impedance	50Ω
VSWR	<1.5 : 1
Front to Back ratio	>20 dB
Maximum Input Power	2 x 400 Watts
Isolation between Input Ports	>27dB
Forward Gain	15dBi
Polarisation	±45˚
3 dB Beamwidths	E Plane 17˚ +/- 2˚
	H Plane 65˚ +/- 5˚
Cross Polar Discrimination	>30dB
Beam Tilt Options	Electrical up to 15˚ (Please specify at time of order)
Intermodulation	3rd Order –153dBc for 2 x Tx @ 43dBm
Connection	7/16 DIN Female
Radome	White ASA capped ABS, UV Resistant
Housing	Aluminium Alloy, Marine Grade 5083
Lightning Protection	Direct Grounded
Mounting Brackets	Options to be Ordered separately (see below)
Weight	12.5kg (without mounting brackets)
Unpacked Dimensions	1840mm x 400mm x 170mm
Typical wind Load @ 45m/s	593N
Survival Wind Speed	75m/s

Free Space Radiation Patterns

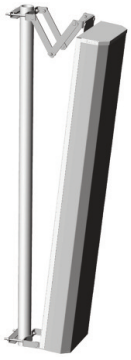
H-Plane



E-Plane



Mounting Accessories



766.7010
Tilt Bracket Assembly 0 - 12º for 38-120mm dia. tube

766.7020
Tilt Bracket Assembly 0 - 22º for 38-120mm dia. tube

766.700
Fixed Bracket for 38-120mm dia. tube

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766.90.13.00

Cross polar UHF 90º panel antenna

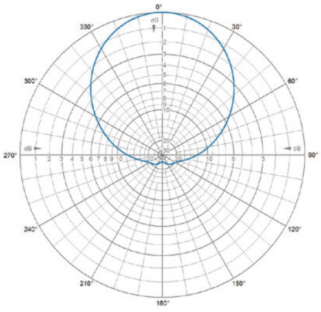
The 766 series of UHF Panel antenna has been designed to offer a very stable radiation pattern whilst giving a very wide bandwidth of operation. This approach enables the use of the antenna for multi carrier operation, and for use where site sharing is also a requirement. The antenna features carefully selected high quality components throughout including the main housing of the antenna being made from corrosion resistant marine grade aluminium. The antennas compact design gives very low wind loading characteristics, and combined with the low weight of the antenna, aids in the reduction of structural loading.

Low PIM Certified

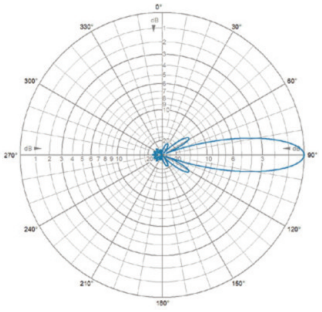
Frequency range	380 - 470MHz
Input Impedance	50Ω
VSWR	<1.5 : 1
Front to Back ratio	>20 dB
Maximum Input Power	2 x 400 Watts
Isolation between Input Ports	>27dB
Forward Gain	13dBi
Polarisation	±45˚
3 dB Beamwidths	E Plane 17˚ +/- 2˚
	H Plane 90˚ +/- 5˚
Cross Polar Discrimination	>30dB
Beam Tilt Options	Electrical up to 15˚ (Please specify at time of order)
Intermodulation	3rd Order –153dBc for 2 x Tx @ 43dBm
Connection	7/16 DIN Female
Radome	White ASA capped ABS, UV Resistant
Housing	Aluminium Alloy, Marine Grade 5083
Lightning Protection	Direct Grounded
Mounting Brackets	Options to be Ordered separately (see below)
Weight	13kg (without mounting brackets)
Unpacked Dimensions	1840mm x 400mm x 170mm
Typical wind Load @ 45m/s	593N
Survival Wind Speed	75m/s

Free Space Radiation Patterns

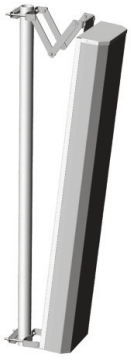
H-Plane



E-Plane



Mounting Accessories



766.7010
Tilt Bracket Assembly 0 - 12º for 38-120mm dia. tube

766.7020
Tilt Bracket Assembly 0 - 22º for 38-120mm dia. tube

766.700
Fixed Bracket for 38-120mm dia. tube

Issue 2. E&OE ROHS This product is RoHS compliant

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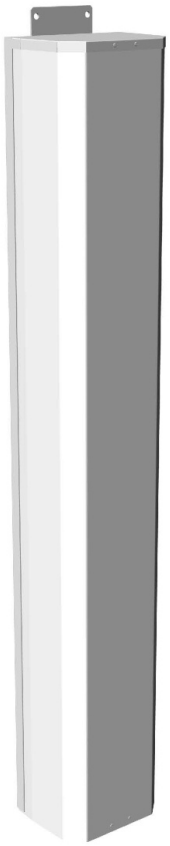
766.12.11.00

Cross polar UHF 120º panel antenna

The 766 series of UHF Panel antenna has been designed to offer a very stable radiation pattern whilst giving a very wide bandwidth of operation. This approach enables the use of the antenna for multi carrier operation, and for use where site sharing is also a requirement. The antenna features carefully selected high quality components throughout including the main housing of the antenna being made from corrosion resistant marine grade aluminium. The antennas compact design gives very low wind loading characteristics, and combined with the low weight of the antenna, aids in the reduction of structural loading.

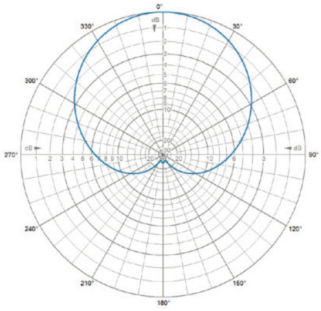


Low PIM Certified

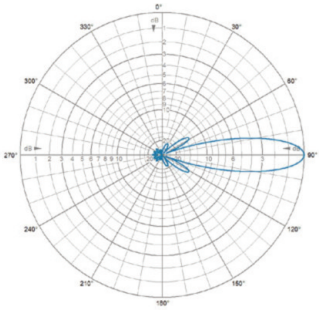
Frequency range	380 - 470MHz
Input Impedance	50Ω
VSWR	<1.5 : 1
Front to Back ratio	>20 dB
Maximum Input Power	2 x 400 Watts
Isolation between Input Ports	>27dB
Forward Gain	11dBi
Polarisation	±45˚
3 dB Beamwidths	E Plane 18˚ +/- 2˚
	H Plane 120˚ +/- 5˚
Cross Polar Discrimination	>30dB
Beam Tilt Options	Electrical up to 15˚ (Please specify at time of order)
Intermodulation	3rd Order –153dBc for 2 x Tx @ 43dBm
Connection	7/16 DIN Female
Radome	White ASA capped ABS, UV Resistant
Housing	Aluminium Alloy, Marine Grade 5083
Lightning Protection	Direct Grounded
Mounting Brackets	Options to be Ordered separately (see below)
Weight	11kg (without mounting brackets)
Unpacked Dimensions	1840mm x 300mm x 216mm
Typical wind Load @ 45m/s	445N
Survival Wind Speed	75m/s

Free Space Radiation Patterns

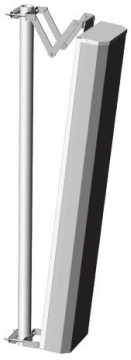
H-Plane



E-Plane



Mounting Accessories



766.7010
Tilt Bracket Assembly 0 - 12º for 38-120mm dia. tube

766.7020
Tilt Bracket Assembly 0 - 22º for 38-120mm dia. tube

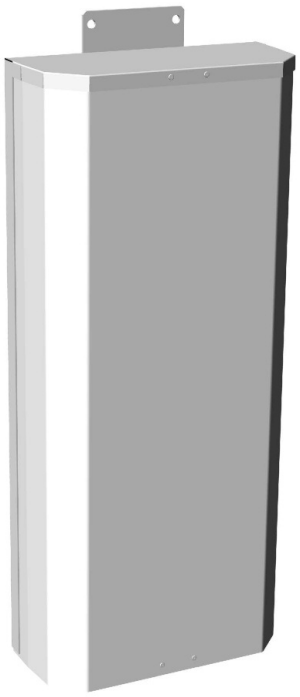
766.700
Fixed Bracket for 38-120mm dia. tube

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

766.65.12.00

Cross polar UHF 65º panel antenna

The 766 series of UHF Panel antenna has been designed to offer a very stable radiation pattern whilst giving a very wide bandwidth of operation. This approach enables the use of the antenna for multi carrier operation, and for use where site sharing is also a requirement. The antenna features carefully selected high quality components throughout including the main housing of the antenna being made from corrosion resistant marine grade aluminium. The antennas compact design gives very low wind loading characteristics, and combined with the low weight of the antenna, aids in the reduction of structural loading.

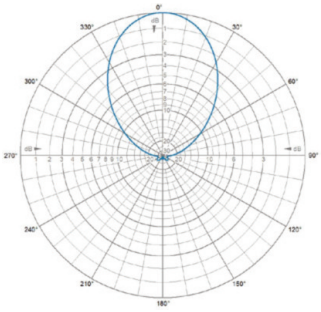


Low PIM Certified

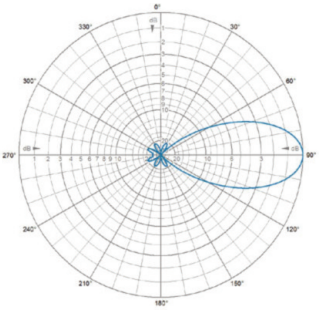
Frequency range	380 - 470MHz
Input Impedance	50Ω
VSWR	<1.5 : 1
Front to Back ratio	>20 dB
Maximum Input Power	2 x 200 Watts
Isolation between Input Ports	>27dB
Forward Gain	12dBi
Polarisation	±45˚
3 dB Beamwidths	E Plane 38˚ +/- 2˚
	H Plane 65˚ +/- 5˚
Cross Polar Discrimination	>30dB
Beam Tilt Options	Electrical up to 15˚ (Please specify at time of order)
Intermodulation	3rd Order –153dBc for 2 x Tx @ 43dBm
Connection	7/16 DIN Female
Radome	White ASA capped ABS, UV Resistant
Housing	Aluminium Alloy, Marine Grade 5083
Lightning Protection	Direct Grounded
Mounting Brackets	Options to be Ordered separately (see below)
Weight	7kg (without mounting brackets)
Unpacked Dimensions	920mm x 400mm x 170mm
Typical wind Load @ 45m/s	297N
Survival Wind Speed	75m/s

Free Space Radiation Patterns

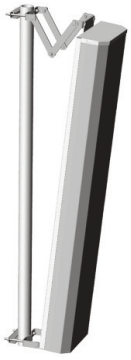
H-Plane



E-Plane



Mounting Accessories



766.7010
Tilt Bracket Assembly 0 - 22º for 38-120mm dia. tube

766.700
Fixed Bracket for 38-120mm dia. tube

Issue 1. E&OE ROHS This product is RoHS compliant

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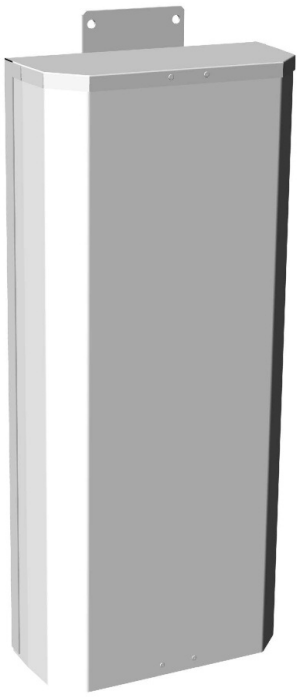
766.90.10.00

Cross polar UHF 90º panel antenna

The 766 series of UHF Panel antenna has been designed to offer a very stable radiation pattern whilst giving a very wide bandwidth of operation. This approach enables the use of the antenna for multi carrier operation, and for use where site sharing is also a requirement. The antenna features carefully selected high quality components throughout including the main housing of the antenna being made from corrosion resistant marine grade aluminium. The antennas compact design gives very low wind loading characteristics, and combined with the low weight of the antenna, aids in the reduction of structural loading.

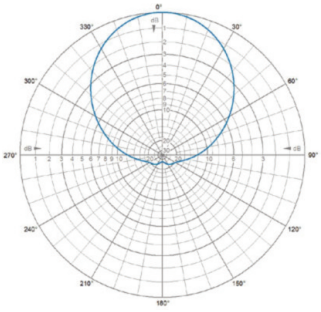


Low PIM Certified

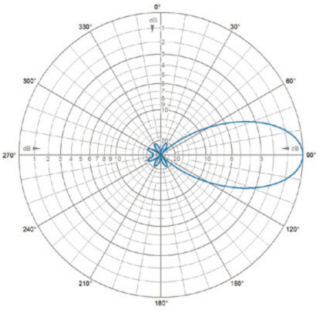
Frequency range	380 - 470MHz
Input Impedance	50Ω
VSWR	<1.5 : 1
Front to Back ratio	>20 dB
Maximum Input Power	2 x 200 Watts
Isolation between Input Ports	>27dB
Forward Gain	10dBi
Polarisation	±45˚
3 dB Beamwidths	E Plane 38˚ +/- 2˚
	H Plane 90˚ +/- 5˚
Cross Polar Discrimination	>30dB
Beam Tilt Options	Electrical up to 15˚ (Please specify at time of order)
Intermodulation	3rd Order –153dBc for 2 x Tx @ 43dBm
Connection	7/16 DIN Female
Radome	White ASA capped ABS, UV Resistant
Housing	Aluminium Alloy, Marine Grade 5083
Lightning Protection	Direct Grounded
Mounting Brackets	Options to be Ordered separately (see below)
Weight	7.5kg (without mounting brackets)
Unpacked Dimensions	920mm x 400mm x 170mm
Typical wind Load @ 45m/s	297N
Survival Wind Speed	75m/s

Free Space Radiation Patterns

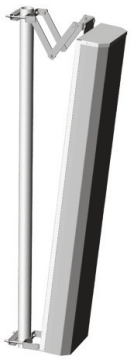
H-Plane



E-Plane



Mounting Accessories



766.7010
Tilt Bracket Assembly 0 - 22º for 38-120mm dia. tube

766.700
Fixed Bracket for 38-120mm dia. tube

Issue 2. E&OE ROHS This product is RoHS compliant

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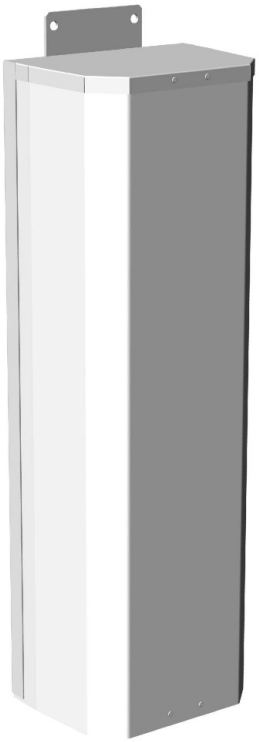
766.12.08.00

Cross polar UHF 120º panel antenna

The 766 series of UHF Panel antenna has been designed to offer a very stable radiation pattern whilst giving a very wide bandwidth of operation. This approach enables the use of the antenna for multi carrier operation, and for use where site sharing is also a requirement. The antenna features carefully selected high quality components throughout including the main housing of the antenna being made from corrosion resistant marine grade aluminium. The antennas compact design gives very low wind loading characteristics, and combined with the low weight of the antenna, aids in the reduction of structural loading.

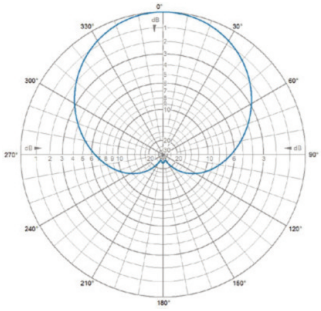


Low PIM Certified

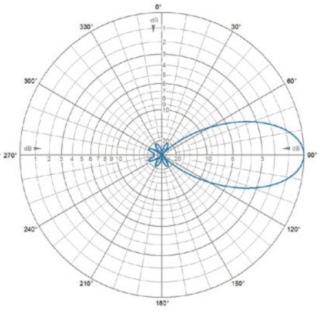
Frequency range	380 - 470MHz
Input Impedance	50Ω
VSWR	<1.5 : 1
Front to Back ratio	>20 dB
Maximum Input Power	2 x 200 Watts
Isolation between Input Ports	>27dB
Forward Gain	8dBi
Polarisation	±45˚
3 dB Beamwidths	E Plane 38˚ +/- 2˚
	H Plane 120˚ +/- 5˚
Cross Polar Discrimination	>30dB
Beam Tilt Options	Electrical up to 15˚ (Please specify at time of order)
Intermodulation	3rd Order –153dBc for 2 x Tx @ 43dBm
Connection	7/16 DIN Female
Radome	White ASA capped ABS, UV Resistant
Housing	Aluminium Alloy, Marine Grade 5083
Lightning Protection	Direct Grounded
Mounting Brackets	Options to be Ordered separately (see below)
Weight	6.5kg (without mounting brackets)
Unpacked Dimensions	920mm x 300mm x 216mm
Typical wind Load @ 45m/s	223N
Survival Wind Speed	75m/s

Free Space Radiation Patterns

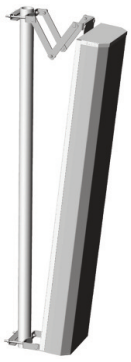
H-Plane



E-Plane



Mounting Accessories



766.7010
Tilt Bracket Assembly 0 - 22º for 38-120mm dia. tube

766.700
Fixed Bracket for 38-120mm dia. tube

Issue 1. E&OE ROHS This product is RoHS compliant

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760.65.15.00

Vertically Polarised UHF 65º panel antenna

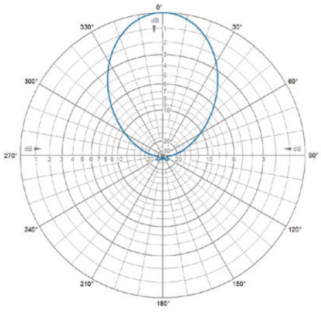
This 760 series of UHF Panel antenna has been designed to offer a very stable radiation pattern whilst giving a very wide bandwidth of operation. This approach enables the use of the antenna for multi carrier operation, and for use where site sharing is also a requirement. The antenna features carefully selected high quality components throughout including the main housing of the antenna being made from corrosion resistant marine grade aluminium. The antennas compact design gives very low wind loading characteristics, and combined with the low weight of the antenna, aids in the reduction of structural loading.

Low PIM Certified

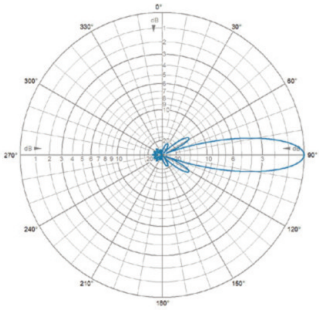
Frequency range	380 - 470MHz
Input Impedance	50Ω
VSWR	<1.5 : 1
Front to Back ratio	>20 dB
Maximum Input Power	400 Watts
Forward Gain	15dBi
Polarisation	Vertical
3 dB Beamwidths	E Plane 17˚ +/- 2˚
	H Plane 65˚ +/- 5˚
Beam Tilt Options	Electrical up to 15˚ (Please specify at time of order)
Intermodulation	3rd Order –153dBc for 2 x Tx @ 43dBm
Connection	7/16 DIN Female
Radome	White ASA capped ABS, UV Resistant
Housing	Aluminium Alloy, Marine Grade 5083
Lightning Protection	Direct Grounded
Mounting Brackets	Options to be Ordered separately (see below)
Weight	12.5kg (without mounting brackets)
Unpacked Dimensions	1840mm x 400mm x 170mm
Typical wind Load @ 45m/s	593N
Survival Wind Speed	75m/s

Free Space Radiation Patterns

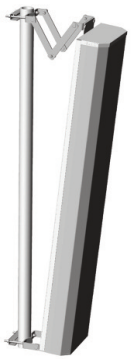
H-Plane



E-Plane



Mounting Accessories



766.7010
Tilt Bracket Assembly 0 - 12º for 38-120mm dia. tube

766.7020
Tilt Bracket Assembly 0 - 22º for 38-120mm dia. tube

766.700
Fixed Bracket for 38-120mm dia. tube

Issue 1. E&OE ROHS This product is RoHS compliant

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

760.90.13.00

Vertically Polarised UHF 90º panel antenna

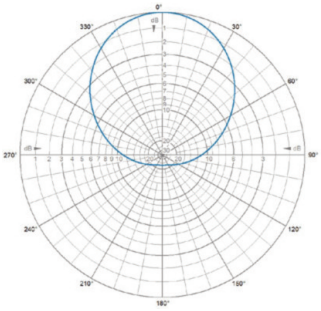
This 760 series of UHF Panel antenna has been designed to offer a very stable radiation pattern whilst giving a very wide bandwidth of operation. This approach enables the use of the antenna for multi carrier operation, and for use where site sharing is also a requirement. The antenna features carefully selected high quality components throughout including the main housing of the antenna being made from corrosion resistant marine grade aluminium. The antennas compact design gives very low wind loading characteristics, and combined with the low weight of the antenna, aids in the reduction of structural loading.

Low PIM Certified

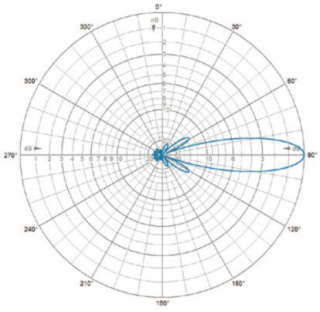
Frequency range	380 - 470MHz
Input Impedance	50Ω
VSWR	<1.5 : 1
Front to Back ratio	>20 dB
Maximum Input Power	400 Watts
Forward Gain	13dBi
Polarisation	Vertical
3 dB Beamwidths	E Plane 17˚ +/- 2˚
	H Plane 90˚ +/- 5˚
Beam Tilt Options	Electrical up to 15˚ (Please specify at time of order)
Intermodulation	3rd Order –153dBc for 2 x Tx @ 43dBm
Connection	7/16 DIN Female
Radome	White ASA capped ABS, UV Resistant
Housing	Aluminium Alloy, Marine Grade 5083
Lightning Protection	Direct Grounded
Mounting Brackets	Options to be Ordered separately (see below)
Weight	13kg (without mounting brackets)
Unpacked Dimensions	1840mm x 400mm x 170mm
Typical wind Load @ 45m/s	593N
Survival Wind Speed	75m/s

Free Space Radiation Patterns

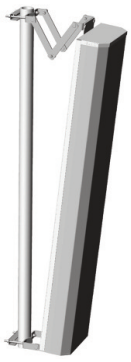
H-Plane



E-Plane



Mounting Accessories



766.7010
Tilt Bracket Assembly 0 - 12º for 38-120mm dia. tube

766.7020
Tilt Bracket Assembly 0 - 22º for 38-120mm dia. tube

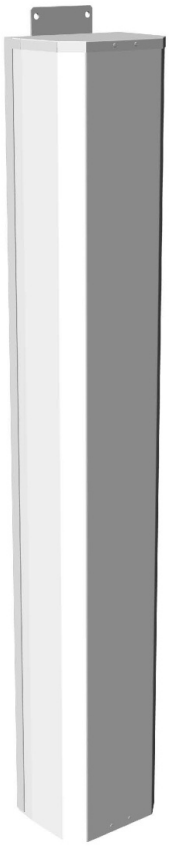
766.700
Fixed Bracket for 38-120mm dia. tube

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

760.12.11.00

Vertically Polarised UHF 120º panel antenna

This 760 series of UHF Panel antenna has been designed to offer a very stable radiation pattern whilst giving a very wide bandwidth of operation. This approach enables the use of the antenna for multi carrier operation, and for use where site sharing is also a requirement. The antenna features carefully selected high quality components throughout including the main housing of the antenna being made from corrosion resistant marine grade aluminium. The antennas compact design gives very low wind loading characteristics, and combined with the low weight of the antenna, aids in the reduction of structural loading.

