



AW3848-T0-F

Common Name 6 Port, (2P/4P), 24", Fixed Tilt, Low Band & Mid Band Omni

698-960MHz	2	Fixed	5	360°
1695-2690MHz	4	Fixed	8.5	360°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

This antenna solution is designed to offer Low Band and Mid Band functionality in a compact 2 foot high housing. This design is intended to offer 2 ports on Low Band and 4 ports on Mid Band.

APPLICATION

Alpha Wireless Low and Mid Band small cell Omni antennas provide 360 degree coverage whilst in an ultra compact radome design. The antenna is designed to be installed in an urban environment where low visual impact is required. There are a number of mounting options available making deployments on lamp posts, utility poles, walls and other vertical structures possible.

STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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FEATURES

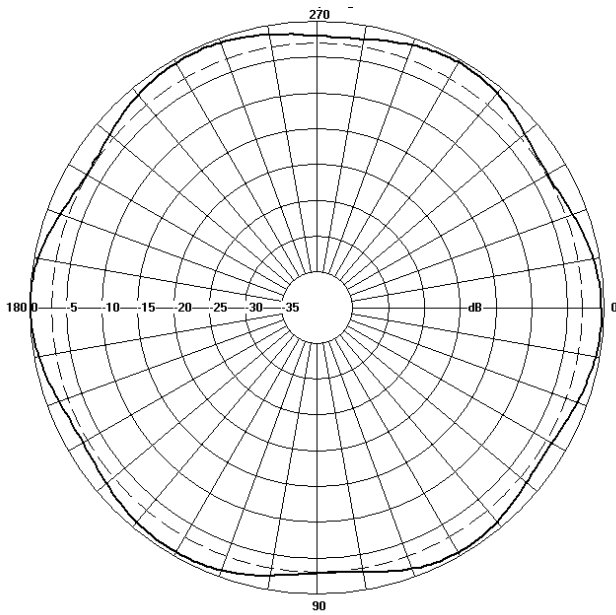
- Multi-band Small Cell Omni antenna - 698-960 / 1695-2690MHz.
- Compact design for low visual impact.
- Manufactured in Ireland.

The parameters in this specification follow the definitions and recommendations per NGMN P-Basta, Release 9.6.

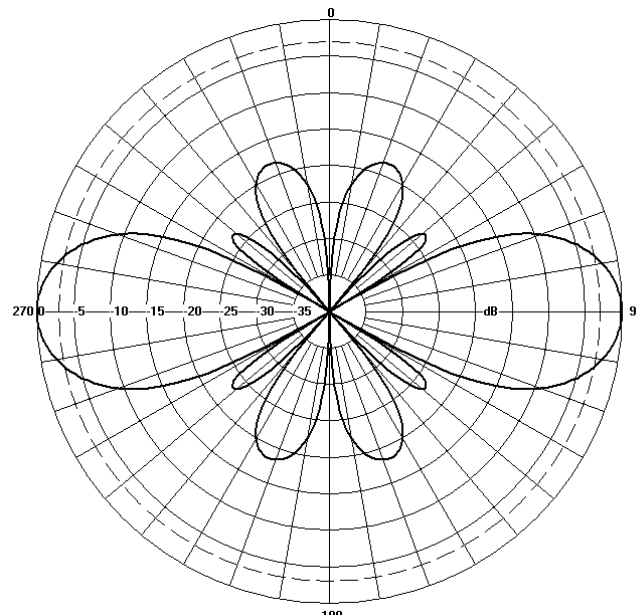
TECHNICAL SPECIFICATION

Electrical Specifications		Low Band				Mid Band			
Frequency Range per Input	MHz	698-755	755-820	820-890	890-960	1695-1995	1920-2170	2170-2500	2500-2690
Polarisation		+/- 45° Slant Linear							
Gain Basta	dBi	4.5±0.5	4.6±0.5	4.6±0.5	4.7±0.5	6.8±0.5	7.8±0.5	7.5±0.5	8.0±0.5
Gain Max	dBi	5.0	5.1	5.1	5.2	7.8	8.3	8.0	8.5
Azimuth Beamwidth	Degree	360°	360°	360°	360°	360°	360°	360°	360°
Elevation Beamwidth	Degree	40° +/- 5°	38° +/- 5°	35° +/- 5°	32° +/- 5°	19° +/- 2°	17° +/- 2°	15° +/- 2°	13° +/- 2°
Electrical Downtilt	Degree	T2°	T2°	T2°	T2°	T2°	T2°	T2°	T2°
Electrical Downtilt Deviation	Degree <	5°	5°	5°	5°	1.5°	1.5°	1.5°	1.5°
Impedance	Ohms	50	50	50	50	50	50	50	50
VSWR	NA <	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Return Loss	dB >	14	14	14	14	14	14	14	14
Isolation	dB >	23	23	23	23	22	22	22	22
Passive Intermodulation	dBc <	-150	-150	-150	-150	-150	-150	-150	-150
Cross Polar Discrimination	dB >	16	16	16	16	16	16	16	16
Maximum Effective Power Per Port	W	100	100	100	100	250	250	250	250
Maximum total input power	W	1200							