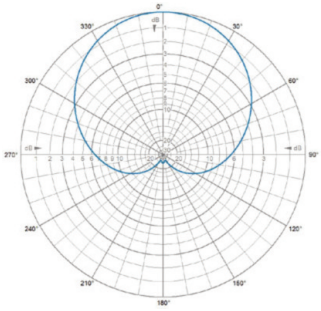


Low PIM Certified

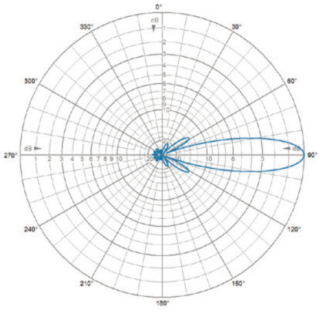
Frequency range	380 - 470MHz
Input Impedance	50Ω
VSWR	<1.5 : 1
Front to Back ratio	>18 dB
Maximum Input Power	400 Watts
Forward Gain	11dBi
Polarisation	Vertical
3 dB Beamwidths	E Plane 18˚ +/- 1˚
	H Plane 120˚ +/- 2˚
Beam Tilt Options	Electrical up to 15˚ (Please specify at time of order)
Intermodulation	3rd Order –153dBc for 2 x Tx @ 43dBm
Connection	7/16 DIN Female
Radome	White ASA capped ABS, UV Resistant
Housing	Aluminium Alloy, Marine Grade 5083
Lightning Protection	Direct Grounded
Mounting Brackets	Options to be Ordered separately (see below)
Weight	11kg (without mounting brackets)
Unpacked Dimensions	1840mm x 300mm x 216mm
Typical wind Load @ 45m/s	445N
Survival Wind Speed	75m/s

Free Space Radiation Patterns

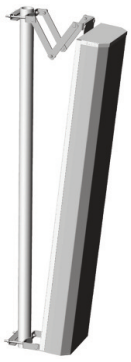
H-Plane



E-Plane



Mounting Accessories



766.7010
Tilt Bracket Assembly 0 - 12º for 38-120mm dia. tube

766.7020
Tilt Bracket Assembly 0 - 22º for 38-120mm dia. tube

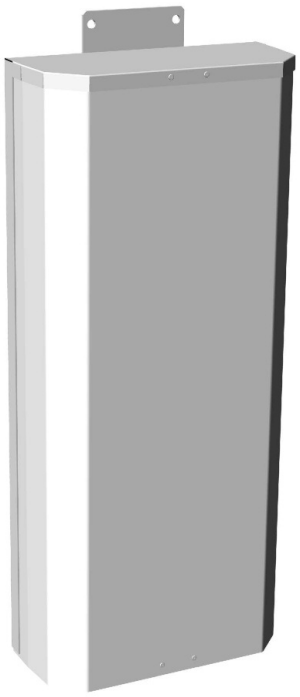
766.700
Fixed Bracket for 38-120mm dia. tube

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

760.65.12.00

Vertically Polarised UHF 65º panel antenna

This 760 series of UHF Panel antenna has been designed to offer a very stable radiation pattern whilst giving a very wide bandwidth of operation. This approach enables the use of the antenna for multi carrier operation, and for use where site sharing is also a requirement. The antenna features carefully selected high quality components throughout including the main housing of the antenna being made from corrosion resistant marine grade aluminium. The antennas compact design gives very low wind loading characteristics, and combined with the low weight of the antenna, aids in the reduction of structural loading.

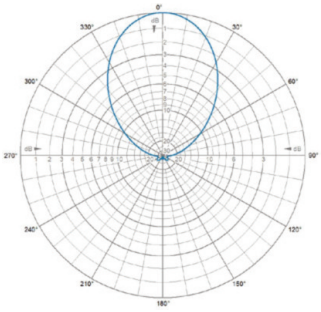


Low PIM Certified

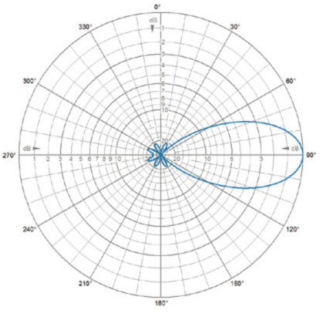
Frequency range	380 - 470MHz
Input Impedance	50Ω
VSWR	<1.5 : 1
Front to Back ratio	>20 dB
Maximum Input Power	200 Watts
Forward Gain	12dBi
Polarisation	Vertical
3 dB Beamwidths	E Plane 35˚ +/- 2˚
	H Plane 65˚ +/- 5˚
Beam Tilt Options	Electrical up to 15˚ (Please specify at time of order)
Intermodulation	3rd Order –153dBc for 2 x Tx @ 43dBm
Connection	7/16 DIN Female
Radome	White ASA capped ABS, UV Resistant
Housing	Aluminium Alloy, Marine Grade 5083
Lightning Protection	Direct Grounded
Mounting Brackets	Options to be Ordered separately (see below)
Weight	7.5kg (without mounting brackets)
Unpacked Dimensions	920mm x 400mm x 170mm
Typical wind Load @ 45m/s	297N
Survival Wind Speed	75m/s

Free Space Radiation Patterns

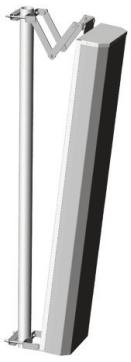
H-Plane



E-Plane



Mounting Accessories



766.7010
Tilt Bracket Assembly 0 - 22º for 38-120mm dia. tube

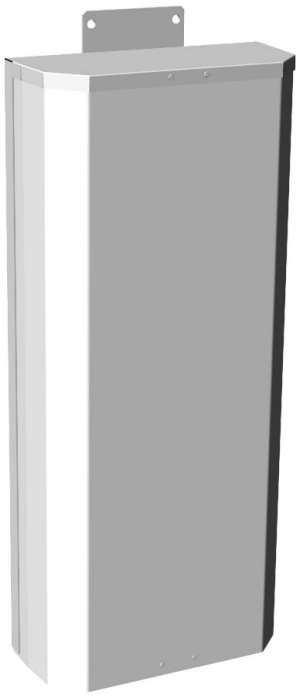
766.700
Fixed Bracket for 38-120mm dia. tube

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

760.90.10.00

Vertically Polarised UHF 90º panel antenna

This 760 series of UHF Panel antenna has been designed to offer a very stable radiation pattern whilst giving a very wide bandwidth of operation. This approach enables the use of the antenna for multi carrier operation, and for use where site sharing is also a requirement. The antenna features carefully selected high quality components throughout including the main housing of the antenna being made from corrosion resistant marine grade aluminium. The antennas compact design gives very low wind loading characteristics, and combined with the low weight of the antenna, aids in the reduction of structural loading.

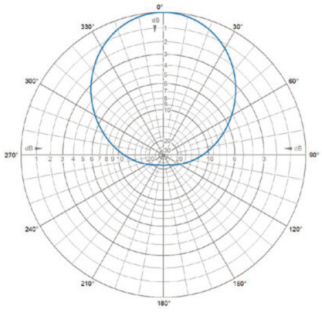


Low PIM Certified

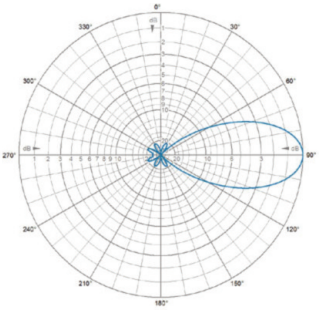
Frequency range	380 - 470MHz
Input Impedance	50Ω
VSWR	<1.5 : 1
Front to Back ratio	>20 dB
Maximum Input Power	200 Watts
Forward Gain	10dBi
Polarisation	Vertical
3 dB Beamwidths	E Plane 35˚ +/- 2˚
	H Plane 90˚ +/- 5˚
Beam Tilt Options	Electrical up to 15˚ (Please specify at time of order)
Intermodulation	3rd Order –153dBc for 2 x Tx @ 43dBm
Connection	7/16 DIN Female
Radome	White ASA capped ABS, UV Resistant
Housing	Aluminium Alloy, Marine Grade 5083
Lightning Protection	Direct Grounded
Mounting Brackets	Options to be Ordered separately (see below)
Weight	8kg (without mounting brackets)
Unpacked Dimensions	920mm x 400mm x 170mm
Typical wind Load @ 45m/s	297N
Survival Wind Speed	75m/s

Free Space Radiation Patterns

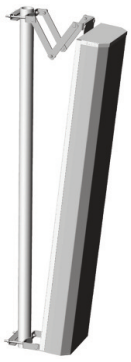
H-Plane



E-Plane



Mounting Accessories



766.7010
Tilt Bracket Assembly 0 - 22º for 38-120mm dia. tube

766.700
Fixed Bracket for 38-120mm dia. tube

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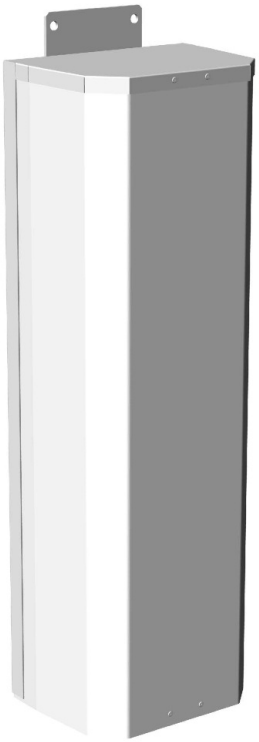
760.12.08.00

Vertically Polarised UHF 120º panel antenna

This 760 series of UHF Panel antenna has been designed to offer a very stable radiation pattern whilst giving a very wide bandwidth of operation. This approach enables the use of the antenna for multi carrier operation, and for use where site sharing is also a requirement. The antenna features carefully selected high quality components throughout including the main housing of the antenna being made from corrosion resistant marine grade aluminium. The antennas compact design gives very low wind loading characteristics, and combined with the low weight of the antenna, aids in the reduction of structural loading.

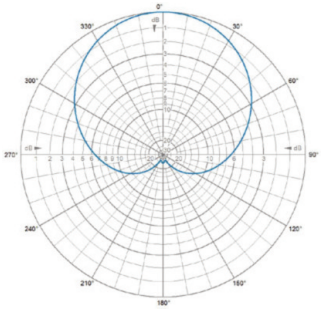


Low PIM Certified

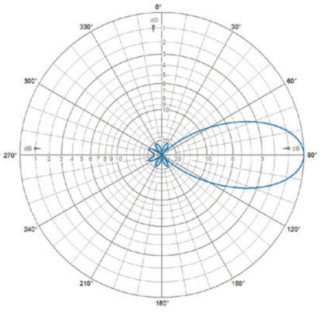
Frequency range	380 - 470MHz
Input Impedance	50Ω
VSWR	<1.5 : 1
Front to Back ratio	>18 dB
Maximum Input Power	200 Watts
Forward Gain	8dBi
Polarisation	Vertical
3 dB Beamwidths	E Plane 38˚ +/- 1˚
	H Plane 120˚ +/- 2˚
Beam Tilt Options	Electrical up to 15˚ (Please specify at time of order)
Intermodulation	3rd Order –153dBc for 2 x Tx @ 43dBm
Connection	7/16 DIN Female
Radome	White ASA capped ABS, UV Resistant
Housing	Aluminium Alloy, Marine Grade 5083
Lightning Protection	Direct Grounded
Mounting Brackets	Options to be Ordered separately (see below)
Weight	6.5kg (without mounting brackets)
Unpacked Dimensions	920mm x 300mm x 216mm
Typical wind Load @ 45m/s	223N
Survival Wind Speed	75m/s

Free Space Radiation Patterns

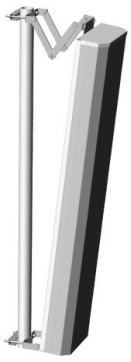
H-Plane



E-Plane



Mounting Accessories



766.7010
Tilt Bracket Assembly 0 - 22º for 38-120mm dia. tube

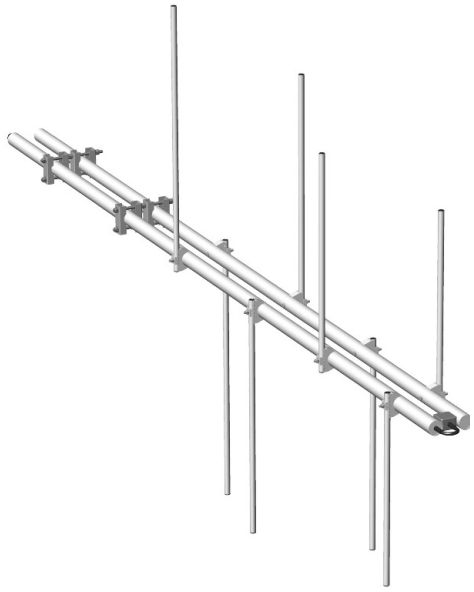
766.700
Fixed Bracket for 38-120mm dia. tube

Issue 2. E&OE ROHS This product is RoHS compliant

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

S.LPA-98
Heavy duty FM log periodic antenna

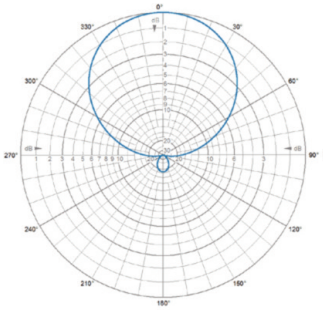
The S.LPA-98 has a heavy duty construction for VHF FM band transmission and reception. The wideband antenna features excellent side and back lobe suppression and constant performance over the full band. The antenna can be mounted for vertical or horizontal polarisation and give a gain of 8dBi with front to back ratio typically 18 dB. They are terminated as standard with a 7/16 type socket, although connector options are available upon request.



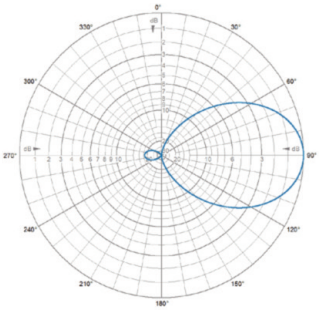
Frequency range	87.5-108 MHz
Input impedance	50Ω
VSWR	<1.4:1
Front to back ratio	18 dB
Maximum input power (CW)	S.LPA-98 500 Watts
	S.LPAH-98 2000 Watts
Polarisation	Vertical or horizontal
Forward gain	8.0 dBi
3dB Beamwidth	E Plane 55°
	H Plane 110°
Standard connection	7/16 DIN Female
Elements	19.0mm dia.x 1.6mm wall aluminium alloy grade 6063T6
Support boom	48.4 mm dia. x 4.5 mm wall aluminium alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Saddle clamps	Aluminium Alloy
Feed Encapsulant	Polyurethane Resin U-600
Lightning protection	Direct grounded
Weight	16kg
Dimensions	Length 3.3m, maximum height 1.75m
Typical wind loading @ 45m/s	640N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-24
Cast aluminium cross clamp 25-115mm

UA64-23
Cast aluminium cross clamp 25/50/75mm

Ordering Codes

Stock code	Frequency
S.LPA-98	87.5-108MHz
S.LPA-118	118-162MHz
S.LPA-225	225-400MHz
S.LPA-675	468-870MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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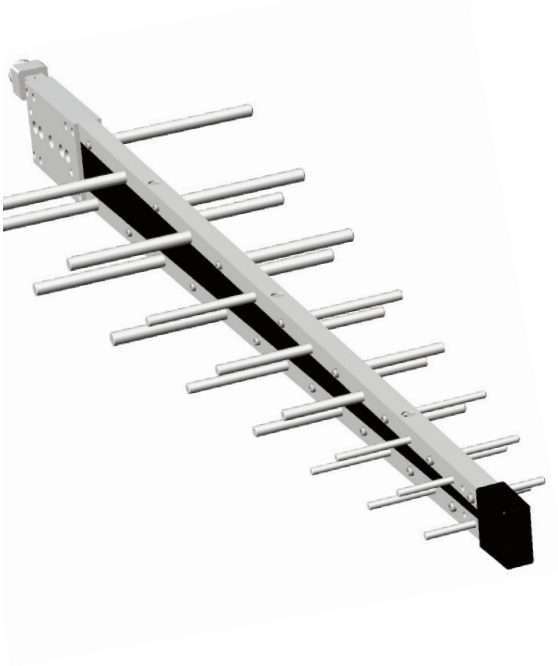
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

S.LPA-675
UHF TV Log Periodic Antenna

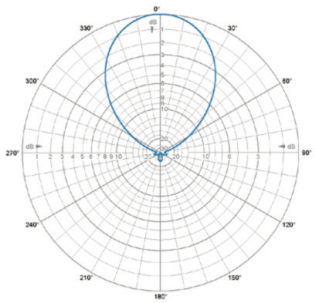
The S.LPA-675 Antenna is a heavy duty log periodic type antenna for use with band IV/V analogue and digital TV transmission and reception. The wideband antenna features excellent side and back lobe suppression and constant performance over the full band. The antenna can be mounted for vertical or horizontal polarisation and can be supplied with a 7/16 DIN or 'N' type connector. It is constructed from aluminium booms and elements featuring alocrom treatment to enhance antenna's durability.



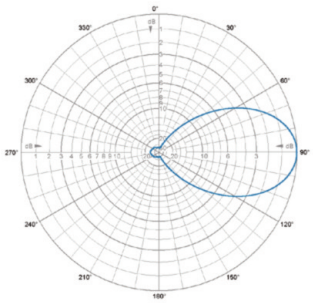
Frequency range	468 - 870MHz
Input impedance	50Ω
VSWR	<1.3:1
Front to back ratio	20 dB
Input power	500 Watts mean
Polarisation	Vertical & horizontal
Forward gain	10dBi
3 dB Beamwidth	E Plane 53°
	H Plane 68°
Connection	7/16 DIN Socket
Elements	Aluminium rod 1/2", 3/8" and 1/4" diameters
Support booms	Aluminium box tube 3/4" x 16g
Protection	Alocrom 1200
Fasteners	Stainless steel grade A2-70
Insulator	LDPE
Lightning protection	Direct grounded
Weight	3 kg
Dimensions	1210 x 320 x 90mm

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
S.LPA-98	87.5-108MHz
S.LPA-118	118-162MHz
S.LPA-225	225-400MHz
S.LPA-675	468-870MHz

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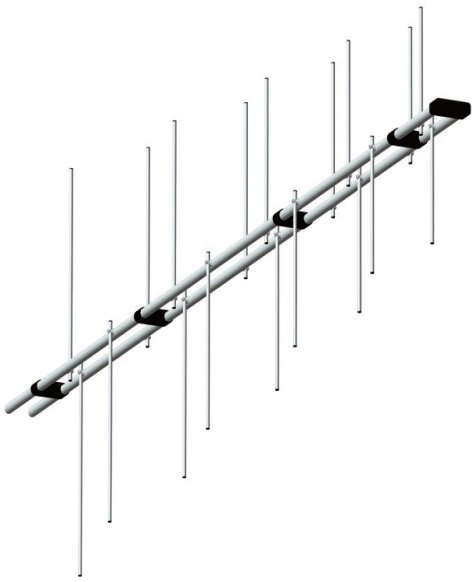
S.LPA-118
VHF Ground-Air Log Periodic Antenna

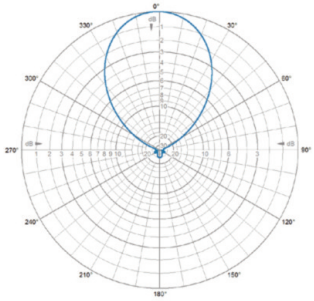
The S.LPA range of Antennas are log periodic type antenna for use with VHF and UHF ground to air systems. The wideband antenna features excellent side and back lobe suppression and constant performance over the full band. The antenna can be mounted for vertical or horizontal polarisation and is supplied with an 'N' type connector on a 3 metre tail, although connector and cable options are available upon request.



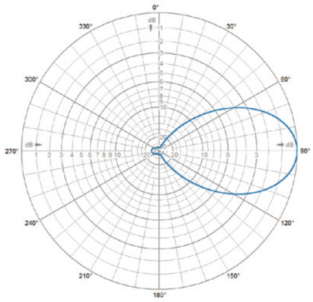
Frequency range	118 - 162MHz
Input impedance	50Ω
VSWR	<2.0:1
Front to back ratio	20 dB
Input power	150 Watts mean
Polarisation	Vertical & horizontal
Forward gain	10dBi
3 dB Beamwidth	E Plane 52º
	H Plane 64º
Standard Connection	3m Length of RG213 c/w 'N' type socket
Elements	12.7mm dia. x 1.6mm wall aluminium alloy grade 6063T6
Support booms	31.7 mm dia. x 2.6 mm wall aluminium alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Saddle clamps	Diecast zinc alloy
Feed Encapsulant	Polyurethane Resin U-600
Lightning protection	Direct grounded
Weight	6.4kg
Length	4.0m

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

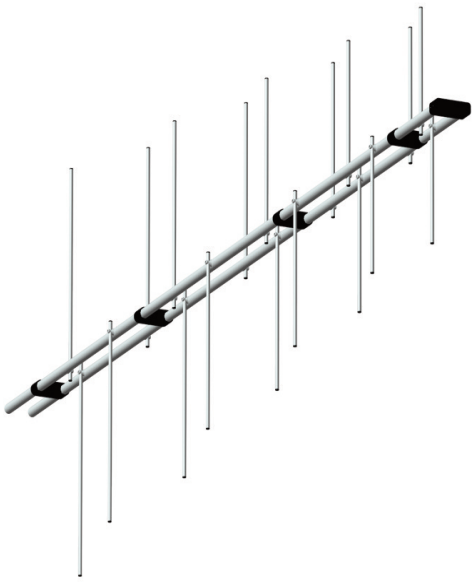
Stock code	Frequency
S.LPA-98	87.5-108MHz
S.LPA-118	118-162MHz
S.LPA-225	225-400MHz
S.LPA-675	468-870MHz

Issue 2. E&OE ROHS This product is RoHS compliant

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

S.LPA-225
UHF Ground-Air Log Periodic Antenna

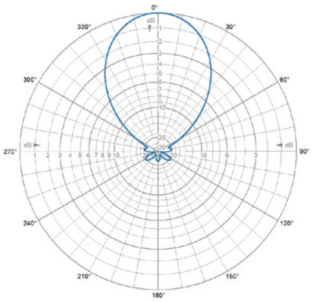
The S.LPA range of Antennas are log periodic type antenna for use with VHF and UHF ground to air systems. The wideband antenna features excellent side and back lobe suppression and constant performance over the full band. The antenna can be mounted for vertical or horizontal polarisation and is supplied with an 'N' type connector on a 3 metre tail, although connector and cable options are available upon request.



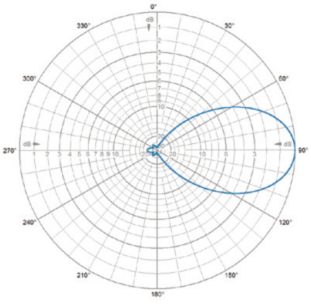
Frequency range	225 - 400MHz
Input impedance	50Ω
VSWR	<2.0:1
Front to back ratio	20 dB
Input power	150 Watts mean
Polarisation	Vertical & horizontal
Forward gain	10dBi
3 dB Beamwidth	E Plane 52º
	H Plane 66º
Standard Connection	3m Length of RG213 c/w 'N' type socket
Elements	12.7mm dia. x 1.6mm wall aluminium alloy grade 6063T6
Support booms	31.7 mm dia. x 2.6 mm wall aluminium alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Saddle clamps	Diecast zinc alloy
Feed Encapsulant	Polyurethane Resin U-600
Lightning protection	Direct grounded
Weight	5.3kg
Length	2.7m

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
S.LPA-98	87.5-108MHz
S.LPA-118	118-162MHz
S.LPA-225	225-400MHz
S.LPA-675	468-870MHz

Issue 1. E&OE ROHS This product is RoHS compliant

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
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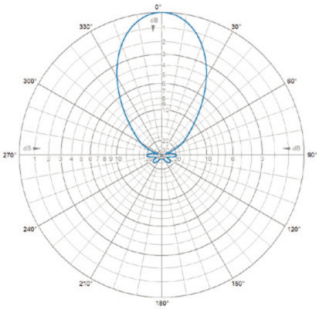
734.02
Shrouded log periodic antenna

The 734 series of antennas have been designed with high quality fixed link applications in mind. They are characterised by outstanding electrical and mechanical performance. The high quality element train offers outstanding reliability and allows for extremely wide band operation. The robust design of the 734 which includes drainage and ventilation capabilities make these antennas ideally suited for use in all environments and weather conditions. A tough corrosion proof integral aluminium cast clamp allows for accurate horizontal or vertical mounting with a lifting eye to ease site installation. The antenna is protected by a radome made of high quality polyurethane to offer excellent weather protection and compliance for in – building or tunnel applications.

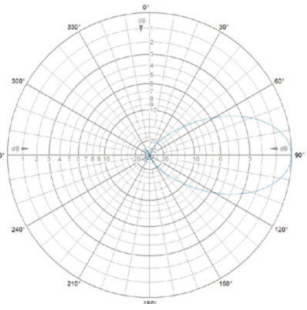
Frequency range	870 - 2700MHz
Input impedance	50Ω
Return loss	>2.5:1
Front to back ratio	30 dB
Maximum input power	250 Watts
Polarisation	Vertical & horizontal
Forward gain	12dBi
3 dB Beamwidth	E Plane 45°
	H Plane 51°
Connection	734.02.05.** N socket 734.02.33.** 7/16 socket
Elements	Aluminium alloy
Radiator feed	Conformable .141" PTFE Cable
Antenna base	Sandcast aluminium alloy grade LM25
Radome	Polyurethane rotational moulding grey
Fasteners	Stainless steel grade A2-70
Lightning protection	Direct grounded
Mounting brackets	Hot gip galvanised steel
	734.02.**.00 38 - 60mm. dia.
	734.02.**.12 38 - 120mm. dia.
Typical weight	6 kg (inc. clamp)
Typical length	1.3 m
Typical wind loading @ 45m/s	202 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

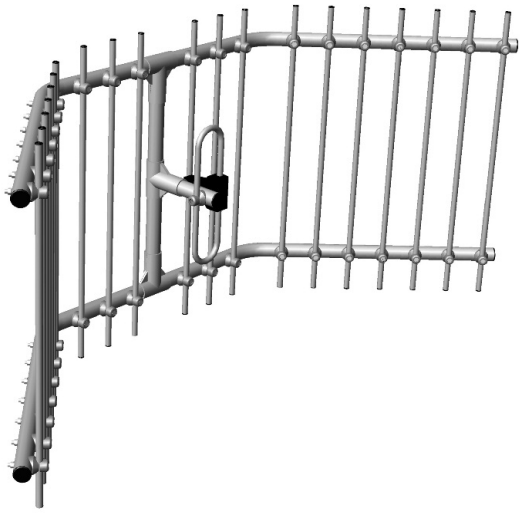
Stock code	Frequency
734.02	870-2700MHz

Issue 1. E&OE ROHS This product is RoHS compliant

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

S.CR-90
45º VHF/UHF Corner reflector antenna

The S.CR consists of a centre fed folded dipole within a reflector screen forming a 'corner' . Two versions are available, one giving 60º sector coverage, one giving 45º sector coverage, achieved by using 120º & 90º corner reflectors respectively. The antennas are designed to offer high gain with minimal sidelobes and a high front-to-back ratio. The one piece folded dipole incorporates a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. These antennas give a gain of 10dBd with front to back ratio typically 25dB. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket, although cable and connector options are available upon request.

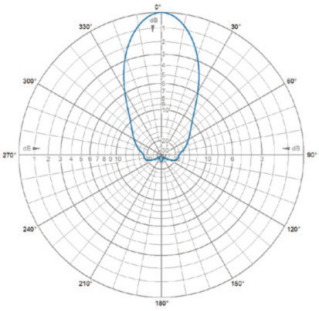


Frequency range	108-500 MHz
Input impedance	50
Bandwidth	± 4% of centre frequency
VSWR	<1.5:1
Front to back ratio	25 dB
Maximum input power	150 Watts
Polarisation	Vertical & horizontal
Forward gain	10 dBd
3dB Beamwidth	H Plane 45º
	E Plane 60º
Standard connection	3m Length of RG 213 c/w 'N' type socket.
Elements	12.7mm dia. x 1.6mm wall aluminium alloy grade 6063T6
Support Booms	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Saddle clamps	Diecast Al / Zinc alloy
Balun Encapsulant	Polyurethane Resin U-600
Lightning protection	Direct grounded
Typical weight	VHF 18 kg UHF 13 kg
Typical wind loading @ 45m/s	VHF 530 N UHF 305 N

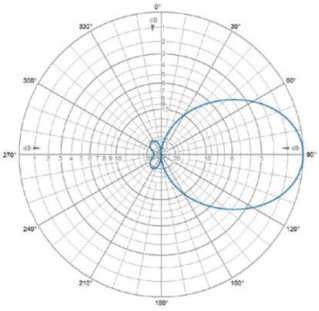
Lightning Resistant Certified

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

Ordering Codes

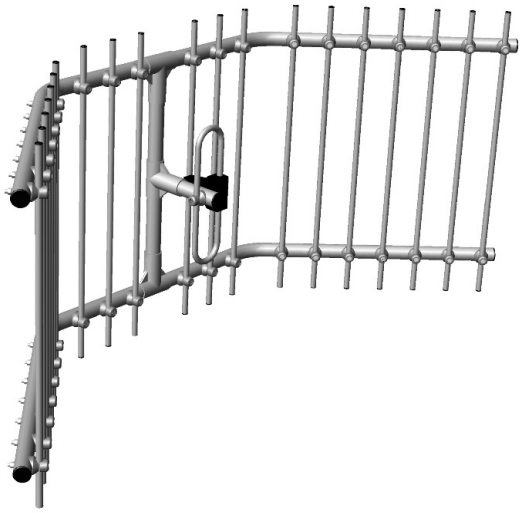
Stock code	Frequency
S.CR-90-160	155-165MHz
S.CR-90-395	380-410MHz
S.CR-90-420	410-430MHz
S.CR-90-450	450-470MHz

Issue 1. E&OE ROHS This product is RoHS compliant

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

S.CR-120
60º VHF/UHF Corner reflector antenna

The S.CR consists of a centre fed folded dipole within a reflector screen forming a 'corner' . Two versions are available, one giving 60º sector coverage, one giving 45º sector coverage, achieved by using 120º & 90º corner reflectors respectively. The antennas are designed to offer high gain with minimal sidelobes and a high front-to-back ratio. The one piece folded dipole incorporates a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. These antennas give a gain of 8dBd with front to back ratio typically 25dB. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket, although cable and connector options are available upon request.

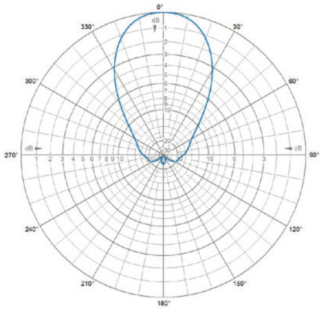


Frequency range	108-500 MHz
Input impedance	50
Bandwidth	± 4% of centre frequency
VSWR	<1.5:1
Front to back ratio	25 dB
Maximum input power	150 Watts
Polarisation	Vertical & horizontal
Forward gain	8 dBd
3dB Beamwidth	H Plane 60º
	E Plane 60º
Standard connection	3m Length of RG 213 c/w 'N' type socket.
Elements	12.7mm dia. x 1.6mm wall aluminium alloy grade 6063T6
Support Booms	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Saddle clamps	Diecast Al / Zinc alloy
Balun Encapsulant	Polyurethane Resin U-600
Lightning protection	Direct grounded
Typical weight	VHF 18 kg UHF 13 kg
Typical wind loading @ 45m/s	VHF 530 N UHF 305 N

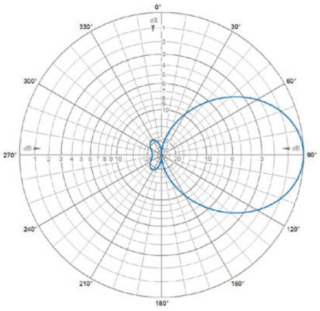
Lightning Resistant Certified

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

Ordering Codes

Stock code	Frequency
S.CR-120-160	155-165MHz
S.CR-120-395	380-410MHz
S.CR-120-420	410-430MHz
S.CR-120-450	450-470MHz

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
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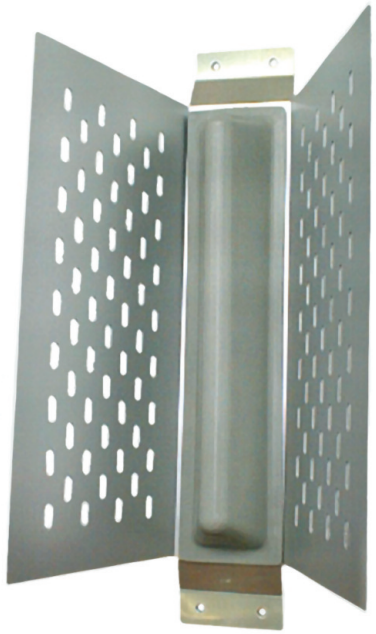
755.01
GSM900 22º Corner reflector antenna

The 755 antenna consists of a PCB - based collinear dipole array within a reflector screen forming a 'corner'. The high front-to-back ratio, low sidelobes and high vertical isolation make this an ideal antenna for repeater applications. Two versions are available, one giving 45º sector coverage, one giving 22º sector coverage, achieved by using 90º & 45º corner reflectors respectively. The antennas are designed for use in harsh environments with the dipole housed in a tough polyurethane radome. The two reflector plates are of mesh construction to minimise wind loading. The antenna has been certified to comply with ETS 300 019 Class 4.1 (Environmental conditions)

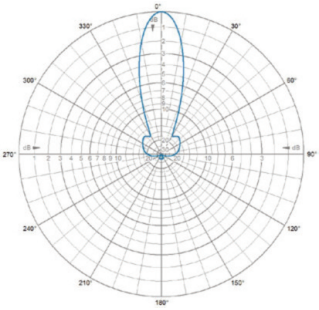


ETS 300-019 Environmental Certification

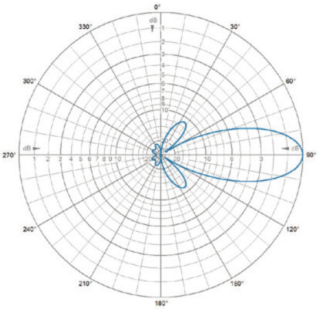
Frequency range	870-960MHz
Input impedance	50
Return loss	<1.5:1
Forward gain	17dBi
Front to back ratio	>35dB
Maximum input power	250W
3 dB Beamwidth	H Plane 22º
	E Plane 30º
Polarisation	Vertical and horizontal
Connection	755.01.05.** N Socket
	755.01.33.** 7/16 Socket
Reflector	Aluminium alloy sheet 2mm grade 6063T6 alocrom 1200
Radator	PTFE Dielectric printed circuit
Radome	Polyurethane rotational moulding grey
Lightning protection	Direct grounded
Mounting brackets	Hot dip galvanised steel, A2 stainless steel fixings
	755.01.**.00 38 to 60mm dia.
	755.01.**.12 38 to 120mm dia.
Size	395(w) x 235(d) x 675(h) (mm)
Weight	5kg
Typical wind loading @45m/s	223 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

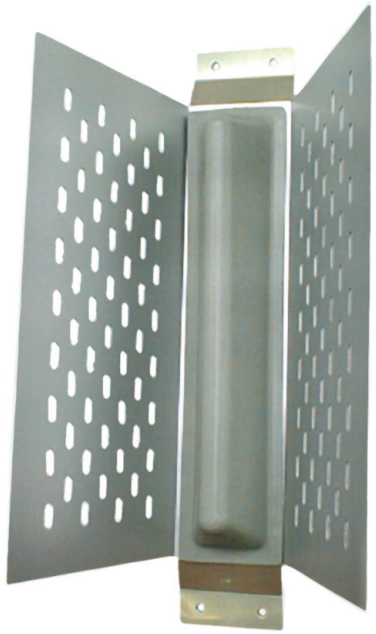
Stock code	Frequency
755.01	870-960MHz
755.04	870-960MHz
755.02	1710-1880MHz
755.05	1710-1880MHz
755.03	1300-1560MHz
755.06	1300-1560MHz

Issue 1. E&OE ROHS This product is RoHS compliant

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

755.04
GSM900 45º Corner reflector antenna

The 755 antenna consists of a PCB - based collinear dipole array within a reflector screen forming a 'corner'. The high front-to-back ratio, low sidelobes and high vertical isolation make this an ideal antenna for repeater applications. Two versions are available, one giving 45º sector coverage, one giving 22º sector coverage, achieved by using 90º & 45º corner reflectors respectively. The antennas are designed for use in harsh environments with the dipole housed in a tough polyurethane radome. The two reflector plates are of mesh construction to minimise wind loading. The antenna has been certified to comply with ETS 300 019 Class 4.1 (Environmental conditions)

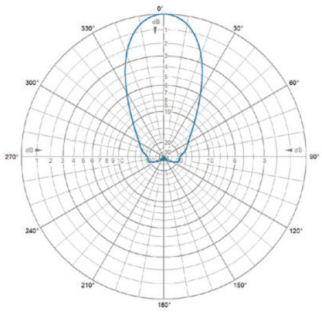


ETS 300-019 Environmental Certification

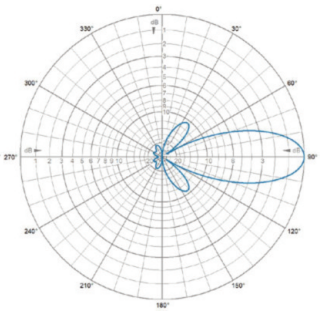
Frequency range	870-960MHz
Input impedance	50
Return loss	<1.5:1
Forward gain	14dBi
Front to back ratio	>35dB
Maximum input power	250W
3 dB Beamwidth	H Plane 45º
	E Plane 30º
Polarisation	Vertical and horizontal
Connection	755.04.05.** N Socket
	755.04.33.** 7/16 Socket
Reflector	Aluminium alloy sheet 2mm grade 6063T6 alocrom 1200
Radator	PTFE Dielectric printed circuit
Radome	Polyurethane rotational moulding grey
Lightning protection	Direct grounded
Mounting brackets	Hot dip galvanised steel, A2 stainless steel fixings
	755.04.**.00 38 to 60mm dia.
	755.04.**.12 38 to 120mm dia.
Size	555(w) x 180(d) x 675(h) (mm)
Weight	5kg
Typical wind loading @45m/s	237 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

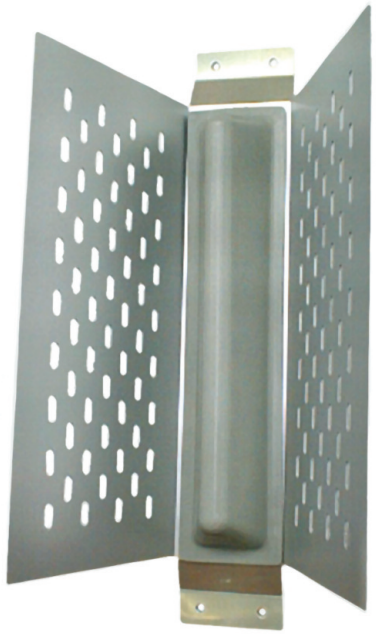
Ordering Codes

Stock code	Frequency
755.01	870-960MHz
755.04	870-960MHz
755.02	1710-1880MHz
755.05	1710-1880MHz
755.03	1300-1560MHz
755.06	1300-1560MHz

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

755.02
DCS1800 22º Corner reflector antenna

The 755 antenna consists of a PCB - based collinear dipole array within a reflector screen forming a 'corner'. The high front-to-back ratio, low sidelobes and high vertical isolation make this an ideal antenna for repeater applications. Two versions are available, one giving 45º sector coverage, one giving 22º sector coverage, achieved by using 90º & 45º corner reflectors respectively. The antennas are designed for use in harsh environments with the dipole housed in a tough polyurethane radome. The two reflector plates are of mesh construction to minimise wind loading. The antenna has been certified to comply with ETS 300 019 Class 4.1 (Environmental conditions)

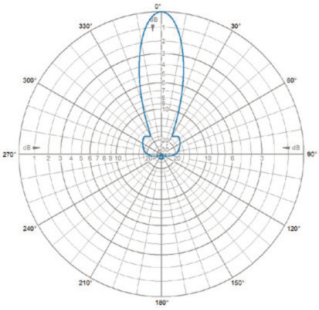


ETS 300-019 Environmental Certification

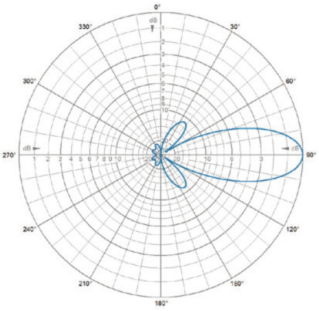
Frequency range	1710-1880MHz
Input impedance	50
Return loss	<1.5:1
Forward gain	17dBi
Front to back ratio	>35dB
Maximum input power	250W
3 dB Beamwidth	H Plane 22º
	E Plane 30º
Polarisation	Vertical and horizontal
Connection	755.02.05.** N Socket
	755.02.33.** 7/16 Socket
Reflector	Aluminium alloy sheet 2mm grade 6063T6 alocrom 1200
Radator	PTFE Dielectric printed circuit
Radome	Polyurethane rotational moulding grey
Lightning protection	Direct grounded
Mounting brackets	Hot dip galvanised steel, A2 stainless steel fixings
	755.02.**.00 38 to 60mm dia.
	755.02.**.12 38 to 120mm dia.
Size	310(w) x 235(d) x 675(h) (mm)
Weight	4.3kg
Typical wind loading @45m/s	196 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

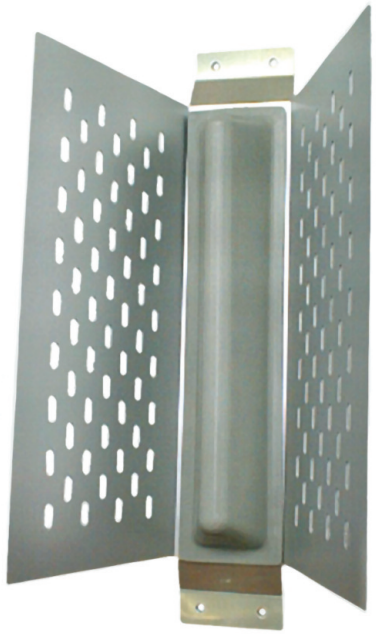
Stock code	Frequency
755.01	870-960MHz
755.04	870-960MHz
755.02	1710-1880MHz
755.05	1710-1880MHz
755.03	1300-1560MHz
755.06	1300-1560MHz

Issue 1. E&OE ROHS This product is RoHS compliant

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

755.05
DCS1800 45º Corner reflector antenna

The 755 antenna consists of a PCB - based collinear dipole array within a reflector screen forming a 'corner'. The high front-to-back ratio, low sidelobes and high vertical isolation make this an ideal antenna for repeater applications. Two versions are available, one giving 45º sector coverage, one giving 22º sector coverage, achieved by using 90º & 45º corner reflectors respectively. The antennas are designed for use in harsh environments with the dipole housed in a tough polyurethane radome. The two reflector plates are of mesh construction to minimise wind loading. The antenna has been certified to comply with ETS 300 019 Class 4.1 (Environmental conditions)

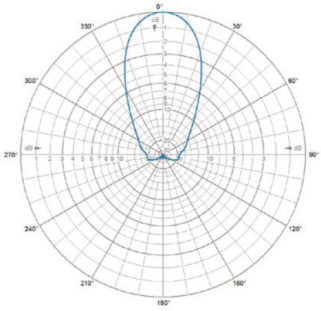


ETS 300-019 Environmental Certification

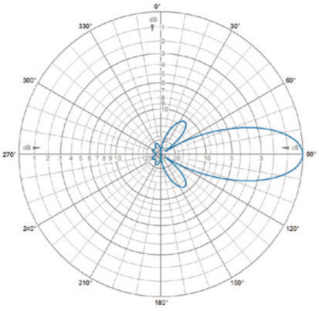
Frequency range	1710-1880MHz
Input impedance	50
Return loss	<1.5:1
Forward gain	14dBi
Front to back ratio	>35dB
Maximum input power	250W
3 dB Beamwidth	H Plane 45º
	E Plane 30º
Polarisation	Vertical and horizontal
Connection	755.05.05.** N Socket
	755.05.33.** 7/16 Socket
Reflector	Aluminium alloy sheet 2mm grade 6063T6 alocrom 1200
Radator	PTFE Dielectric printed circuit
Radome	Polyurethane rotational moulding grey
Lightning protection	Direct grounded
Mounting brackets	Hot dip galvanised steel, A2 stainless steel fixings
	755.05.**.00 38 to 60mm dia.
	755.05.**.12 38 to 120mm dia.
Size	480(w) x 180(d) x 675(h) (mm)
Weight	4.3kg
Typical wind loading @45m/s	207 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

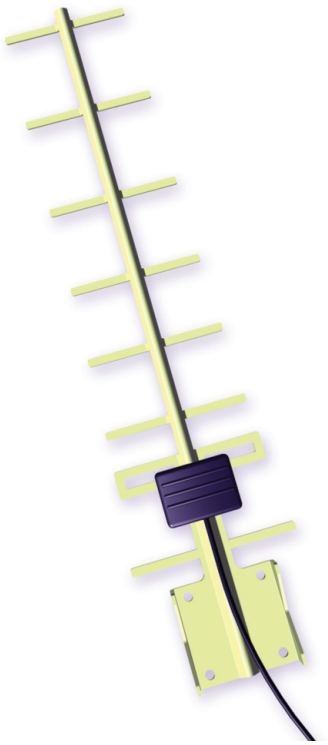
Stock code	Frequency
755.01	870-960MHz
755.04	870-960MHz
755.02	1710-1880MHz
755.05	1710-1880MHz
755.03	1300-1560MHz
755.06	1300-1560MHz

Issue 1. E&OE ROHS This product is RoHS compliant

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

7161.3
GSM900 Light duty Yagi antenna

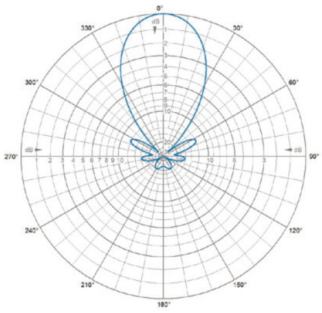
The 7161 Yagi antennas are a lightweight low cost solution for signal enhancement and data use within 900MHz Cellular bands. The 7161 antenna range are widely used for cellular network repeater and rural telephony applications. The antenna is supplied with a ten metre downlead, mounting bracket to suit up to 60mm tube and mounting instructions. The antennas are fully weatherproof and well suited to either domestic or commercial applications.