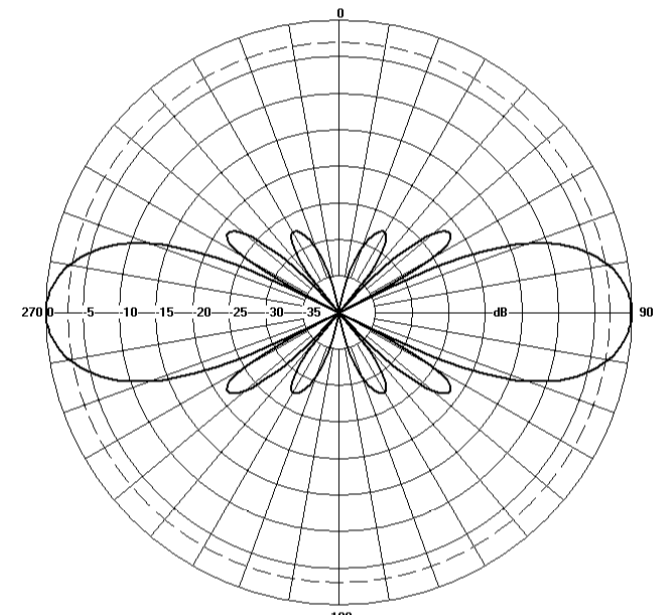
Representative Pattern Files



Azimuth



Low Band



Mid Band

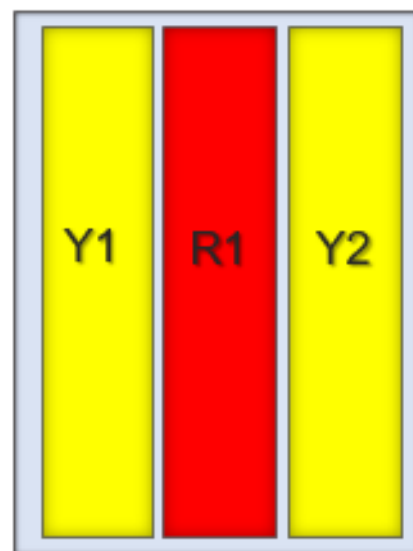
Elevation

TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions	mm (in)	610 (24) x 365 (14.3) - (LxD)
Packing Size (LxWxD)	mm (in)	685 (27) x 448 (17.6) x 448 (17.6)
Net Weight (antenna)	kg (lb)	7.7 (17)
Net Weight (mount)	kg (lb)	5.9 (13)
Shipping Weight	kg (lb)	15.6 (34.4)
Connector Type (Female)	-	4.3-10
Connector Position	-	Bottom
Connector Quantity	-	6 (2P Low Band , 4P Mid Band)
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	180 (40)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	180 (40)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	ASA capped ABS
Radome Colour	RAL	7035 (light grey)
Product Compliance Environmental	-	RoHS
Lightning Protection	-	DC Grounded
Cold Temperature Survival	Celsius (Fahrenheit)	-40 (-40)
Hot Temperature Survival	Celsius (Fahrenheit)	70 (158)