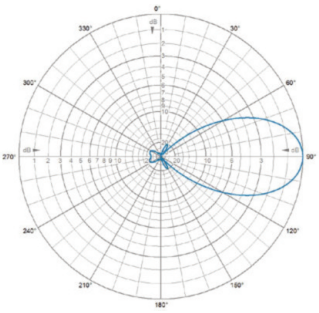
Frequency range	870-960 MHz
Input impedance	50
VSWR	<2.0:1
Front to back ratio	18 dB
Maximum input power	25 Watts
Polarisation	Vertical & Horizontal
Forward gain	10 dBd.
3 dB Beamwidth	E Plane 43º
	H Plane 50º
Standard Connection	10m RG58 c/w FME female (options available)
Elements	1/8" Aluminium profile
Balun	Printed circuit FR4 (lacquered)
Fasteners	1/8" Aluminium rivets
Lightning protection	Direct grounded
Corrosion protection	Alocrom 1200
Mounting brackets	1763/SLCL (supplied)
Typical weight	300g (not including cable)
Typical length	0.8 m

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
7161.3	870-960MHz
7161.4	1710-1880MHz
7161.31	870-960MHz
7161.41	1710-1880MHz
7161.5	1900-2170MHz

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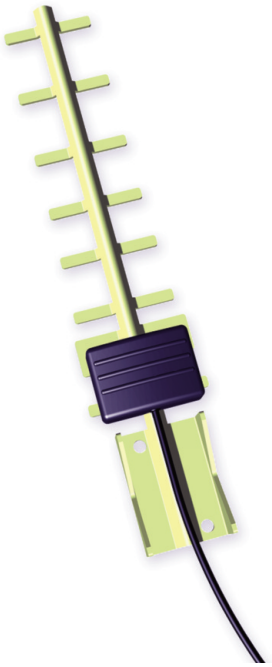
7161.4
DCS1800 Light duty Yagi antenna

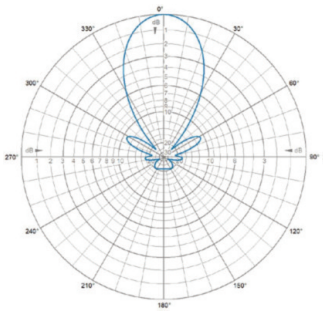
The 7161 Yagi antennas are a lightweight low cost solution for signal enhancement and data use within 1800MHz Cellular bands. The 7161 antenna range are widely used for cellular network repeater and rural telephony applications. The antenna is supplied with a five metre downlead, mounting bracket to suit up to 60mm tube and mounting instructions. The antennas are fully weatherproof and well suited to either domestic or commercial applications.



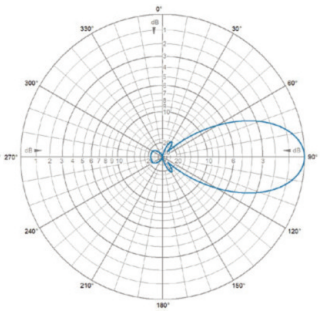
Frequency range	1710-1880 MHz
Input impedance	50
VSWR	<2.0:1
Front to back ratio	18 dB
Maximum input power	25 Watts
Polarisation	Vertical & Horizontal
Forward gain	10 dBd
3 dB Beamwidth	E Plane 43°
	H Plane 50°
Standard Connection	5m RG58 c/w FME female (options available)
Elements	1/8" Aluminium profile
Balun	Printed circuit FR4 (lacquered)
Fasteners	1/8" Aluminium rivets
Lightning protection	Direct grounded
Corrosion protection	Alocrom 1200
Mounting brackets	1763/SLCL (supplied)
Typical weight	250g (not including cable)
Typical length	0.4 m

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
7161.3	870-960MHz
7161.4	1710-1880MHz
7161.31	870-960MHz
7161.41	1710-1880MHz
7161.5	1900-2170MHz

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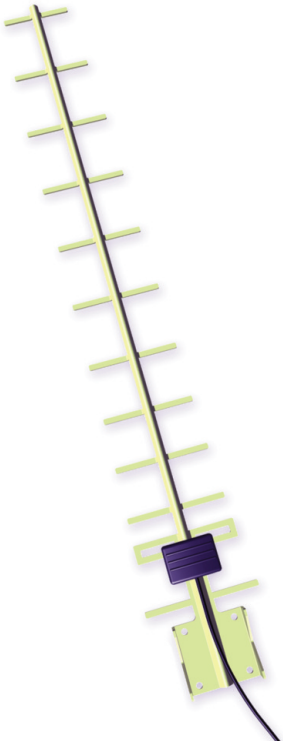
7161.31
GSM High-gain light duty Yagi antenna

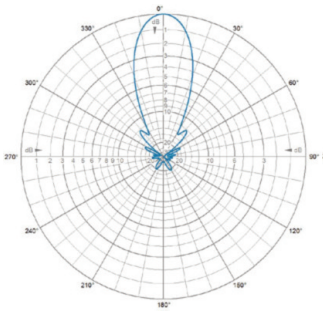
The 7161 Yagi antennas are a lightweight low cost solution for signal enhancement and data use within 900MHz Cellular bands. The 7161 antenna range are widely used for cellular network repeater and rural telephony applications. The antenna is supplied with a ten metre downlead, mounting bracket to suit up to 60mm tube and mounting instructions. The antennas are fully weatherproof and well suited to either domestic or commercial applications.



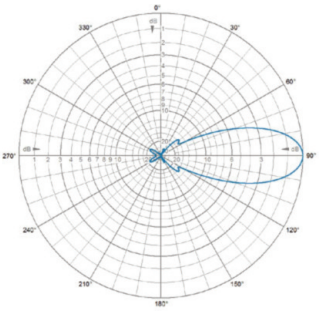
Frequency range	870-960 MHz
Input impedance	50
VSWR	<2.0:1
Front to back ratio	18 dB
Maximum input power	25 Watts
Polarisation	Vertical & Horizontal
Forward gain	12 dBd
3 dB Beamwidth	E Plane 34°
	H Plane 40°
Standard Connection	10m RG58 c/w FME female (options available)
Elements	1/8" Aluminium profile
Balun	Printed circuit FR4 (lacquered)
Fasteners	1/8" Aluminium rivets
Lightning protection	Direct grounded
Corrosion protection	Alocrom 1200
Mounting brackets	1763/SLCL (supplied)
Typical weight	345g (not including cable)
Typical length	1.1m

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
7161.3	870-960MHz
7161.4	1710-1880MHz
7161.31	870-960MHz
7161.41	1710-1880MHz
7161.5	1900-2170MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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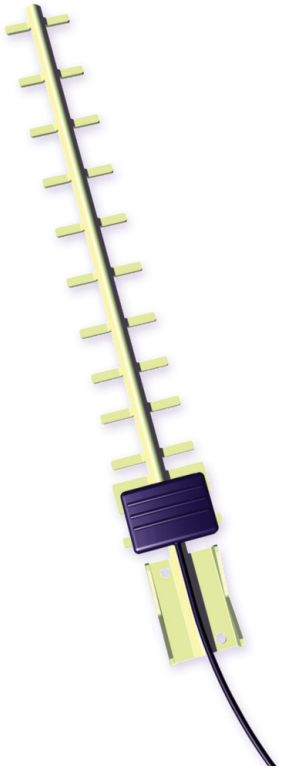
7161.41
DCS High-gain light duty Yagi antenna

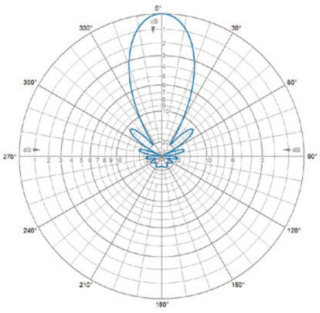
The 7161 Yagi antennas are a lightweight low cost solution for signal enhancement and data use within 1800MHz Cellular bands. The 7161 antenna range are widely used for cellular network repeater and rural telephony applications. The antenna is supplied with a five metre downlead, mounting bracket to suit up to 60mm tube and mounting instructions. The antennas are fully weatherproof and well suited to either domestic or commercial applications.



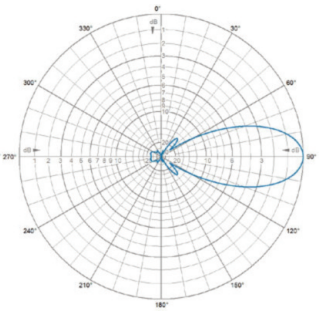
Frequency range	1710-1880 MHz
Input impedance	50
VSWR	<2.0:1
Front to back ratio	18 dB
Maximum input power	25 Watts
Polarisation	Vertical & Horizontal
Forward gain	12 dBd
3 dB Beamwidth	E Plane 34°
	H Plane 40°
Standard Connection	5m RG58 c/w FME female (options available)
Elements	1/8" Aluminium profile
Balun	Printed circuit FR4 (lacquered)
Fasteners	1/8" Aluminium rivets
Lightning protection	Direct grounded
Corrosion protection	Alocrom 1200
Mounting brackets	1763/SLCL (supplied)
Typical weight	310g (not including cable)
Typical length	0.7 m

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
7161.3	870-960MHz
7161.4	1710-1880MHz
7161.31	870-960MHz
7161.41	1710-1880MHz
7161.5	1900-2170MHz

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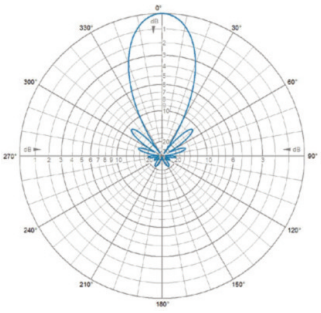
7161.5
UMTS/3G Light duty Yagi antenna

The 7161 Yagi antennas are a lightweight low cost solution for signal enhancement and data use within 2.1GHz Cellular bands. The 7161 antenna range are widely used for cellular network repeater and rural telephony applications. The antenna is supplied with a five metre downlead, mounting bracket to suit up to 60mm tube and mounting instructions. The antennas are fully weatherproof and well suited to either domestic or commercial applications.

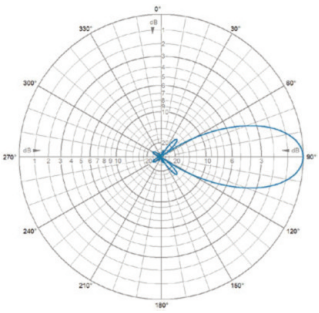
Frequency range	1900-2170 MHz
Input impedance	50
VSWR	<2.0:1
Front to back ratio	18 dB
Maximum input power	25 Watts
Polarisation	Vertical & Horizontal
Forward gain	12 dBd.
3 dB Beamwidth	E Plane 34°
	H Plane 40°
Standard Connection	5m RG58 c/w FME female (options available)
Elements	1/8" Aluminium profile
Balun	Printed circuit FR4 (lacquered)
Fasteners	1/8" Aluminium rivets
Lightning protection	Direct grounded
Corrosion protection	Alocrom 1200
Mounting brackets	1763/SLCL (supplied)
Typical weight	220g (not including cable)
Typical length	0.46 m

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
7161.3	870-960MHz
7161.4	1710-1880MHz
7161.31	870-960MHz
7161.41	1710-1880MHz
7161.5	1900-2170MHz

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S.EFX
Broadband glassfibre end fed dipole

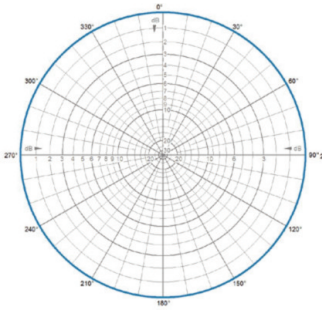
The S.EFX series of glassfibre dipoles are designed for professional base station and fixed mobile applications. The antennas have been designed with an integral dual purpose mounting bracket, cast in aluminium. The stainless steel fittings enable the antennas to be fixed to the top or side of a vertical pole up to 60mm diameter. The centre fed dipole is fed via coaxial cable, giving a stable radiation pattern over a wide operating band. All S.EFX series are d.c. grounded. A VSWR of 1.5:1 is achieved over a bandwidth of ±6% of centre frequency.

• Horizontal or vertical tube mount

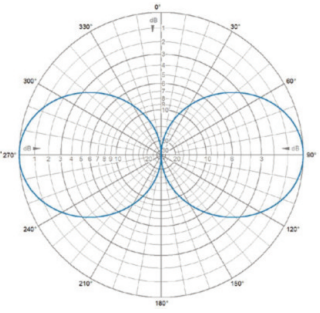
Frequency range	Manufactured between 68 - 500 MHz		
Input impedance	50Ω		
Typical Bandwidth	±6% of centre frequency		
VSWR	<1.5:1		
H Plane ripple	< ±0.5 dB		
Maximum input power	150 Watts		
Polarisation	Vertical		
Gain	0 dBd		
3 dB Beamwidth	E Plane 80°		
Standard Connection	0.5m Length of RG 213 c/w 'N' type socket.		
Dipoles	11mm dia brass tube		
Dipole feeds	PTFE dielectric coaxial cable		
Shroud	Parallel grey glassfibre tube 26mm dia.		
	VHF Low Band 40mm dia.		
Lightning protection	Direct grounded		
Mounting bracket	Integral diecast aluminium alloy grade LM6		
Bracket finish	Black anodise		
Mast fixings	Stainless steel M8 V bolts grade A2-70		
Typical weight	**VHF Low** 1.5kg	**VHF High** 0.8kg	**UHF** 0.6kg
Typical length	**VHF Low** 3.1m	**VHF High** 1.5m	**UHF** 0.8m
Typical wind loading @ 45m/s	**VHF Low** 135N	**VHF High** 41N	**UHF** 26N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

CSB
Welded
Aluminium
Standoff Frame

Ordering Codes

Stock code	Frequency
S.EFX-127	117-137MHz
S.EFX-165	155-175MHz
S.EFX-184	176-192MHz
S.EFX-200	192-208MHz
S.EFX-405	380-430MHz
S.EFX-445	420-470MHz

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S.C3B
3dBd Glassfibre collinear antenna

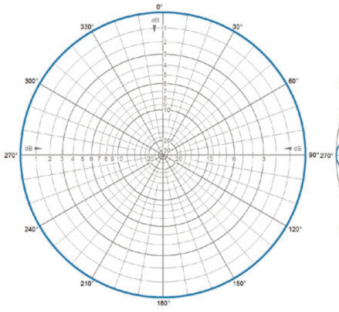
The S.C3B series of glassfibre collinears are designed for professional base station and telemetry applications. The antennas have been designed with an integral dual purpose mounting bracket, cast in aluminium. The stainless steel fittings enable the antennas to be fixed to the top of a vertical pole up to 60mm diameter. The all coaxial fed centre fed dipoles enable beam tilt to be readily achieved, if specifically required. All S.C3B series antennas are d.c. grounded. A VSWR of 1.5:1 is achieved over a bandwidth of ±4 % of centre frequency.

The S.C3B is approved for use on MPT1411 systems.

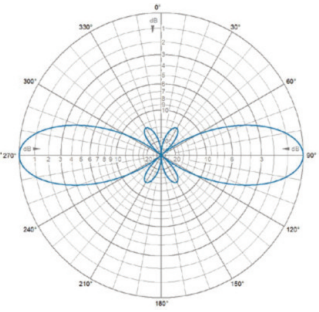
Frequency range	Manufactured between 118 - 960 MHz
Input impedance	50Ω
Typical Bandwidth	±4% of centre frequency
VSWR	<1.5:1
H Plane ripple	< ±0.5 dB
Maximum input power	**VHF/UHF** 150 Watts **SHF** 100 W
Polarisation	Vertical
Gain	3 dBd
3 dB Beamwidth	E Plane 33º
Standard Connection	0.5m Length of RG213 c/w 'N' type socket.
Dipoles	11mm dia brass tube
Dipole feeds	PTFE dielectric coaxial cable
Shroud	Parallel grey glassfibre tube
	VHF 40mm dia. **UHF/SHF** 26mm dia.
Lightning protection	Direct Grounded
Mounting bracket	Integral diecast aluminium alloy grade LM6
Bracket finish	Black anodise
Mast fixings	Stainless steel M8 V bolts grade A2-70
Typical weight	**VHF** 1.5kg **UHF** 0.8kg **SHF** 0.6kg
Typical length	**VHF** 3.1m **UHF** 1.5m **SHF** 0.8m
Typical wind loading @ 45m/s	**VHF** 185N **UHF** 81N **SHF** 46N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

CSB
Welded
Aluminium
Standoff Frame

Ordering Codes

Stock code	Frequency
S.C3B-155	145-165MHz
S.C3B-165	155-175MHz
S.C3B-395	380-410MHz
S.C3B-420	410-430MHz
S.C3B-460	450-470MHz
S.C3B-869	860-890MHz
S.C3B-915	870-960MHz

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S.C6B
6dBd Glassfibre collinear antenna

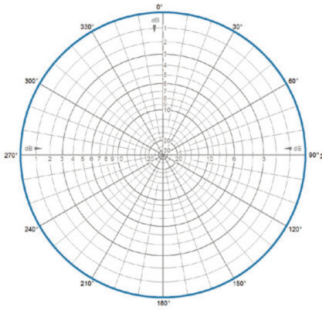
The S.C6B series of glassfibre collinears are designed for professional base station and telemetry applications. The antennas have been designed with an integral dual purpose mounting bracket, cast in aluminium. The stainless steel fittings enable the antennas to be fixed to the top of a vertical pole up to 60mm diameter. The all coaxial fed centre fed dipoles enable beam tilt to be readily achieved, if specifically required. All S.C6B series antennas are d.c. grounded. A VSWR of 1.5:1 is achieved over a bandwidth of ±3% of centre frequency.

The S.C6B is approved for use on MPT1411 systems.

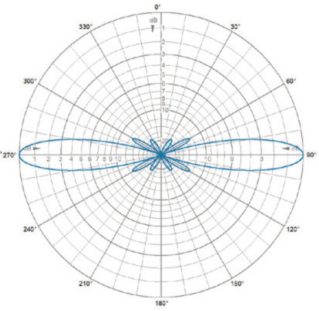
Frequency range	Manufactured between 145 - 500 MHz
Input impedance	50Ω
Typical Bandwidth	**UHF** ±3% centre freq. **VHF** ±1.5% centre freq.
VSWR	<1.5:1
H Plane ripple	< ±0.5 dB
Maximum input power	150 Watts
Polarisation	Vertical
Gain	6 dBd
3 dB Beamwidth	E Plane 17°
Standard Connection	0.5m Length of RG213 c/w 'N' type socket.
Dipoles	11mm dia brass tube
Dipole feeds	PTFE dielectric coaxial cable
Shroud	Parallel grey glassfibre tube 40mm dia.
Lightning protection	Direct grounded
Mounting section	**>300MHz** Integral diecast aluminium alloy bracket
	<300MHz 48mm diameter tube section (separate bracket required)
Bracket finish	Black anodise (UHF)
Mast fixings	Stainless steel M8 V bolts grade A2-70 (UHF)
Typical weight	**VHF** 3.8kg **UHF** 1.5kg
Typical length	**VHF** 5.1m **UHF** 3.1m
Typical wind loading @ 45m/s	**VHF** 298N **UHF** 185N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

CSB
Welded
Aluminium
Standoff Frame

2140/2141
Galv Steel
Parallel clamps
38-120mm

Ordering Codes

Stock code	Frequency
S.C6B-390	380-400MHz
S.C6B-420	410-430MHz
S.C6B-460	450-470MHz

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4220.03

3dBd Glassfibre Low PIM HD Colinear Antenna

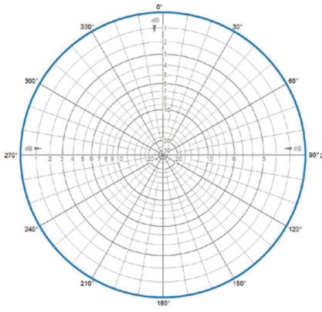
The 4220 Series colinear antenna is designed for demanding applications where a durable and high performance colinear antenna is required. The centre fed dipole design and feed network gives a stable radiation pattern across a wide bandwidth, and allows tilted beam designs to be effectively employed without large pattern distortions. High quality materials and manufacturing techniques are employed to ensure that the antenna has excellent intermodulation performance & wide bandwidth characteristics for TETRA and other multi-channel communication systems. The antenna has been designed to withstand lightning strike and has a conductor through it's centre to allow a finial to be fitted to it's top cap, and is supplied as standard with a 7/16 female connector.

- Low PIM Certified
- Lightning Resistant Certified
- Strength Tested

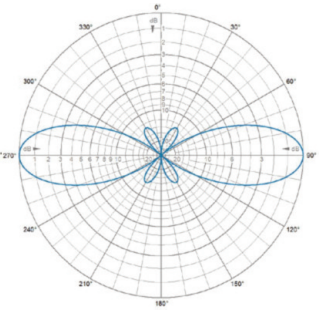
Frequency range	**4220.03-355-Txx**	340 - 370 MHz
	4220.03-405-Txx	380 - 430 MHz
	4220.03-445-Txx	420 - 470 MHz
Input impedance	50Ω	
VSWR	<1.5:1	
H Plane ripple	< ±0.5 dB	
Maximum input power	300 W CW	
Polarisation	Vertical	
Forward gain	3 dBd (5.15dBi)	
3 dB Beamwidth	E Plane 35°	
Available beamtilts	0 , 6 ,8 and 12°	
Intermodulation	-153dBc (3rd order), 2 x Tx@43dBm	
Lightning protection	To withstand 2.5 x 10^6 A^2 pulse	
	All metallic parts DC grounded	
Connection	Fixed 7/16 DIN socket in base	
Dipoles	38mm dia. brass tube	
Dipole feeds	PTFE dielectric coaxial cable	
Shroud	GRP tube (grey,RAL7035) 53mm dia.	
Mounting section	Aluminium alloy tube 63.5mm dia. Alocrom 1000	
Typical weight	4kg	
Typical length	1.6m	
Maximum wind loading @ 45m/s	142N	
Survival wind speed	350km/h	

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

CSB
Welded
Aluminium
Standoff Frame

2141.01.00.00
Galv Steel
Parallel clamps
38-120mm

Ordering Codes

Stock code	Beamtilt
4220.03-xxx-T0	0°
4220.03-xxx-T6	6°
4220.03-xxx-T8	8°
4220.03-xxx-T12	12°

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4220.06

6dBd Glassfibre Low PIM HD Colinear Antenna

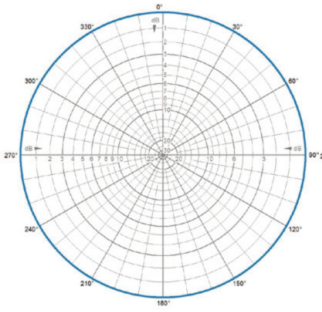
The 4220 Series colinear antenna is designed for demanding applications where a durable and high performance colinear antenna is required. The centre fed dipole design and feed network gives a stable radiation pattern across a wide bandwidth, and allows tilted beam designs to be effectively employed without large pattern distortions. High quality materials and manufacturing techniques are employed to ensure that the antenna has excellent intermodulation performance & wide bandwidth characteristics for TETRA and other multi-channel communication systems. The antenna has been designed to withstand lightning strike and has a conductor through it's centre to allow a finial to be fitted to it's top cap, and is supplied as standard with a 7/16 female connector.

- Low PIM Certified
- Lightning Resistant Certified
- Strength Tested

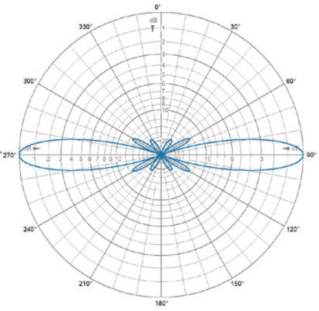
Frequency range	**4220.06-355-Txx**	340 - 370 MHz
	4220.06-405-Txx	380 - 430 MHz
	4220.06-445-Txx	420 - 470 MHz
Input impedance	50Ω	
VSWR	<1.5:1	
H Plane ripple	< ±0.5 dB	
Maximum input power	300 W CW	
Polarisation	Vertical	
Forward gain	6 dBd (8.15dBi)	
3 dB Beamwidth	E Plane 16°	
Available beamtilts	0 , 6 ,8 and 12°	
Intermodulation	-153dBc (3rd order), 2 x Tx@43dBm	
Lightning protection	To withstand 2.5 x 10^6 A^2 pulse	
	All metallic parts DC grounded	
Connection	Fixed 7/16 DIN socket in base	
Dipoles	38mm dia. brass tube	
Dipole feeds	PTFE dielectric coaxial cable	
Shroud	GRP tube (grey, RAL7035) 53mm dia.	
Mounting section	Aluminium alloy tube 63.5mm dia. Alocrom 1000	
Weight	8.1kg	
Overall Length	2.85m	
Maximum wind loading @ 45m/s	230N	
Survival wind speed	350km/h	

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

CSB
Welded
Aluminium
Standoff Frame

2141.01.00.00
Galv Steel
Parallel clamps
38-120mm

Ordering Codes

Stock code	Beamtilt
4220.06-xxx-T0	0°
4220.06-xxx-T6	6°
4220.06-xxx-T8	8°
4220.06-xxx-T12	12°

Issue 2. E&OE ROHS This product is RoHS compliant

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

4220.09

9dBd Glassfibre Low PIM HD Colinear Antenna

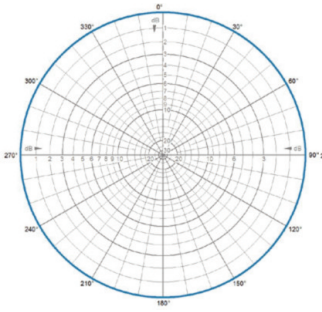
The 4220 Series colinear antenna is designed for demanding applications where a durable and high performance colinear antenna is required. The centre fed dipole design and feed network gives a stable radiation pattern across a wide bandwidth, and allows tilted beam designs to be effectively employed without large pattern distortions. High quality materials and manufacturing techniques are employed to ensure that the antenna has excellent intermodulation performance & wide bandwidth characteristics for TETRA and other multi-channel communication systems. The antenna has been designed to withstand lightning strike and has a conductor through it's centre to allow a finial to be fitted to it's top cap, and is supplied as standard with a 7/16 female connector.

- Low PIM Certified
- Lightning Resistant Certified
- Strength Tested

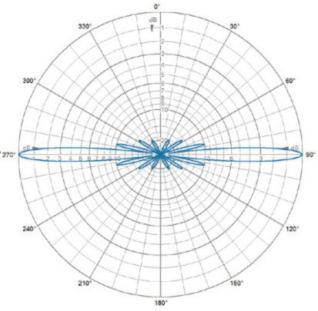
Frequency range	**4220.09-355-Txx**	340 - 370 MHz
	4220.09-405-Txx	380 - 430 MHz
	4220.09-445-Txx	420 - 470 MHz
Input impedance	50Ω	
VSWR	<1.5:1	
H Plane ripple	< ±0.5 dB	
Maximum input power	300 W CW	
Polarisation	Vertical	
Forward gain	9 dBd (11.15dBi)	
3 dB Beamwidth	E Plane 8°	
Available beamtilts	0 , 5 ,8 and 12°	
Intermodulation	-153dBc (3rd order), 2 x Tx@43dBm	
Lightning protection	To withstand 2.5 x 10^6 A^2 pulse	
	All metallic parts DC grounded	
Connection	Fixed 7/16 DIN socket in base	
Dipoles	38mm dia. brass tube	
Dipole feeds	PTFE dielectric coaxial cable	
Shroud	GRP tube (grey,RAL7035) 53mm dia.	
Mounting section	Aluminium alloy tube 63.5mm dia. Alocrom 1000	
Typical weight	13kg	
Typical length	5.6m	
Maximum wind loading @ 45m/s	447N	
Survival wind speed	300km/h	

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

CSB
Welded
Aluminium
Standoff Frame

2141.01.00.00
Galv Steel
Parallel clamps
38-120mm

Ordering Codes

Stock code	Beamtilt
4220.09-xxx-T0	0°
4220.09-xxx-T6	6°
4220.09-xxx-T8	8°
4220.09-xxx-T12	12°

Issue 2. E&OE ROHS This product is RoHS compliant

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

438 Series
Broadband VHF ground plane antenna

The 438 Series are NATO approved antennas consisting a broadband quarter wave radiator and four radial ground planes of an extremely rugged and reliable construction. The quarter wave radiator incorporates a d.c. short to minimise static interference. The antenna has an integral cast aluminium mounting clamp to suit masts of 38mm to 60mm diameter. The antenna is available in a variety of two part lacquer finishes, including IR proof military green.

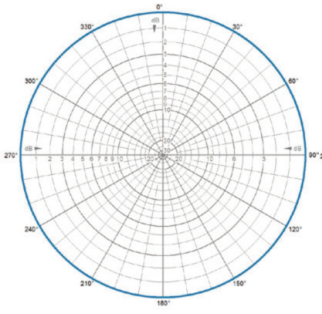
NATO Stock Number (NSN) 5985-22-306-9402 for model 438.02.05.00 (108-156MHz) IR Proof Green

Lightning Resistant Certified

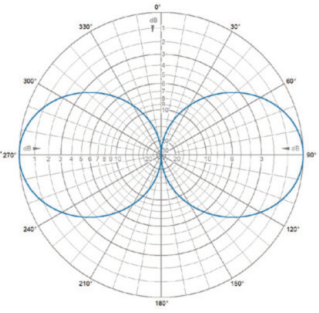
Frequency range	**438.01.05.00** 68 - 88 MHz
	438.04.05.00 88 - 108 MHz
	438.02.05.00 108 - 156 MHz
	438.03.05.00 145 - 175 MHz
	438.05.05.00 176 - 224 MHz
Input impedance	50Ω
VSWR	<2.0:1
Maximum input power	1KW PEP
Polarisation	Vertical
Antenna gain	0 dBd
3dB Beamwidth	80° typical
Connection	'N' Type socket, fixed in base
Dipole	100mm dia.x 2mm wall aluminium alloy grade 6063T6
Ground plane	32mm dia. x 1.5mm wall aluminium alloy grade 6063T6
Fasteners	Stainless steel grade A2-70
Mounting bracket	Integral diecast aluminium alloy grade LM25.
Mast fixings	Stainless steel M8 V bolts grade A2-70
External Finish	Polyester Coated White (or to customer specified colour)
Lightning protection	Direct Grounded
Weight	**438.02.05.00** 4.1 kg
Assembled Length	**438.02.05.00** 0.95 m
Typical Wind loading @ 45m/s	**438.02.05.00** 130 N
NATO Stock No. (NSN)	**438.02.05.00** 5985-22-306-9402

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

2140/2141
Galv Steel Parallel clamps 38-120mm

AT5 / ST5
Aluminium / Steel Tube 1 29/32"

Ordering Codes

Stock code	Frequency
438.01.05.00	68-88 MHz
438.04.05.00	88-108 MHz
438.02.05.00	108-156 MHz
438.03.05.00	145-175 MHz
438.05.05.00	176-224 MHz

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

470.01.05.00
Broadband VHF ground-air dipole

The 470 Series of glassfibre dipoles are designed for wide band, particularly military and ground-to-air applications. The antennas are well suited to the most demanding applications both physically and environmentally, and have been engineered for optimal performance over a bandwidth greater than 50% of their centre frequency. They have been designed with an integral mounting bracket, cast in aluminium, which enables the 470 to be fitted directly on a vertical pole of 50mm diameter. The aluminium centre fed dipole is fed via PTFE coaxial cable and offers a stable radiation pattern over a wide operating band. The antenna is available in a variety of two part lacquer finishes, including IRR military green. (can be customer specified to appropriate colour code ref.)

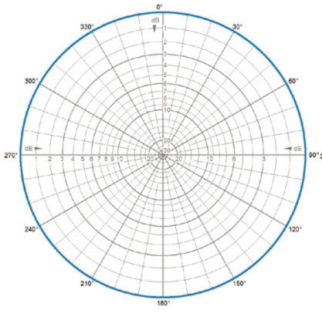
Frequency range	108-175MHz
Input impedance	50Ω
VSWR	<2.0:1
H Plane ripple	< ±1dB
Maximum input power	1kW
Polarisation	Vertical
Antenna gain	0 dBd
3dB Beamwidth	E Plane 80°
Connection	'N' type socket
Dipole	120mm dia. aluminium rolled tube
Dipole feed	PTFE dielectric coaxial cable
Shroud	Parallel military green glassfibre tube 128mm dia.
Lightning protection	Direct grounded
	470.01.05.00 Grounded alum. top cap with finial and lifting eye
Mounting bracket	Integral cast alum.alloy LM6 to suit 50mm dia. support pole
Mast fixings	Stainless steel M10 bolts grade A2-70
Weight	6 kg
Length	1.9 m
Typical Wind loading @ 45m/s	324 N

Lightning Resistant Certified

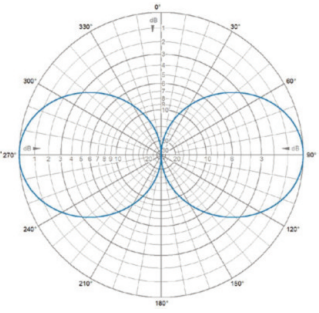
Multidipole and high gain versions can be found in the **Skymasts Ground to Air Catalogue**

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

2140/2141
Galv Steel Parallel clamps 38-120mm

AT5 / ST5
Aluminium / Steel Tube 1 29/32”

Ordering Codes

Stock code	Frequency
470.01.05.00	108-175MHz
470.31.05.00	108-175MHz, 3dBd
470.02.05.00	225-400MHz
470.32.05.00	225-400MHz, 3dBd
470.05.05.00	100-400MHz
470.04.33.00	208-235MHz
470.34.33.00	208-235MHz, 3dBd

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Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

470.02.05.00
Broadband UHF ground-air dipole antenna

The 470 Series of glassfibre dipoles are designed for wide band, particularly military and ground-to-air applications. The antennas are well suited to the most demanding applications both physically and environmentally, and have been engineered for optimal performance over a bandwidth greater than 50% of their centre frequency. They have been designed with an integral mounting bracket, cast in aluminium, which enables the 470 to be fitted directly on a vertical pole of 50mm diameter. The aluminium centre fed dipole is fed via PTFE coaxial cable and offers a stable radiation pattern over a wide operating band. The antenna is available in a variety of two part lacquer finishes, including IRR military green. (can be customer specified to appropriate colour code ref.)

NATO Stock Number (NSN) 5985-25-132-3733 for mo del 470.02.05.00 (225-400MHz) IRR Military Green

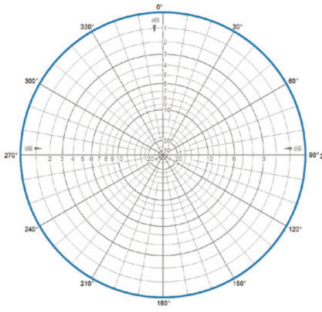
Frequency range	225 - 400 MHz
Input impedance	50Ω
VSWR	<2.0:1
H Plane ripple	< ±1dB
Maximum input power	1kW
Polarisation	Vertical
Antenna gain	0 dBd
3dB Beamwidth	E Plane 80°
Connection	'N' type socket
Dipole	120mm dia. aluminium rolled tube
Dipole feed	PTFE dielectric coaxial cable
Shroud	Parallel military green glassfibre tube 128mm dia.
Lightning protection	Direct grounded
	470.02.05.10 Grounded alum. top cap with finial and lifting eye
Mounting bracket	Integral cast alum.alloy LM6 to suit 50mm dia. support pole
Mast fixings	Stainless steel M10 bolts grade A2-70
Weight	4 kg
Length	1.1 m
Typical Wind loading @ 45m/s	184 N

Lightning Resistant Certified

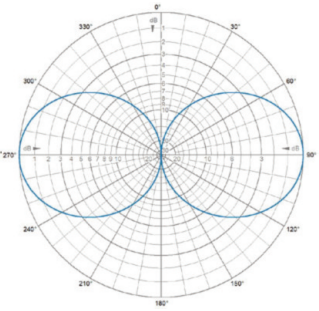
Multidipole and high gain versions can be found in the **Skymasts Ground to Air Catalogue**

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

2140/2141
Galv Steel Parallel clamps 38-120mm

AT5 / ST5
Aluminium / Steel Tube 1 29/32”

Ordering Codes

Stock code	Frequency
470.01.05.00	108-175MHz
470.31.05.00	108-175MHz, 3dBd
470.02.05.00	225-400MHz
470.32.05.00	225-400MHz, 3dBd
470.05.05.00	100-400MHz
470.04.33.00	208-235MHz
470.34.33.00	208-235MHz, 3dBd

Issue 1. E&OE ROHS This product is RoHS compliant

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Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

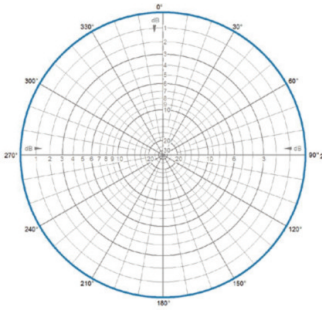
470.05.05.00
Wideband VHF-UHF ground-air dipole

The 470 Series of glassfibre dipoles are designed for wide band, particularly military and ground-to-air applications. The antennas are well suited to the most demanding applications both physically and environmentally, and have been engineered for optimal performance over a bandwidth greater than 50% of their centre frequency. They have been designed with an integral mounting bracket, cast in aluminium, which enables the 470 to be fitted directly on a vertical pole of 50mm diameter. The aluminium centre fed dipole is fed via PTFE coaxial cable and offers a stable radiation pattern over a wide operating band. The antenna is available in a variety of two part lacquer finishes, including IRR military green. (can be customer specified to appropriate colour code ref.)

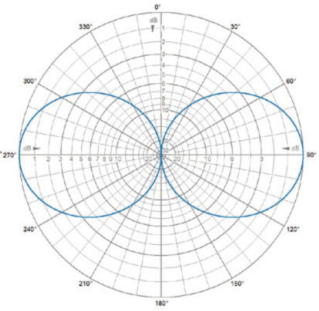
Frequency range	100 -400MHz
Input impedance	50Ω
VSWR	<2.0:1
H Plane ripple	< ±1dB
Maximum input power	0.5kW
Polarisation	Vertical
Antenna gain	0 dBd
3dB Beamwidth	E Plane 80°
Connection	'N' type socket
Dipole	120mm dia. aluminium rolled tube
Dipole feed	PTFE dielectric coaxial cable
Shroud	Parallel military green glassfibre tube 128mm dia.
Lightning protection	Direct grounded
Mounting bracket	Integral cast alum.alloy LM6 to suit 50mm dia. support pole
Mast fixings	Stainless steel M10 bolts grade A2-70
Weight	7.5 kg
Length	1.5 m
Effective Wind Area	0.165m2
Typical Wind loading @ 45m/s	205 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

2140/2141
Galv Steel Parallel clamps 38-120mm

AT5 / ST5
Aluminium / Steel Tube 1 29/32”

Ordering Codes

Stock code	Frequency
470.01.05.00	108-175MHz
470.31.05.00	108-175MHz, 3dBd
470.02.05.00	225-400MHz
470.32.05.00	225-400MHz, 3dBd
470.05.05.00	100-400MHz
470.04.33.00	208-235MHz
470.34.33.00	208-235MHz, 3dBd

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470.04.33.00
High power DAB dipole antenna

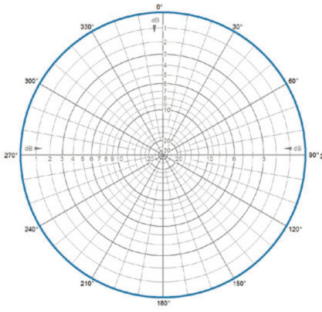
The 470.04 Series of glassfibre dipoles are designed for high power DAB broadcast applications. The antennas are well suited to the most demanding applications both physically and environmentally, and have been engineered for optimal VSWR performance over the VHF DAB band. They have been designed with an integral mounting bracket, cast in aluminium, which enables the 470 to be fitted directly on a vertical pole of 50mm diameter. The aluminium centre fed dipole is fed via PTFE coaxial cable and offers a stable radiation pattern over a wide operating band. The antenna is available in a variety of two part lacquer finishes, including IR proof military green.

Frequency range	208 - 235 MHz
Input impedance	50Ω
VSWR	<1.25:1
H Plane ripple	< ±1dB
Maximum input power	1.5kW
Polarisation	Vertical
Antenna gain	0 dBd
3dB Beamwidth	E Plane 80°
Connection	7/16 DIN socket
Dipole	120mm dia. aluminium rolled tube
Dipole feed	PTFE dielectric coaxial cable
Shroud	Parallel military green glassfibre tube 128mm dia.
Lightning protection	Direct grounded
	470.04.33.10 Grounded alum. top cap with finial and lifting eye
Mounting bracket	Integral cast alum.alloy LM6 to suit 50mm dia. support pole
Mast fixings	Stainless steel M10 bolts grade A2-70
Weight	4.7 kg
Length	1.2 m
Typical Wind loading @ 45m/s	184 N

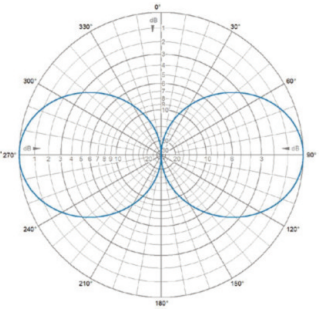
Lightning Resistant Certified

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

2140/2141
Galv Steel Parallel clamps 38-120mm

AT5 / ST5
Aluminium / Steel Tube 1 29/32”

Ordering Codes

Stock code	Frequency
470.01.05.00	108-175MHz
470.31.05.00	108-175MHz, 3dBd
470.02.05.00	225-400MHz
470.32.05.00	225-400MHz, 3dBd
470.05.05.00	100-400MHz
470.04.33.00	208-235MHz
470.34.33.00	208-235MHz, 3dBd

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Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

470.34.33.00
3dBd High power DAB dipole antenna

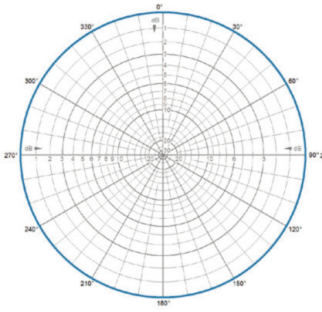
The 470.34 Series of glassfibre dipoles are designed for high power DAB broadcast applications. The antennas are well suited to the most demanding applications both physically and environmentally, and have been engineered for optimal VSWR performance over the VHF DAB band. The 470.34 offers 3dBd gain and is supplied with an integral mounting bracket, in aluminium, which enables the 470 to be fitted directly on a vertical pole of 76mm diameter. The aluminium centre fed dipole is fed via PTFE coaxial cable and offers a stable radiation pattern over a wide operating band. The antenna is available in a variety of two part lacquer finishes.

Frequency range	208 - 235 MHz
Input impedance	50Ω
VSWR	<1.25:1
H Plane ripple	< ±1dB
Maximum input power	1.5kW
Polarisation	Vertical
Antenna gain	3 dBd
3dB Beamwidth	E Plane 40º
Connection	7/16 DIN socket
Dipole	120mm dia. aluminium rolled tube
Dipole feed	PTFE dielectric coaxial cable
Shroud	Parallel military green glassfibre tube 128mm dia.
Lightning protection	Direct grounded
	470.34.33.10 Grounded alum. top cap with finial and lifting eye
Mounting bracket	To suit 76mm dia. support pole or 2" tube mount
Mast fixings	Stainless steel M10 bolts grade A2-70
Weight	6 kg
Length	2.3 m
Typical Wind loading @ 45m/s	438 N

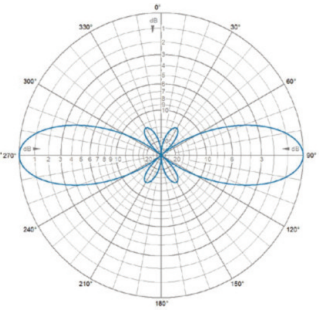
Lightning Resistant Certified

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

2140/2141
Galv Steel Parallel clamps 38-120mm

AT5 / ST5
Aluminium / Steel Tube 1 29/32"

Ordering Codes

Stock code	Frequency
470.01.05.00	108-175MHz
470.31.05.00	108-175MHz, 3dBd
470.02.05.00	225-400MHz
470.32.05.00	225-400MHz, 3dBd
470.05.05.00	100-400MHz
470.04.33.00	208-235MHz
470.34.33.00	208-235MHz, 3dBd

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Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

S.1
Centre-fed folded dipole antenna

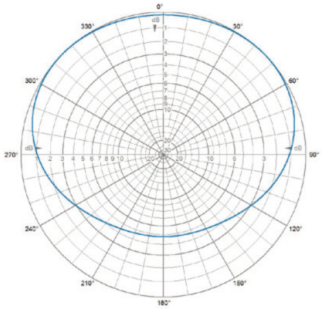
The S.1 series are of a rugged and reliable construction. The one piece folded dipole incorporates a d.c. short to minimise static interference. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. These antennas can be arranged in a variety of arrays in combination with MH power splitters to produce a wide range of radiation patterns. They are supplied as standard with 3m. of RG213 cable terminated with an 'N' type socket. Heavy duty and stainless steel options are available.