Array Layout and RET Information

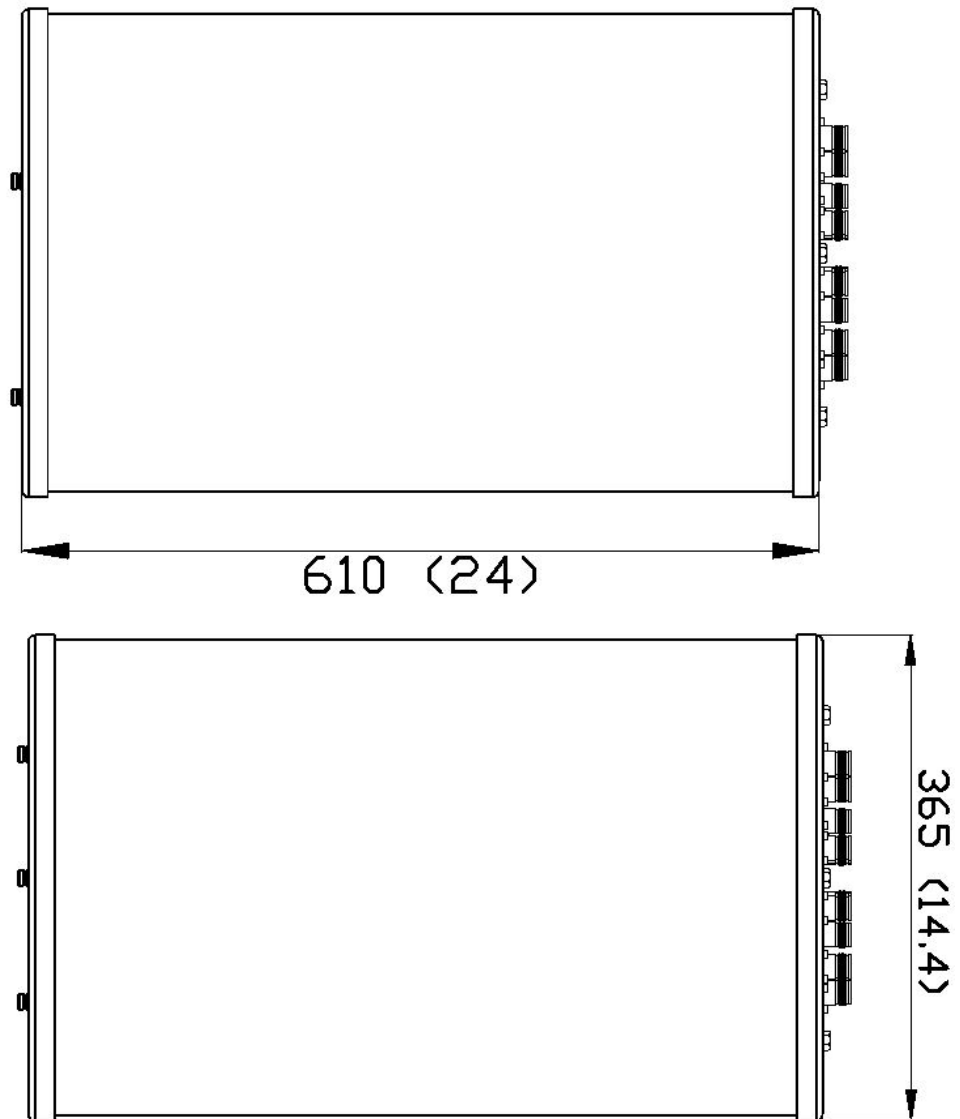


Array	Frequency MHz	Ports
R1	698 - 960	1 - 2
Y1	1695 - 2690	3 - 4
Y2	1695 - 2690	5 - 6

Note: Coloured box sizes do not represent antenna sizes.

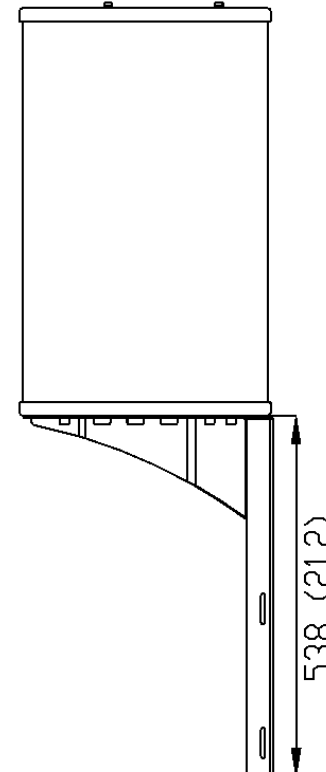
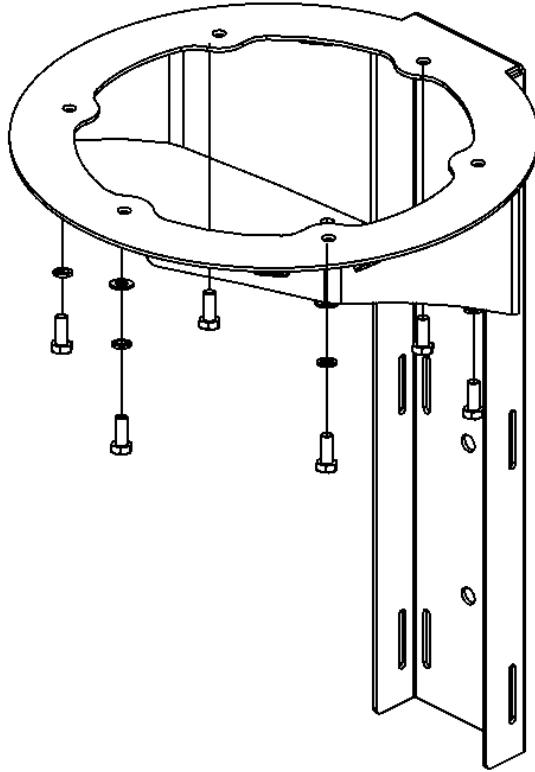
TECHNICAL SPECIFICATION

Mechanical Illustration



TECHNICAL SPECIFICATION

Mounting Bracket Kit



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
0	Stainless Steel	152mm-254mm (6" to 10")

Ordering Info

Order Code - Antenna
AW3848-T0-F

Description

Zero degrees Fixed Tilt with 4.3-10 Connectors.

Order Code - Accessories

Order Code - Accessories

AW1012-2-FM-FM

RF Jumper Cable, connector types 4.3-10 (m) / 4.3-10 (m), length 2 metres (6'6")

AW1012-2-FM-NM

RF Jumper Cable, connector types 4.3-10 (m) / N-Type (m), length 2 metres (6'6")

AW1014-2-FM-TM

RF Jumper Cable, connector types 4.3-10 (m) / Nex10 (m), length 2 metres (6'6")

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