Frequency range	Manufactured between 68-700 MHz	
Input impedance	50Ω	
Typical Bandwidth	± 10% of centre frequency	
VSWR	<1.5:1	
Front to back ratio	4 dB	
Maximum input power	150 Watts	
Polarisation	Vertical	
Forward gain	2 dBd mounted on conductive pole / mast (0dBd free space)	
3dB Beamwidth	E Plane 85°	
	H Plane 200° (mounted on conductive pole / mast)	
Standard Connection	3m Length of RG213 c/w 'N' type socket	
Elements	**<138MHz** 19.1mm dia.x 1.6mm wall Al. alloy 6063T6	
	>138MHz 12.7mm dia. x 1.6mm wall Al. alloy 6063T6	
Support Boom	31.7 mm dia. x 2.6 mm wall Al. alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Saddle clamps	Diecast Al / Zinc alloy	
Balun Encapsulant	Polyurethane Resin U-600	
Lightning protection	Direct grounded	
Typical weight	**VHF** 2.8 kg	**UHF** 1.9 kg
Typical length	**VHF** 1.33 m	**UHF** 1 m
Typical wind loading @ 45m/s	**VHF** 148 N	**UHF** 54 N

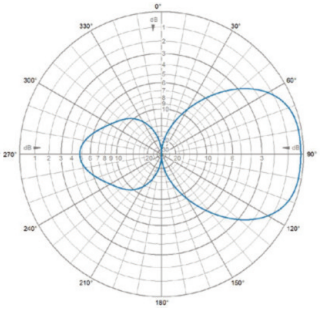
Lightning Resistant Certified

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

COP54
Galvanised steel cross clamp 32/50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
S.1-78	70-86MHz
S.1-127	117-137MHz
S.1-165	155-175MHz
S.1-184	176-192MHz
S.1-200	192-208MHz
S.1-405	380-430MHz
S.1-380-470	380-470MHz
S.1-445	420-470MHz

Issue 1. E&OE This product is RoHS compliant

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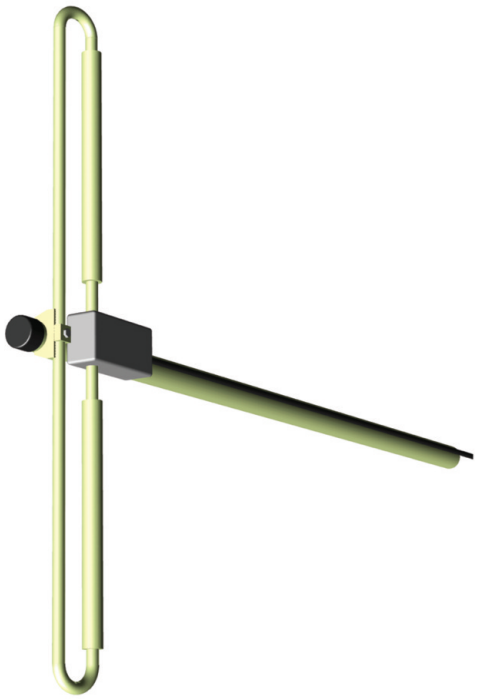
S.1H
Heavy duty centre-fed folded dipole

The S.1H Series are designed for use in extreme environments, or for multi channel applications. The one piece folded dipole assembly incorporates a d.c. short and is completely encapsulated in poyurethane resin, totally preventing moisture ingress. A sleeve is welded to the dipole to increase strength, and improve VSWR. These antennas can be arranged in a variety of arrays to produce a wide range of radiation patterns. They are supplied as standard with 3m of RG213 cable terminated with an 'N' type socket.

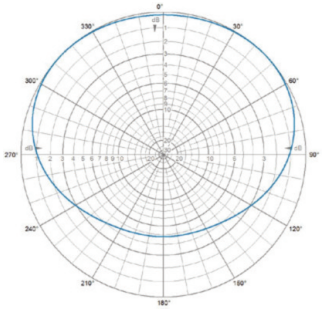


Lightning Resistant Certified

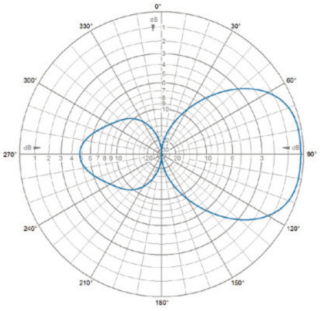
Frequency range	Manufactured between 68-176 MHz
Input impedance	50Ω
Typical Bandwidth	± 10% of centre frequency
VSWR	<1.5:1
Front to back ratio	4 dB
Maximum input power	500 Watts
Polarisation	Vertical
Forward gain	2 dBd mounted on conductive pole / mast (0dBd free space)
3dB Beamwidth	E Plane 85°
	H Plane 200° (mounted on conductive pole / mast)
Standard Connection	3m Length of RG213 c/w 'N' type socket
Elements	19.0mm dia.x 1.6mm wall aluminium alloy grade 6063T6
Dipole sleeve (welded)	31.7mm dia. x 2.6mm wall aluminium alloy grade 6063T6
Support Boom	48.4mm dia. x 4.5 mm wall aluminium alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Saddle clamps	Machined aluminium alloy
Balun Encapsulant	Polyurethane Resin U-600
Lightning protection	Direct grounded
Typical weight	5.3 kg
Typical length	1.5 m
Typical wind loading @ 45m/s	202 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-24
Cast aluminium cross clamp 25-115mm

UA64-23
Cast aluminium cross clamp 25/50/75mm

Ordering Codes

Stock code	Frequency
S.1H-78	68-88MHz
S.1H-98	88-108MHz
S.1H-127	117-137MHz
S.1H-165	155-175MHz

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S.M2
Two element stacked dipole array

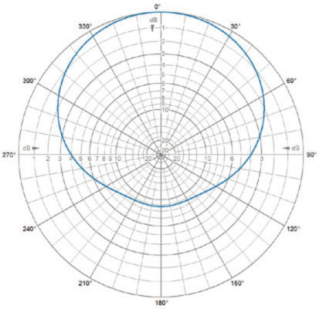
The S.M2 is an array of two centre fed folded dipoles mounted on an aluminium mast. Each folded dipole balun assembly and associated harness junction is completely encapsulated in poyurethane resin, totally preventing moisture ingress. The balun assembly has been tested to BS5490:IP67. The S.M2 in Band III is a half height version of the popular S.M4 series (DTI type AK). The parallel feed enables beam tilt to be easily achieved, and the dipoles can be reorientated to shape the beam pattern. At VHF the antenna disassembles and flat packs for ease of shipping.

Lightning Resistant Certified

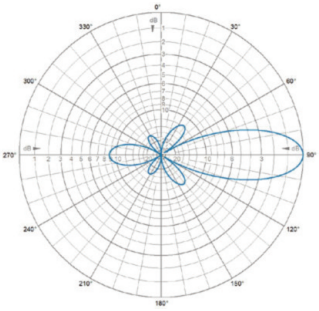
Frequency range	Manufactured between 68 - 500 MHz	
Input impedance	50Ω	
Typical Bandwidth	± 4% of Centre Frequency	
VSWR	<1.5:1	
Front to back ratio	5.5 dB	
Maximum input power	250 Watts	
Polarisation	Vertical	
Forward gain	5 dBd	
3dB Beamwidth	E Plane 36°	
	H Plane 180°	
Standard connection	3m Length of RG213 c/w 'N' type socket	
Elements	12.7mm dia. x 1.6mm wall aluminium alloy grade 6063T6	
Support boom	**VHF** 63.5mm dia. x 6.3mm wall aluminium alloy grade 6082T6	
	UHF 38.1mm dia. x 3.2mm wall aluminium alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Dipole clamps	Cast aluminium alloy	
Dipole adjustment	M8 Stainless steel screws	
Saddle clamps	Diecast Al / Zinc alloy	
Balun Encapsulant	Polyurethane Resin U-600	
Lightning protection	Direct grounded	
Typical weight	**VHF** 9 kg	**UHF** 4 kg
Typical length	**VHF** 4 m	**UHF** 1.25 m
Typical wind loading @ 45m/s	**VHF** 292N	**UHF** 85N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

2140/2141
Galv Steel Parallel clamps 38-120mm

Ordering Codes

Stock code	Frequency
S.M2-127	117-137MHz
S.M2-165	155-175MHz
S.M2-184	176-192MHz
S.M2-200	192-208MHz
S.M2-405	380-430MHz
S.M2-445	420-470MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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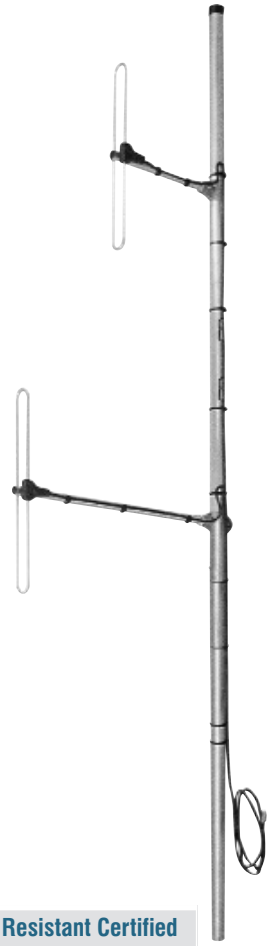
S.M2C
Two-stack cardioid dipole array

The S.M2C is an array of two centre fed folded dipoles mounted on an aluminium mast and fed in quadrature, giving a wide bandwidth and high front to back ratio. Each folded dipole balun assembly and associated harness junction is completely encapsulated in poyurethane resin, totally preventing moisture ingress. The balun assembly has been tested to BS5490:IP67. The S.M2C was designed to meet specific Band III needs (DTI Type ½AJ), but can be applied across both VHF and UHF bands. At VHF the antenna disassembles and flat packs for ease of shipping.

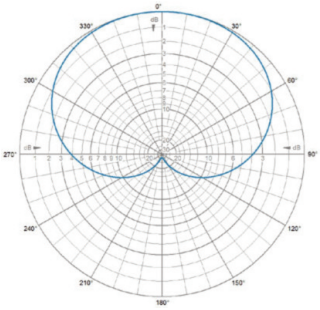


Lightning Resistant Certified

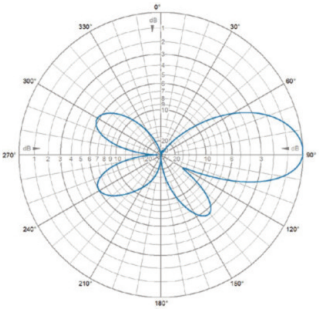
Frequency range	Manufactured between 68 - 500 MHz	
Input impedance	50Ω	
Typical Bandwidth	± 6% of Centre Frequency	
VSWR	<1.5:1	
Front to back ratio	25 dB	
Maximum input power	250 Watts	
Polarisation	Vertical	
Forward gain	2.7 dBd	
3dB Beamwidth	E Plane 85°	
	H Plane 180°	
Standard connection	3m Length of RG213 c/w 'N' type socket	
Elements	12.7mm dia. x 1.6mm wall aluminium alloy grade 6063T6	
Support boom	**VHF** 63.5mm dia. x 6.3mm wall aluminium alloy grade 6082T6	
	UHF 38.1mm dia. x 3.2mm wall aluminium alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Dipole clamps	**VHF** Cast aluminium alloy	**UHF** Welded boom
Dipole adjustment	M8 Stainless steel screws	
Saddle clamps	Diecast Al / Zinc alloy	
Balun Encapsulant	Polyurethane Resin U-600	
Lightning protection	Direct grounded	
Typical weight	**VHF** 12 kg	**UHF** 5 kg
Typical length	**VHF** 4 m	**UHF** 1.25 m
Typical wind loading @ 45m/s	**VHF** 325N	**UHF** 92N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

2140/2141
Galv Steel Parallel clamps 38-120mm

Ordering Codes

Stock code	Frequency
S.M2C-127	117-137MHz
S.M2C-165	155-175MHz
S.M2C-184	176-192MHz
S.M2C-200	192-208MHz
S.M2C-405	380-430MHz
S.M2C-445	420-470MHz

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S.M4
Four element stacked dipole array

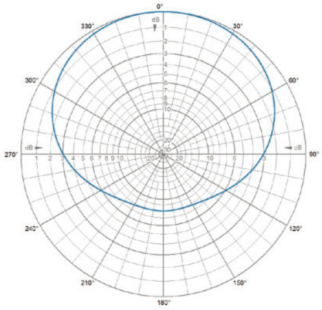
The S.M4 is an array of four dipoles mounted on an aluminium mast. Each folded dipole balun assembly and harness junction is completely encapsulated in poyurethane resin, totally preventing moisture ingress. The balun assembly has been tested to BS5490:IP67. The S.M4 offset array is used extensively in UHF and VHF Trunking systems. The dipoles can be easily oriented on site or before shipment to adjust between omnidirectional and directional patterns, and beam tilt is easily achieved via the parallel feed. The VHF antenna disassembles to reduce shipping costs, and the boom can be supplied in two parts if requested.

Lightning Resistant Certified

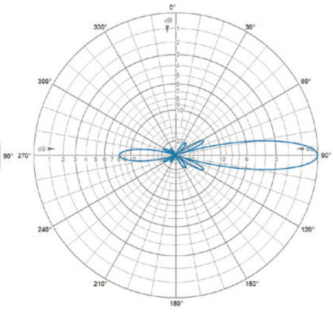
Frequency range	Manufactured between 117 - 500 MHz	
Input impedance	50Ω	
Typical Bandwidth	± 5.5% of Centre Frequency	
VSWR	<1.5:1	
Front to back ratio	7 dB (offset)	
Maximum input power	250 Watts	
Polarisation	Vertical	
Forward gain	**Omni** 5.7 dBd	**Offset** 8.7 dBd
3dB Beamwidth	E Plane 21°	
	H Plane 180° (offset)	
Standard connection	3m Length of RG213 c/w 'N' type socket	
Elements	12.7mm dia. x 1.6mm wall aluminium alloy grade 6063T6	
Support boom	**VHF** 63.5mm dia. x 6.3mm wall aluminium alloy grade 6082T6	
	UHF 38.1mm dia. x 3.2mm wall aluminium alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Dipole clamps	Cast aluminium alloy	
Dipole adjustment	M8 Stainless steel screws	
Saddle clamps	Diecast Al / Zinc alloy	
Balun Encapsulant	Polyurethane Resin U-600	
Lightning protection	Direct grounded	
Typical weight	**VHF** 26 kg	**UHF** 6 kg
Typical length	**VHF** 6 m	**UHF** 2.5 m
Typical wind loading @ 45m/s	**VHF** 620N	**UHF** 180N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

2140/2141
Galv Steel Parallel clamps 38-120mm

Ordering Codes

Stock code	Frequency
S.M4-127	117-137MHz
S.M4-165	155-175MHz
S.M4-184	176-192MHz
S.M4-200	192-208MHz
S.M4-405	380-430MHz
S.M4-445	420-470MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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414.04-405-Txx

Four element stacked dipole array, directional

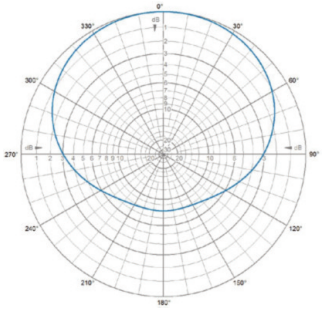
The 414.04 Antenna is a version of the S.M4 four-stack dipole array, designed for improved performance in multi-channel communication systems such as TETRA. The antenna features four phased folded dipoles fed with an RG214 coaxial feed network which allows for beamtilt to be applied to the pattern; high quality materials and manufacturing techniques are employed throughout to ensure that the antenna meets strict intermodulation requirements of multi-channel systems. The balun housings and cable connections are completely encapsulated in a poyurethane compound to IP67 eliminating any risk from water ingress. The antenna is supplied as standard with a 5 metre tail terminated with a 7/16 socket. This model has a stronger boom to cope with high wind speeds.

Frequency range	380 - 430 MHz
Input impedance	50Ω
VSWR	<1.5:1
Front to back ratio	7 dB
Maximum input power	250W CW
Polarisation	Vertical
Forward gain	8.7 dBd (10.85dBi)
3dB Beamwidth	E Plane 21°
	H Plane 160°
Available beamtilts	0 °, 5°, 10° and 15°
Intermodulation	-143dBc (3rd order), 2 x Tx@43dBm
Standard connection	5m Length of RG214 c/w 7/16 DIN socket
Dipole feeds	RG214 Coaxial cable
Elements	12.7mm dia. x 1.6mm wall alum. alloy grade 6063T6
Support boom	38.1mm dia. x 4.8mm wall alum. alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Dipole clamps	Cast aluminium alloy
Saddle clamps	Diecast zinc alloy
Balun encapsulant	Polyurethane resin U-600
Lightning protection	Direct grounded
Weight	6.0 kg
Length	2.6 m
Maximum wind loading @ 45m/s	232N
Survival wind speed	315km/h

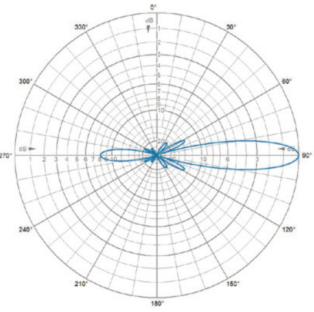
- Low PIM Certified
- Lightning Resistant Certified
- Strength Tested

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

2140/2141
Galv Steel Parallel clamps 38-120mm

Ordering Codes

Stock code	Beamtilt
414.04-405-T0	0°
414.04-405-T5	5°
414.04-405-T10	10°
414.04-405-T15	15°

Issue 1. E&OE ROHS This product is RoHS compliant

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4104.04-405

Four element stacked dipole array, omnidirectional

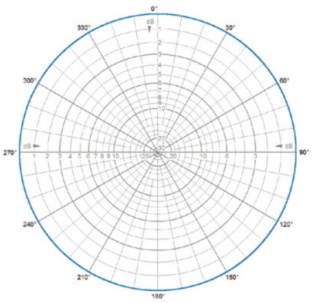
The 4104.04 Antenna is a version of the S.M4 four-stack dipole array, designed for improved performance in multi-channel communication systems such as TETRA. The antenna features four phased folded dipoles fed with an RG214 coaxial feed network; high quality materials and manufacturing techniques are employed throughout to ensure that the antenna meets strict intermodulation requirements of multi-channel systems. The balun housings and cable connections are completely encapsulated in a poyurethane compound to IP67 eliminating any risk from water ingress. The antenna is supplied as standard with a 5 metre tail terminated with a 7/16 socket. This model has a stronger boom to cope with high wind speeds.

Frequency range	380 - 430 MHz
Input impedance	50Ω
VSWR	<1.5:1
Front to back ratio	7 dB
Maximum input power	250W CW
Polarisation	Vertical
Forward gain	5.7 dBd (17.85dBi)
3dB Beamwidth	E Plane 21°
	H Plane 360°
Intermodulation	-143dBc (3rd order), 2 x Tx@43dBm
Standard connection	5m Length of RG214 c/w 7/16 DIN socket
Dipole feeds	RG214 Coaxial cable
Elements	12.7mm dia. x 1.6mm wall alum. alloy grade 6063T6
Support boom	38.1mm dia. x 4.8mm wall alum. alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Dipole clamps	Cast aluminium alloy
Saddle clamps	Diecast zinc alloy
Balun encapsulant	Polyurethane resin U-600
Lightning protection	Direct grounded
Weight	6.0 kg
Length	2.6 m
Maximum wind loading @ 45m/s	232N
Survival wind speed	315km/h

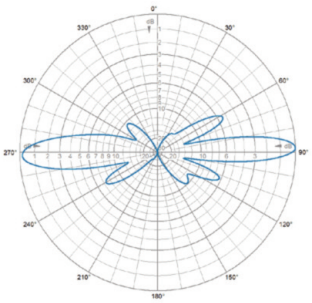
- **Low PIM Certified**
- **Lightning Resistant Certified**
- **Strength Tested**

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

2140/2141
Galv Steel Parallel clamps 38-120mm

Ordering Codes

Stock code	Frequency
4104.04-405	380-430MHz

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Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

S.M4C
Four-stack cardioid dipole array

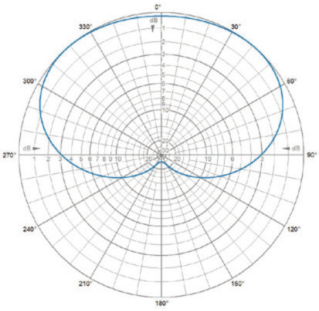
The S.M4C is an array of four centre fed folded dipoles mounted on an aluminium mast and fed in quadrature, giving a wide bandwidth and high front to back ratio. Each folded dipole balun assembly and associated harness junction is completely encapsulated in poyurethane resin, totally preventing moisture ingress. The balun assembly has been tested to BS5490:IP67. The S.M4C was designed to meet specific Band III needs (DTI Type AJ), but can be applied across both VHF and UHF bands. The VHF antenna disassembles to reduce shipping costs, and the boom can be supplied in two parts if requested.

Lightning Resistant Certified

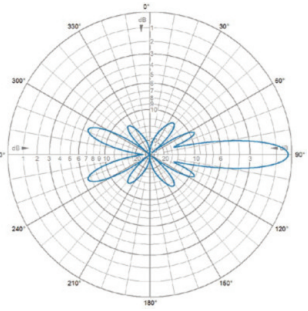
Frequency range	Manufactured between 117 - 500 MHz	
Input impedance	50Ω	
Typical Bandwidth	± 6% of Centre Frequency	
VSWR	<1.5:1	
Front to back ratio	25 dB	
Maximum input power	250 Watts	
Polarisation	Vertical	
Forward gain	5.7 dBd	
3dB Beamwidth	E Plane 43°	
	H Plane 180°	
Standard connection	3m Length of RG213 c/w 'N' type socket	
Elements	12.7mm dia. x 1.6mm wall aluminium alloy grade 6063T6	
Support boom	**VHF** 63.5mm dia. x 6.3mm wall aluminium alloy grade 6082T6	
	UHF 38.1mm dia. x 3.2mm wall aluminium alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Dipole clamps	**VHF** Cast aluminium alloy	**UHF** Welded boom
Dipole adjustment	M8 Stainless steel screws	
Saddle clamps	Diecast Al / Zinc alloy	
Balun Encapsulant	Polyurethane Resin U-600	
Lightning protection	Direct grounded	
Typical weight	**VHF** 32 kg	**UHF** 7 kg
Typical length	**VHF** 6 m	**UHF** 2.5 m
Typical wind loading @ 45m/s	**VHF** 631N	**UHF** 195N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

2140/2141
Galv Steel Parallel clamps 38-120mm

Ordering Codes

Stock code	Frequency
S.M4C-127	117-137MHz
S.M4C-165	155-175MHz
S.M4C-184	176-192MHz
S.M4C-200	192-208MHz
S.M4C-405	380-430MHz
S.M4C-445	420-470MHz

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S.M8
Eight element stacked dipole array

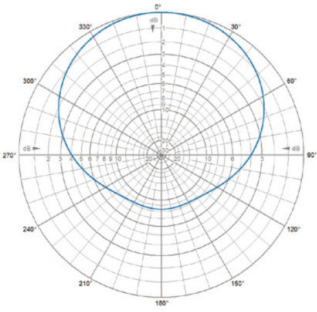
The S.M8 is an array of eight dipoles mounted on an aluminium mast. Each folded dipole balun assembly and harness junction is completely encapsulated in poyurethane resin, totally preventing moisture ingress. The balun assembly has been tested to BS5490:IP67. The dipoles are easily oriented to shape the antenna radiation pattern, and beam tilt is easily achieved via the parallel feed. At VHF, the boom is supplied in two parts. The antenna disassembles for ease of shipping.

Lightning Resistant Certified

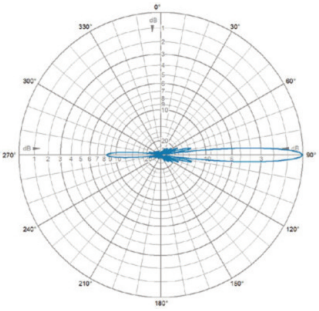
Frequency range	Manufactured between 138 - 500 MHz	
Input impedance	50Ω	
Typical Bandwidth	± 5.5% of Centre Frequency	
VSWR	<1.5:1	
Front to back ratio	7 dB (offset)	
Maximum input power	250 Watts	
Polarisation	Vertical	
Forward gain	**Omni** 8.5 dBd	**Offset** 11.5 dBd
3dB Beamwidth	E Plane 21°	
	H Plane 180° (offset)	
Standard connection	3m Length of RG213 c/w 'N' type socket	
Elements	12.7mm dia. x 1.6mm wall aluminium alloy grade 6063T6	
Support boom	**VHF** 63.5mm dia. x 6.3mm wall aluminium alloy grade 6082T6	
	UHF 38.1mm dia. x 3.2mm wall aluminium alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Dipole clamps	Cast aluminium alloy	
Dipole adjustment	M8 Stainless steel screws	
Saddle clamps	Diecast Al / Zinc alloy	
Balun Encapsulant	Polyurethane Resin U-600	
Lightning protection	Direct grounded	
Typical weight	**VHF** 45 kg	**UHF** 12 kg
Typical length	**VHF** 12 m	**UHF** 5 m
Typical wind loading @ 45m/s	**VHF** 1240N	**UHF** 386N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

2140/2141
Galv Steel Parallel clamps 38-120mm

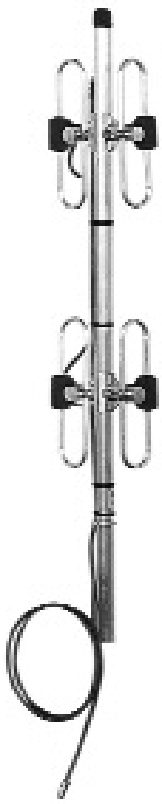
Ordering Codes

Stock code	Frequency
S.M8-405	380-430MHz
S.M8-445	420-470MHz

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

S.M2/4
Two-stacked four dipole array

The S.M2/4 is an array of two tiers of two centre fed folded dipoles mounted on an aluminium mast, offering a high gain elliptical pattern especially suited to trackside or highway coverage applications. Each folded dipole balun assembly and associated harness junction is completely encapsulated in poyurethane resin, totally preventing moisture ingress. The balun assembly has been tested to BS5490:IP67. The parallel feed enables beam tilt to be easily achieved. At VHF the antenna disassembles and flat packs for ease of shipping.

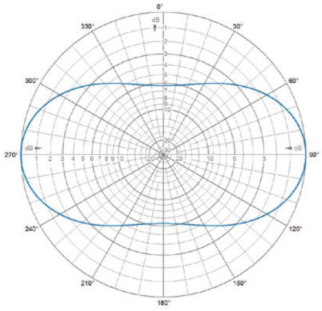


Lightning Resistant Certified

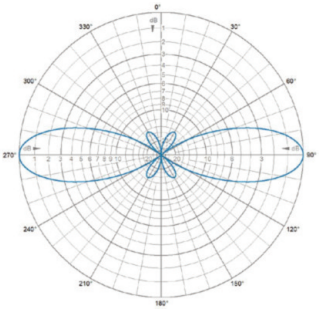
Frequency range	Manufactured between 138 - 500 MHz	
Input impedance	50Ω	
Typical Bandwidth	± 4% of Centre Frequency	
VSWR	<1.5:1	
Front to back ratio	Elliptical pattern	
Maximum input power	250 Watts	
Polarisation	Vertical	
Forward gain	6dBd	
3dB Beamwidth	E Plane 36º	
Standard connection	3m Length of RG213 c/w 'N' type socket	
Elements	12.7mm dia. x 1.6mm wall aluminium alloy grade 6063T6	
Support boom	**VHF** 63.5mm dia. x 6.3mm wall aluminium alloy grade 6082T6	
	UHF 38.1mm dia. x 3.2mm wall aluminium alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Dipole clamps	**VHF** Welded boom	**UHF** Cast aluminium alloy
Dipole adjustment	M8 Stainless steel screws	
Saddle clamps	Diecast Al / Zinc alloy	
Balun Encapsulant	Polyurethane Resin U-600	
Lightning protection	Direct grounded	
Typical weight	**VHF** 13 kg	**UHF** 8 kg
Typical length	**VHF** 4 m	**UHF** 1.25 m
Typical wind loading @ 45m/s	**VHF** 419N	**UHF** 117N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

2140/2141
Galv Steel Parallel clamps 38-120mm

Ordering Codes

Stock code	Frequency
S.M2/4-184	176-192MHz
S.M2/4-200	192-208MHz
S.M2/4-405	380-430MHz
S.M2/4-445	420-470MHz

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Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

S.M4/8
Four-stacked eight dipole array

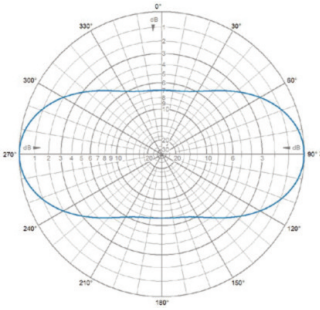
The S.M4/8 is an array of four tiers of two centre fed folded dipoles mounted on an aluminium mast, offering a high gain elliptical pattern especially suited to trackside or highway coverage applications. Each folded dipole balun assembly and associated harness junction is completely encapsulated in poyurethane resin, totally preventing moisture ingress. The balun assembly has been tested to BS5490:IP67. The parallel feed enables beam tilt to be easily achieved. At VHF the antenna disassembles and flat packs for ease of shipping.

Lightning Resistant Certified

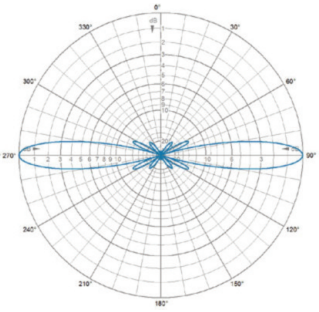
Frequency range	Manufactured between 138 - 500 MHz	
Input impedance	50Ω	
Typical Bandwidth	± 4% of Centre Frequency	
VSWR	<1.5:1	
Front to back ratio	Elliptical pattern	
Maximum input power	250 Watts	
Polarisation	Vertical	
Forward gain	8.7dBd	
3dB Beamwidth	E Plane 21°	
Standard connection	3m Length of RG213 c/w 'N' type socket	
Elements	12.7mm dia. x 1.6mm wall aluminium alloy grade 6063T6	
Support boom	**VHF** 63.5mm dia. x 6.3mm wall aluminium alloy grade 6082T6	
	UHF 38.1mm dia. x 3.2mm wall aluminium alloy grade 6082T6	
Fasteners	Stainless steel grade A2-70	
Dipole clamps	**VHF** Welded boom	**UHF** Cast aluminium alloy
Dipole adjustment	M8 Stainless steel screws	
Saddle clamps	Diecast Al / Zinc alloy	
Balun Encapsulant	Polyurethane Resin U-600	
Lightning protection	Direct grounded	
Typical weight	**VHF** 32 kg	**UHF** 9 kg
Typical length	**VHF** 6 m	**UHF** 2.5 m
Typical wind loading @ 45m/s	**VHF** 677N	**UHF** 237N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

2140/2141
Galv Steel Parallel clamps 38-120mm

Ordering Codes

Stock code	Frequency
S.M4/8-184	176-192MHz
S.M4/8-200	192-208MHz
S.M4/8-405	380-430MHz
S.M4/8-445	420-470MHz

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S.H6-460
Horizontally Polarised Omnidirectional Dipole Array

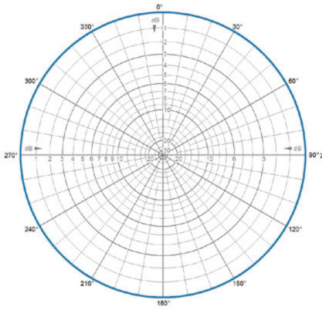
The S.H6 is a stacked 6 dipole array configured as 2 tiers of 3 horizontally mounted dipoles on support arms which are welded to an aluminium support boom. The antenna has been specifically designed for UHF telemetry systems where use of horizontally polarized omnidirectional antennas are required. Each folded dipole assembly is fed via a fully encapsulated assembly and the integrated combining network assemblies are also fully encapsulated in epoxy resin, totally preventing moisture ingress. The dipole feed assemblies have been tested to BS5490:IP67. The overall design of the antenna combines an extremely uniform radiation pattern across the frequency range with low VSWR and reduced wind loading characteristics within a compact design.

Frequency range	450 - 470MHz
Input Impedance	50Ω
VSWR	<1.5 : 1
Maximum Input Power	250 Watts
Polarisation	Horizontal
Ripple	± 0.1 dB
Gain	2.8dBd
3 dB Beamwidth	Elevation 38°
Standard Connection	3m Length of RG213 c/w 'N' type socket
Elements	12.7mm dia x 1.6mm wall aluminium alloy grade 6063 T6
Support Boom	48.4mm dia. x 6.0 m wall aluminium alloy grade 6082T6
Construction	Welded Dipole supports
Fasteners	Stainless steel grade A2-70
Saddle clamps	Diecast Al / Zinc alloy
Balun Encapsulant	Polyurethane Resin U-600
Lightning Protection	Direct grounded
Typical Weight	8.0kg
Typical Length	1.5m
Typical wind Load @ 45m/s	120N

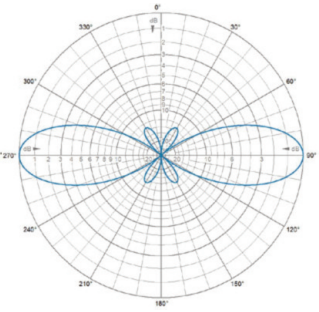
Lightning Resistant Certified

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

2140/2141
Galv Steel Parallel clamps 38-120mm

Ordering Codes

Stock code	Frequency
S.H6-460	450-470MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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S.CDA
Cardioid dipole array

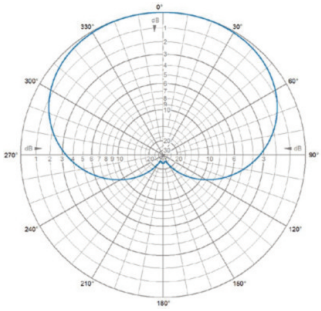
The S.CDA Series consist of two dipoles fed in quadrature, to produce a heart shaped pattern with high front to back ratio. Each one piece folded dipole incorporates a d.c. short to minimise static interference. The balun assembly and feed harness are completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. They are supplied as standard with 3 metres of RG213 cable terminated with an 'N' type socket.

Frequency range	Manufactured between 68 - 208 MHz
Input impedance	50Ω
Typical Bandwidth	± 1.5% of Centre Frequency
VSWR	<1.5:1
Front to back ratio	25 dB
Maximum input power	150 Watts
Polarisation	Vertical
Forward gain	2.7 dBd
3dB Beamwidth	E Plane 85°
	H Plane 180°
Standard connection	3m Length of RG213 c/w 'N' type socket
Elements	19.0mm dia.x 1.6mm wall Aluminium Alloy Grade 6063T6
Support boom	31.7 mm dia. x 2.6 mm wall Aluminium Alloy Grade 6082T6
Fasteners	Stainless Steel Grade A2-70
Saddle clamps	Diecast Al / Zinc alloy
Balun Encapsulant	Polyurethane Resin U-600
Lightning protection	Direct Grounded
Mounting brackets	COP series (not supplied)
Typical weight	4.2 kg
Typical length	2 m
Typical wind loading @ 45m/s	220 N

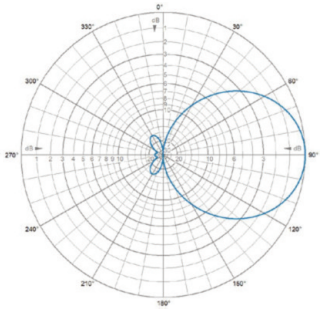
Lightning Resistant Certified

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

UA66-22
Cast aluminium cross clamp 25-50mm

COP54
Galvanised steel cross clamp 32/50mm

UA66-24
Cast aluminium cross clamp 25-115mm

Ordering Codes

Stock code	Frequency
Manufactured to requirements	

Issue 1. E&OE ROHS This product is RoHS compliant

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S.LBLAD
FM Lindenblad Dipole Array

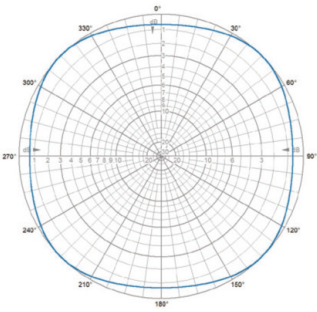
The S.LBLAD array is designed for mixed polarisation broadcast on FM radio systems. The array consists of four folded dipoles affixed to a rugged mounting bracket, fed in phase from a machined power splitter, to achieve an omnidirectional mixed polarisation antenna. The arrays give a maximum gain of 0.5dBd, and can be stacked to achieve higher gain, a narrower beam or multiple transmissions. The balun assembly is completely encapsulated in poyurethane resin, totally preventing moisture ingress, and has been tested to BS5490:IP67. The power splitter / array input is terminated standard with an 'N' type female, although cable and connector options are available upon request.

Frequency range	88 - 108 MHz
Bandwidth	Optimised for single transmit frequency
Input impedance	50Ω
VSWR	<1.2:1
Maximum input power	600W
Polarisation	Mixed / Circular
Forward gain	0.5 dBd
3dB Beamwidth	E Plane 65°
	H Plane 360°
Standard connection	N socket
Elements	19.0mm dia.x 1.6mm wall aluminium alloy grade 6063T6
Element support boom	31.7 mm dia. x 2.6 mm wall aluminium alloy grade 6082T6
Fasteners	Stainless steel grade A2-70
Saddle clamps	Diecast Al / Zinc alloy
Balun Encapsulant	Polyurethane Resin U-600
Lightning protection	Direct grounded
Mounting bracket	Welded flange bracket to suit 50mm support pole
Typical weight	17kg

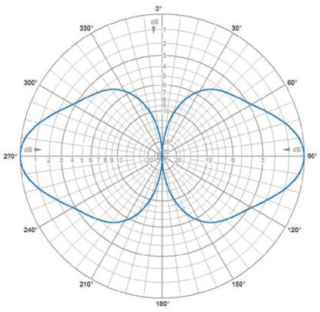
Lightning Resistant Certified

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

2140/2141
Galv Steel
Parallel clamps
38-120mm

AT5 / ST5
Aluminium / Steel
Tube 1 29/32"

Ordering Codes

Stock code | Frequency

Manufactured to requirements

Issue 2. E&OE ROHS This product is RoHS compliant

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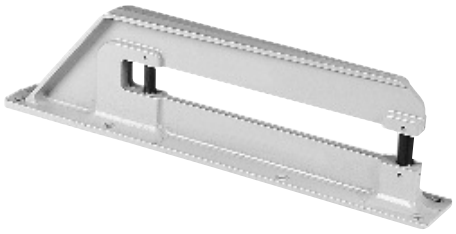
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

401.01.05.00
VHF low profile vehicle antenna

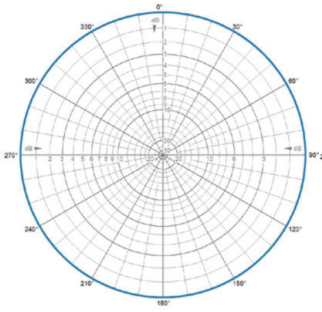
These antennas are omni-directional, and suited for operation on vehicles in harsh environments. Using a single-piece cast aluminium quarter wave slot for radiating, they are short and very robust. They are d.c. grounded, and intended for installation on conductive surfaces for correct operation. The 401 has a polyester coated grey finish..



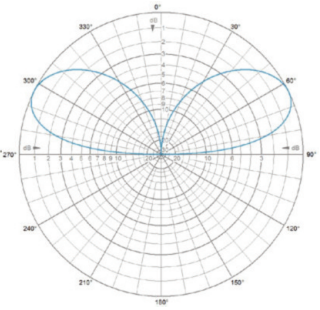
Frequency range	158-162MHz
Input impedance	50Ω
Bandwidth	±2.5% of centre frequency
VSWR	<2.0:1
Maximum input power	500 Watts
Polarisation	Vertical
Forward gain	0 dBd
3 dB Beamwidth	E Plane 90°
Connection	'N' type socket
Element	Diecast aluminium alloy LM25
Finish	Baked polyester coating grey
Insulator	Nylon
Lightning / HT line protection	Direct Grounded
Minimum ground plane	1.25 x 1.25m
Typical weight	3 kg
Dimensions	550 x 145 x 70
Typical wind loading @ 45m/s	38 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
401.01.05.00	158-162MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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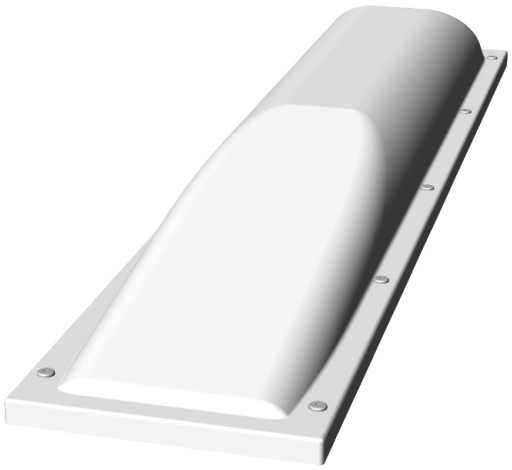
403.02
VHF Low profile vehicle antenna

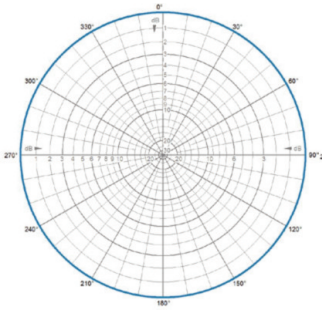
The 403.02 is a low profile VHF vehicle antenna, ideal for heavy duty transport logistics on buses and trucks. The unique radiator design offers minimal loss of efficiency when compared with a standard quarter-wave antenna, and consistent gain across transmit and receive bands. The antenna elements are protected by a tough ABS radome and is fixed to the vehicle with two robust mounting studs, which also provide a cable exit point from the antenna. The VHF element antenna is supplied with on-site tuning capability across a pre-set bandwidth. Cabling and connector configuration options are available on the 403.02 including FAKRA automotive standard connectors.



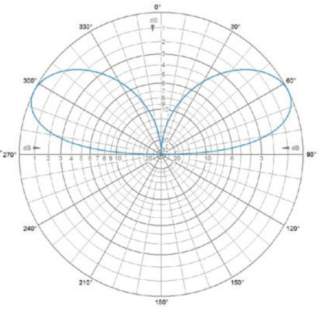
Frequency range	138-220MHz (3-4MHz Tx bandwidth), on-site tuneable
	403.02-420 410-430MHz, Full Band
Input impedance	50Ω
VSWR	<2.0:1
Maximum input power	50 Watts
Polarisation	Vertical
Gain	1dBi
Grounding	Direct grounded
Ground plane required	Typical 1.2m x 1.2m
Connection	RG58 cable, length / termination to customer requirement
Dimensions	673 x 144 x 62mm
Mounting holes	2 x 25mm holes, 517mm centres
Weight	1.5kg approx
Housing material	ABS
Other materials	Aluminium, PTFE, Brass, Nylon
Colour	Traffic White RAL9016
Operating temperature range	-30ºC to +70ºC
Storage temperature range	-50ºC to +70ºC
Relative humidity	5% to 95%RH
Water resistance	To IP67 (external, when installed)

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
403.02-160	150-170MHz
403.02-192	176-208MHz
403.02-420	410-430MHz

Issue 2. E&OE ROHS This product is RoHS compliant

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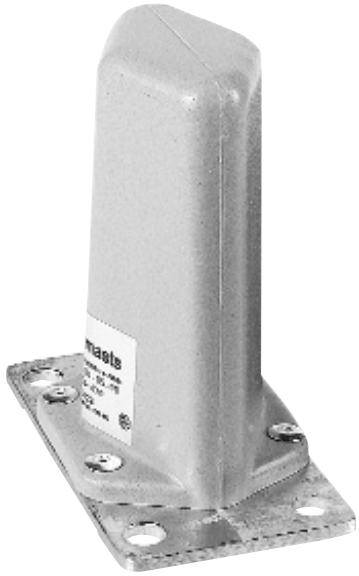
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

472.01.05.00
UHF vehicle antenna

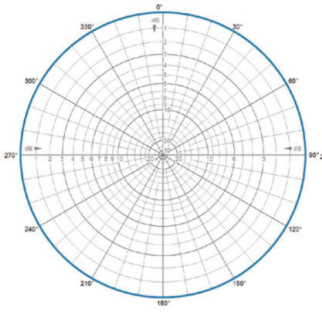
These antennas are omni-directional and suited for operation on vehicles in harsh environments. Using a quarter wave radiator, they are short and very robust, and offer a wide operating bandwidth. They are d.c. grounded, and intended for installation on conductive surfaces. The radiator is an integral part of the base casting, giving an extremely strong antenna. The 472 is covered by a radome of tough moulded polyurethane.



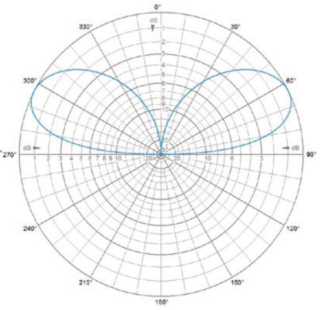
Frequency range	380 - 470 MHz
Input impedance	50Ω
VSWR	<2.0:1
Maximum input power	250 Watts
Polarisation	Vertical
Forward gain	0 dBd
3 dB Beamwidth	E Plane 80º
Connection	'N' Type socket
Element	Brass
Radome	Polyurethane rotational moulding grey
Mounting flange	Aluminium, Alocrom 1000 protected
Lightning / HT line protection	Direct grounded
Fixings	4 x M12 Bolts stainless steel grade A2-70
Recommended ground plane	500 mm square minimum
Typical weight	0.5kg
Dimensions	145 x 80 x 140
Typical wind loading @ 45m/s	18 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
472.01.05.00	380-470MHz

Issue 2. E&OE ROHS This product is RoHS compliant

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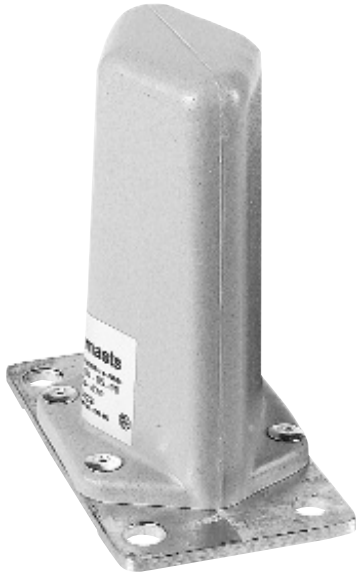
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

4142
GSM/GPS vehicle antenna

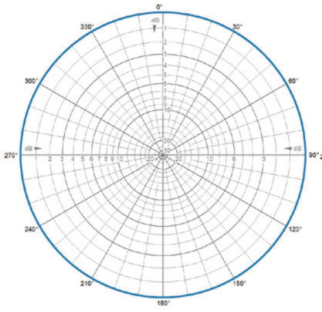
The 4142 antenna offers a solution where Global Positioning Satellite systems are used with GSM, and the environment demands a rugged antenna. They are very short and robust, and protected by a radome of tough moulded polyurethane. The GSM antenna incorporates a DC short and the GPS antenna is fully sealed to protect against overhead power cables. A 26dB gain low noise amplifier is incorporated in the GPS antenna to overcome losses in large cable lengths.



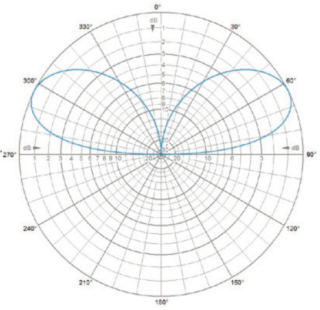
Frequency range	**4142.09.11.00** 870-960MHz
	4142.07.11.00 806-870MHz
	GPS module 1574.42-1576.42MHz
Input impedance	50Ω
VSWR	<1.5:1
LNA gain (GPS)	26dB
Supply voltage (GPS)	3.3 - 5V
Noise factor (GPS)	<5.5dB
Polarisation	**GSM** Vertical **GPS** Right Hand Circular
Forward gain (GSM)	0dBd
Maximum input iower (GSM)	150W
3 dB Beamwidth (GSM)	E-Plane 80°
Connection	Terminated to requirements
Radiator (GSM)	PTFE Printed circuit
Antenna base	Aluminium alloy alocrom 1000
Radome	Polyurethane rotational moulding grey
Lightning / HT line protection	GSM Direct grounded
Fixings	4 x M12 Bolts stainless steel grade A2-70
Typical weight	0.5kg
Dimensions	145 x 80 x 140mm
Typical wind loading @ 45m/s	18 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

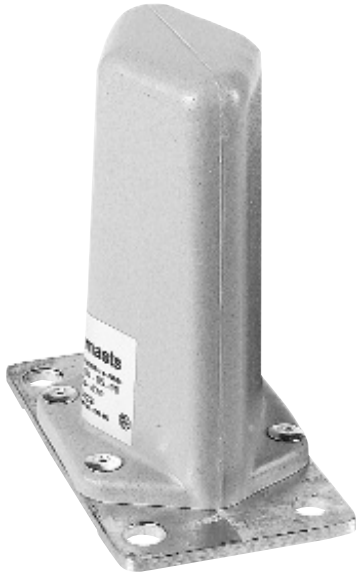
Stock code	Frequency
4142.09.11.00	870-960MHz
4142.09.11.00	806-870MHz

Issue 1. E&OE ROHS This product is RoHS compliant

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

4172.01.05.00
GSM vehicle antenna

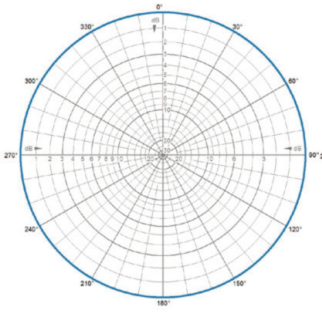
These antennæ are omni directional, and suited for operation on vehicles in harsh environments. Using a full half wave radiator, they offer a wide operating bandwidth. They are d.c. grounded, and do not require a conductive surface (ground plane) for operation. The radiator is manufactured from PTFE dielectric printed circuit for high efficiency. The 4172 is covered by a radome of tough moulded polyurethane.



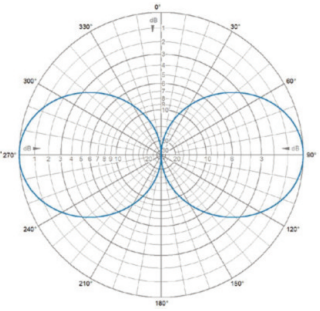
Frequency range	870-960MHz
Input impedance	50Ω
VSWR	<1.5:1
Maximum input power	250 Watts
Polarisation	Vertical
Forward gain	0 dBd
3 dB Beamwidth	E Plane 80º
Connection	'N' type socket
Radiator	PTFE dielectric printed circuit
Radome	Polyurethane rotational moulding grey
Mounting flange	Diecast aluminium alloy LM25
Lightning / HT line protection	Direct grounded
Fixings	4 x M12 Bolts stainless steel grade A2-70
Typical weight	0.5kg
Dimensions	145 x 80 x 140mm
Typical wind loading @ 45m/s	18 N

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
4172.01.05.00	870-960MHz

Issue 1. E&OE ROHS This product is RoHS compliant

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752.01.05.00

UHF / TETRA Indoor Panel Antenna

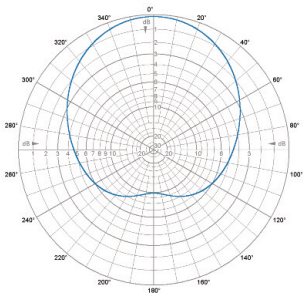
The 752.01.05.00 antenna is a broadband panel antenna suitable for indoor or outdoor coverage with TETRA and other UHF repeater systems. The dual-patch design gives the antenna stable radiation characteristics over a broad band of frequencies making the antenna ideal for a large range of indoor multichannel UHF repeater networks. This model has undergone S.A.R. testing to EN50385:2002. The antenna is available with a snap-fit wall mounting bracket for easy installation, and can be supplied with connector and cabling options to suit application requirements.

Frequency range	380-470MHz
Input impedance	50Ω
VSWR	<2.0:1
Front to back ratio	8 dB
Maximum input power	50 W
Polarisation	Vertical & horizontal
Forward gain	4 dBi
Beamwidth	E-Plane 120°
	H-Plane 130°
IM3	<-140dBc (2 x Tx@ 37dBm)
S.A.R.* Testing	EN50385:2002; 7.19W Touch Safe Level
***(Specific Absorption Rate)**	
Standard connection	'N' Socket on 500mm RG303 cable
Materials	Aluminium, PTFE, ABS, Brass
Radome	ABS Fire retardant, white RAL6014
Weight	0.4 kg
Dimensions	292 x 292 x 76mm

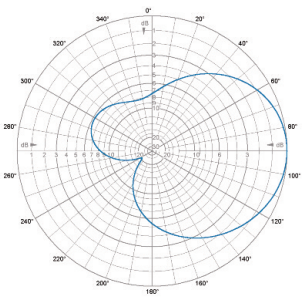
- SAR Tested
- Low PIM Certified

Free Space Radiation Patterns

H-Plane



E-Plane



Ordering Codes

752.01.05.00
Antenna with wall mount plate

752.01.05.10
Antenna with pole mount plate and 60mm U-bolts

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802.00.05.00

Wideband TETRA / UHF indoor ceiling mount antenna

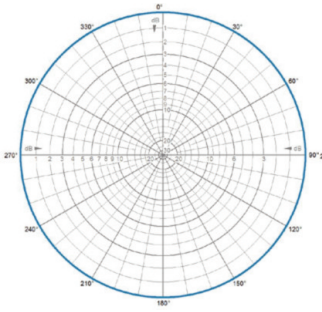
The 802.00.05.00 is a compact, stylish and efficient indoor antenna designed for use with UHF TETRA & PMR systems. It's ingenious radiator design allows for incredibly broadband operation making the antenna suitable for use within either UHF TETRA frequency band. It's stylish design makes for a discreet installation in any modern office or industrial complex, and the antenna is simple to install with the minimum of fuss.

- SAR Tested
- Low PIM Certified

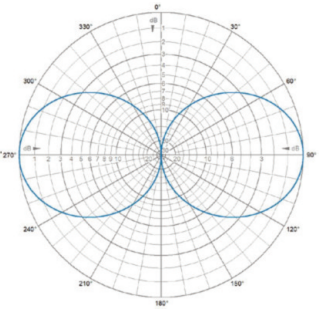
Frequency range	380-470MHz
Input impedance	50Ω
VSWR	<2.0:1
Maximum input power	50 Watts
Polarisation	Vertical
Gain	1dBi
3 dB Beamwidth	Horizontal 360°
	Vertical 80°
Intermodulation IM3	-120dBm (2 x Tx @ 37dBm)
Connection	500mm RG303 term. 'N' type socket
Element	FR4 Printed Circuit
Radome	ABS White Fire Retardant
Mounting	Via 3 screws on 180mm PCD
Dimensions	231mm (diameter) x 81mm (height)
Weight	400g

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
802.00.05.00	380-470MHz
802.01.05.00	380-430MHz
802.02.05.00	420-470MHz

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Tel +44(0)1604 494132 **email** info@skymasts.com **web** www.skymasts.com

802.01.05.00

TETRA indoor ceiling mount antenna

The 802.01.05.00 is a compact, stylish and efficient indoor antenna designed for use with UHF and TETRA systems. It's ingenious radiator design allows for incredibly broadband operation making the antenna suitable for use within either TETRA frequency band. It's stylish design makes for a discreet installation in any modern office or industrial complex, and the antenna is simple to install with the minimum of fuss.

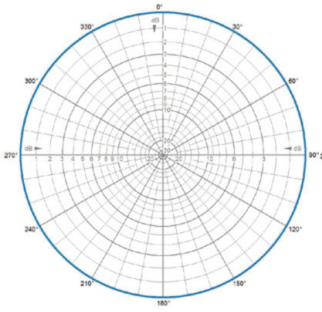
SAR Tested

Low PIM Certified

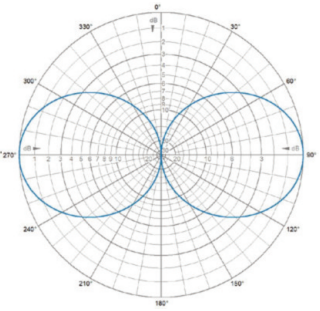
Frequency range	380-430MHz
Input impedance	50Ω
VSWR	<2.0:1
Maximum input power	50 Watts
Polarisation	Vertical
Gain	2dBi
3 dB Beamwidth	Horizontal 360°
	Vertical 80°
Intermodulation IM3	-120dBm (2 x Tx @ 37dBm)
Connection	500mm RG303 term. 'N' type socket
Element	FR4 Printed Circuit
Radome	ABS White Fire Retardant
Mounting	Via 3 screws on 180mm PCD
Dimensions	231mm (diameter) x 81mm (height)
Weight	400g

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
802.00.05.00	380-470MHz
802.01.05.00	380-430MHz
802.02.05.00	420-470MHz

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802.02.05.00

UHF indoor ceiling mount antenna

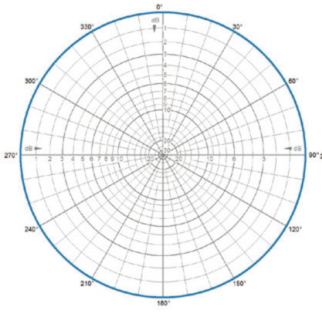
The 802.02.05.00 is a compact, stylish and efficient indoor antenna designed for use with UHF and TETRA systems. It's ingenious radiator design allows for incredibly broadband operation making the antenna suitable for use within either UHF frequency band. It's stylish design makes for a discreet installation in any modern office or industrial complex, and the antenna is simple to install with the minimum of fuss.

- SAR Tested
- Low PIM Certified

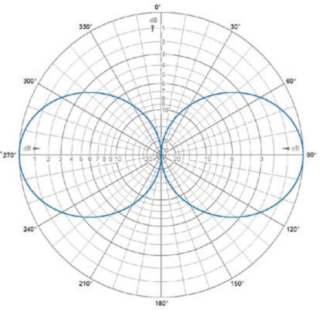
Frequency range	420 - 470 MHz
Input impedance	50Ω
VSWR	<2.0:1
Maximum input power	50 Watts
Polarisation	Vertical
Gain	2dBi
3 dB Beamwidth	Horizontal 360°
	Vertical 80°
Intermodulation IM3	-120dBm (2 x Tx @ 37dBm)
Connection	500mm RG303 term. 'N' type socket
Element	FR4 Printed Circuit
Radome	ABS White Fire Retardant
Mounting	Via 3 screws on 180mm PCD
Dimensions	231mm (diameter) x 81mm (height)
Weight	400g

Free Space Radiation Patterns

H-Plane



E-Plane



Mounting Accessories

Ordering Codes

Stock code	Frequency
802.00.05.00	380-470MHz
802.01.05.00	380-430MHz
802.02.05.00	420-470MHz

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CPS2

Two Way Cable Power Splitter

The CPS series of power splitters are manufactured using high quality coaxial cable and connectors. The CPS power splitters use quarter wave coaxial cable transformer sections to match two or more loads to one source. Phase shift can be incorporated to produce electrical beam tilt with phased dipole arrays. The junction points on the CPS power splitters are completely encapsulated with polyurethane resin within a high grade aluminium tube totally preventing dust and moisture ingress.

Frequency range	Manufactured between 27-500 MHz
Input impedance	50Ω
Bandwidth	±12% of centre frequency
VSWR	<1.3:1
Maximum input power	500 Watts
Input connection	1m Length RG213 c/w 'N' type female
Output connections	'N' type male on quarter-wave length RG11 cable
Body	Aluminium tube 38.1mm
Insulator	Polyurethane resin encapsulant

Ordering Codes

Stock code	Frequency
CPS2-78	66-88MHz
CPS2-98	88-108MHz
CPS2-127	117-137MHz
CPS2-160	145-175MHz
CPS2-200	180-220MHz
CPS2-405	380-430MHz
CPS2-445	420-470MHz

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CPS3

Three Way Cable Power Splitter

The CPS series of power splitters are manufactured using high quality coaxial cable and connectors. The CPS power splitters use quarter wave coaxial cable transformer sections to match two or more loads to one source. Phase shift can be incorporated to produce electrical beam tilt with phased dipole arrays. The junction points on the CPS power splitters are completely encapsulated with polyurethane resin within a high grade aluminium tube totally preventing dust and moisture ingress.

Frequency range	Manufactured between 27-500 MHz
Input impedance	50Ω
Bandwidth	±12% of centre frequency
VSWR	<1.3:1
Maximum input power	500 Watts
Input connection	1m Length RG213 c/w 'N' type female
Output connections	'N' type male on 0.5m RG213
Body	Aluminium tube 38.1mm
Insulator	Polyurethane resin encapsulant

Ordering Codes

Stock code	Frequency
CPS3-78	66-88MHz
CPS3-98	88-108MHz
CPS3-127	117-137MHz
CPS3-160	145-175MHz
CPS3-200	192-208MHz
CPS3-405	380-430MHz
CPS3-445	420-470MHz

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CPS4

Four Way Cable Power Splitter

The CPS series of power splitters are manufactured using high quality coaxial cable and connectors. The CPS power splitters use quarter wave coaxial cable transformer sections to match two or more loads to one source. Phase shift can be incorporated to produce electrical beam tilt with phased dipole arrays. The junction points on the CPS power splitters are completely encapsulated with polyurethane resin within a high grade aluminium tube totally preventing dust and moisture ingress.

Frequency range	Manufactured between 27-500 MHz
Input impedance	50Ω
Bandwidth	±12% of centre frequency
VSWR	<1.3:1
Maximum input power	500 Watts
Input connection	1m Length RG213 c/w 'N' type female
Output connections	'N' type male on 0.5m RG213
Body	Aluminium tube 38.1mm
Insulator	Polyurethane resin encapsulant

Ordering Codes

Stock code	Frequency
CPS4-78	66-88MHz
CPS4-98	88-108MHz
CPS4-127	117-137MHz
CPS4-160	145-175MHz
CPS4-200	192-208MHz
CPS4-405	380-430MHz
CPS4-445	420-470MHz

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MM Series

Machined Equal and Unequal Power Splitters

The MM and MM-U series of power splitters are manufactured to a high engineering standard utilising high quality machined components of both aluminium and brass, offering precision matching through custom transmission line quarter wave transformers which gives a very high degree of performance and reliability in the field. The MM-U series power splitters offer the same qualities as the MM series, although offer unequal power splitting options of your choice. The MM-U is widely used with radiating cable systems & specialised antenna array configurations. Connector and colour options are available.

Product codes, equal splitters	**MM2** Two way power splitter
	MM3 Three way power splitter
	MM4 Four way power splitter
Product codes, unequal splitters	**MM2U** Two way unequal power splitter
(specify split ratio at time of order)	**MM3U** Three way unequal power splitter
	MM4U Four way unequal power splitter
Frequency range	Manufactured between 88 - 960 MHz
Input impedance	50Ω
Bandwidth	±10% of centre frequency
VSWR	<1.3:1
Power split ratio	From 1:1 to 10:1
Maximum input power	Up to 2kW
Connections	'N' Sockets on input / outputs (standard)
	MMx-7 7/16 DIN Socket on input / outputs
Conductor	Brass rod
Dielectric	Air / PTFE
Body	Welded aluminium tube
Finish	Polyester Coated

Ordering Codes

Stock code	Frequency
Manufactured to requirements	

Skymasts Antennas Ltd., Equilibrium House, Mansion Close, Moulton Park Industrial Estate, Northampton, NN3 6RU, England.
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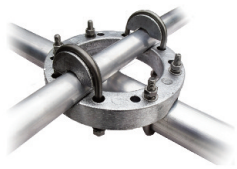
A typical selection of mounting brackets and hardware. Other solutions are available and specialist requirements can be manufactured to order. Please contact us for details.



UA64-23

Circular cast alloy clamp, gives a good two point fixing, supplied as standard with 4 x 50mm stainless steel 'U' bolts and two half-moon cast spacers to fit smaller antenna booms.

Tube 1 size: 25-50mm (1" - 2") diameter
Tube 2 size: 50 or 76mm (2" or 3") diameter *(order UB06 'U' bolts for 76mm dia.)*

UA66-22

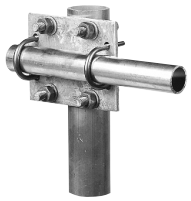
Very strong square cast alloy clamp, fits up to 50mm diameter tubes as either a cross-over or parallel clamp. Supplied with two stainless steel 'U' bolts.

Tube 1 size: 25-50mm (1" - 2") diameter
Tube 2 size: 25-50mm (1" - 2") diameter

UA66-24

Rectangular cast alloy clamp, gives a good two point fixing, supplied as standard with 4 x 50mm stainless steel 'U' bolts and two half-moon cast spacers to fit smaller antenna booms.

Tube 1 size: 25-50mm (1" - 2") diameter
Tube 2 size: 50 / 76 / 100 / 115mm (2", 3", 4", 4 1/2") diameter
(Order 'U' bolts UB06 for 76mm, UB07 for 100mm, UB09 for 115mm)



COP 54

Standard cross-over plate mounting clamp, hot dipped galvanised steel plate supplied with spun galvanised 48.5mm 'U' bolts and stainless steel 32mm 'U' bolts. to fit 32mm diameter tubes. Slotted to accomodate 'U' bolts to fit 38mm diameter booms. *Also available in Stainless Steel (order **COP54SS**)*

Tube 1 size: 48.4 / 50mm (1 29/32" - 2") diameter
Tube 2 size: 32-38mm (1 1/4" - 1 1/2") diameter *(supplied with 32mm 'U' bolts)*

COP 55

Standard cross-over plate mounting clamp (50mm to 50mm), hot dipped galvanised steel plate supplied with spun galvanised 'U' bolts to fit 50mm diameter tubes.

Tube 1 size: 48.4 / 50mm (1 29/32" - 2") diameter
Tube 2 size: 48.4 / 50mm (1 29/32" - 2") diameter

1763-100

Strong, yet low cost, galvanised steel cross-over clamp, fits 32mm (1-1/4") diameter antenna booms to up to 50mm (2") diameter poles.

Tube 1 size: 48.4 / 50mm (1 29/32" - 2") diameter
Tube 2 size: 32mm (1 1/4") diameter

1763-187

Medium duty, low cost, galvanised steel cross-over/parallel clamp. The 'V' bolts can be turned through 90 degrees to change from cross-over to parallel configuration.

Tube 1 size: 48.4 / 50mm (1 29/32" - 2") diameter
Tube 2 size: 32mm (1 1/4") diameter

1763-37

Medium/light duty, low cost, galvanised steel cross-over/parallel clamp, fits 32mm-50mm diameter antenna booms to up to 32mm-50mm diameter poles in either cross-over or parallel configuration.

Tube 1 size: 32 - 50mm (1 1/4" - 2") diameter
Tube 2 size: 32 - 50mm (1 1/4" - 2") diameter

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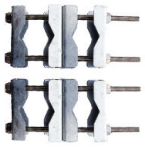
A typical selection of mounting brackets and hardware. Other solutions are available and specialist requirements can be manufactured to order. Please contact us for details.



2140.01.00.00

Parallel clamps, in galvanised steel with stainless steel fixings, fits from 25-60mm diameter tubes.

Tube 1 size: 25 - 60mm (1" - 2 3/8") diameter
Tube 2 size: 25 - 60mm (1" - 2 3/8") diameter

2141.01.00.00

Parallel clamps, in galvanised steel with stainless steel fixings, fits from 38-120mm diameter tubes.

Tube 1 size: 38 - 120mm (1 1/2" - 4 3/4") diameter
Tube 2 size: 38 - 120mm (1 1/2" - 4 3/4") diameter

83210

'Norstel' type galvanised drop forged steel clamp, fixed 90 degree double coupler. Made to fit standard 48.4mm diameter scaffold tubes.

Tube 1 size: 48.4 / 50mm (1 29/32" - 2") diameter
Tube 2 size: 48.4 / 50mm (1 29/32" - 2") diameter

83220

'Norstel' type galvanised drop forged steel clamp, swivelling double coupler. Made to fit standard 48.4mm diameter scaffold tubes. (Note: cannot be locked into position)

Tube 1 size: 48.4 / 50mm (1 29/32" - 2") diameter
Tube 2 size: 48.4 / 50mm (1 29/32" - 2") diameter

83225

1/2 'Norstel' galvanised, drop forged steel clamp, complete with bolt and nut set for fixing through a plate. Made to fit standard 48.4mm diameter scaffold tubes.

Tube 1 size: 48.4 / 50mm (1 29/32" - 2") diameter

13072

Cast Aluminium increasing sleeves to fit antenna booms of 32mm (1-1/4") diameter into the 'Norstel' type clamps above

CWB15

Hot Dipped Galvanised Steel (RSC) wall stand-off bracket pair, supplied with 'U' bolts (50mm) and M10 wall anchors. Secures 50mm diameter mast to wall with 150mm stand-off

AM47

Hot Dipped Galvanised Steel (RSC) wall stand-off bracket pair, supplied with 83225 Half Norstel Clamps and M10 wall anchors. Secures 50mm diameter mast to wall with 150mm stand-off

SWB30, SWB45, SWB60

High quality stand-off wall brackets (T&K type) made in hot dipped galvanised steel and supplied with all necessary 'U' bolts and M10 wall anchors to fix a 50mm diameter mast to a brick / concrete wall.

SWB30 300mm stand-off
SWB45 450mm stand-off
SWB60 600mm stand-off

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A typical selection of mounting brackets and hardware. Other solutions are available and specialist requirements can be manufactured to order. Please contact us for details.

UB3

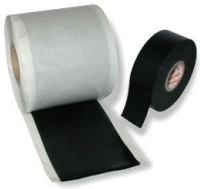
Aluminium support underboom for yagi antennas such as 12 element and in particular, 18 element UHF Yagi antennas, supplied complete with cast aluminium clamps for attaching to antenna boom.

CSB

All welded aluminium twin boom antenna stand-off frame suitable for mounting end-fed, colinear or UHF stacked dipole antennas off the side of a mast or tower structure. Total frame width 1500mm.

AT5, ST5

Heavy duty scaffolding tubes (drawn tube; 6082 T6) for mounting antennas. 48.5mm diameter, available in any length up to 6m. Available as aluminium drawn tube, grade 6082 T6 (order AT5) or galvanised steel tube (order ST5)



TAPE KIT

Weather proofing kit for cable / connector joints, consisting of 1 roll of Butyl Mastic (self amalgamating) tape and 1 roll of high quality PVC adhesive tape.

(Kit will enable up to 9-10 joints with 1/2" foam feeder cable / antenna joints to be treated.)

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