



AWL4015-T0-F-BL-V2

Common Name 8 Port (4P/4P) Multiband Omni Antenna

1695-2690MHz	4	Fixed	8.0	360°
3300-4200MHz	4	Fixed	9.1	360°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

This product was designed to offer Mid-band as well as 3.5GHz functionality in a compact housing for multi-operator applications. This design is intended to offer 4 ports on Mid Band and 4 ports on 3.5GHz (CBRS).

APPLICATION

Alpha Wireless multi-band small cell provides omni coverage whilst in an ultra-compact radome design. This antenna provides multiple ports for ultimate data throughput in 4G and 5G applications. The antenna is designed to be installed in an urban environment where low visual impact is required.

STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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FEATURES

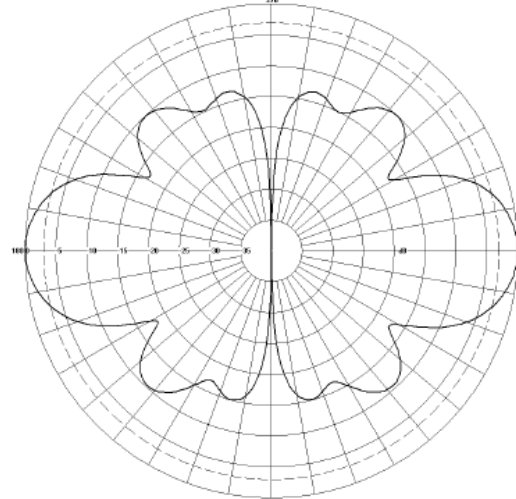
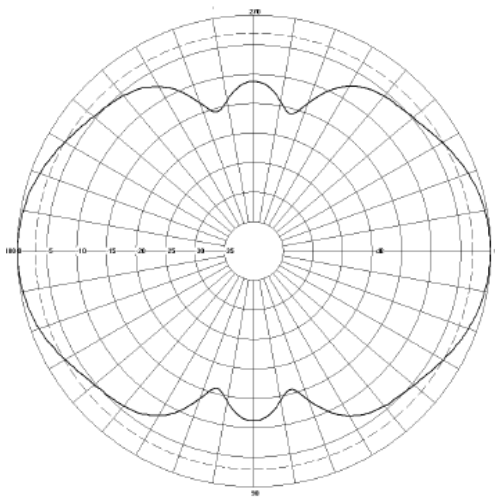
- Allows 4x4 MIMO on dual bands for multiple operators
- Minimal nulls in the azimuth pattern for consistent azimuth coverage
- Pole-top and side-arm mounting options
- High port count enabling multiple operators
- Compact design - Low visual impact.

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

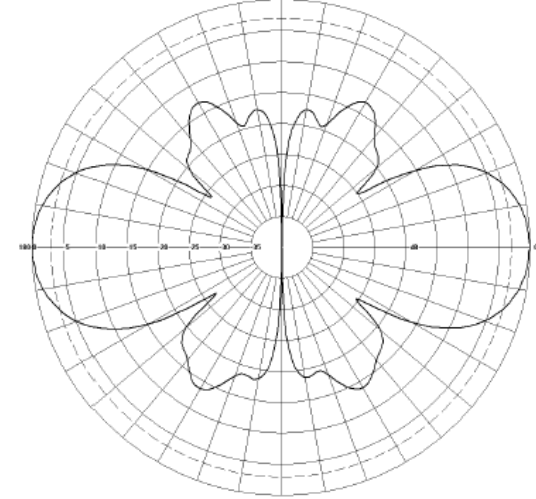
TECHNICAL SPECIFICATION

Electrical Specifications								
Frequency Range	MHz	1695-1995	1920-2170	2170-2500	2500-2690	3300-3600	3600-4200	
Polarisation	Degree	+/- 45° Slant Linear						
Gain	Basta	dBi	6.0±0.5	6.5±0.5	6.9±0.5	7.5±0.5	8.5±0.5	8.6±0.5
	Max	dBi	6.5	7.0	7.4	8.0	9.0	9.1
Azimuth Beamwidth	Degree	360°	360°	360°	360°	360°	360°	360°
Elevation Beamwidth	Degree	40°	38°	32°	30°	32°	30°	
Electrical Downtilt	Degree	T0°	T0°	T0°	T0°	T0°	T0°	T0°
Electrical Downtilt Deviation	Degree<	3°	3°	3°	3°	3°	3°	3°
Impedance	Ohms	50						
VSWR	<	1.5						
Return Loss	dB>	14						
Isolation	dB>	25	25	25	25	25	25	25
Passive Intermodulation	dBc<	-150	-150	-150	-150	N/A	N/A	
Cross-Polar Discrimination (0°)	dB>	10	10	10	10	10	10	10
Maximum Effective Power Per Port	W	50	50	50	50	50	50	50

Representative Pattern Files



1695- 2690MHz



3300 - 4200MHz

Azimuth

Elevation

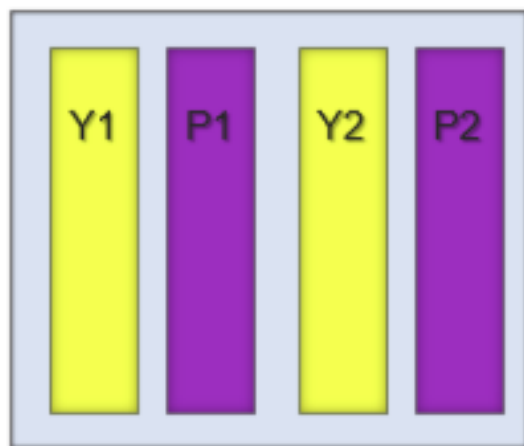
For radiation pattern files, please login at www.alphawireless.com

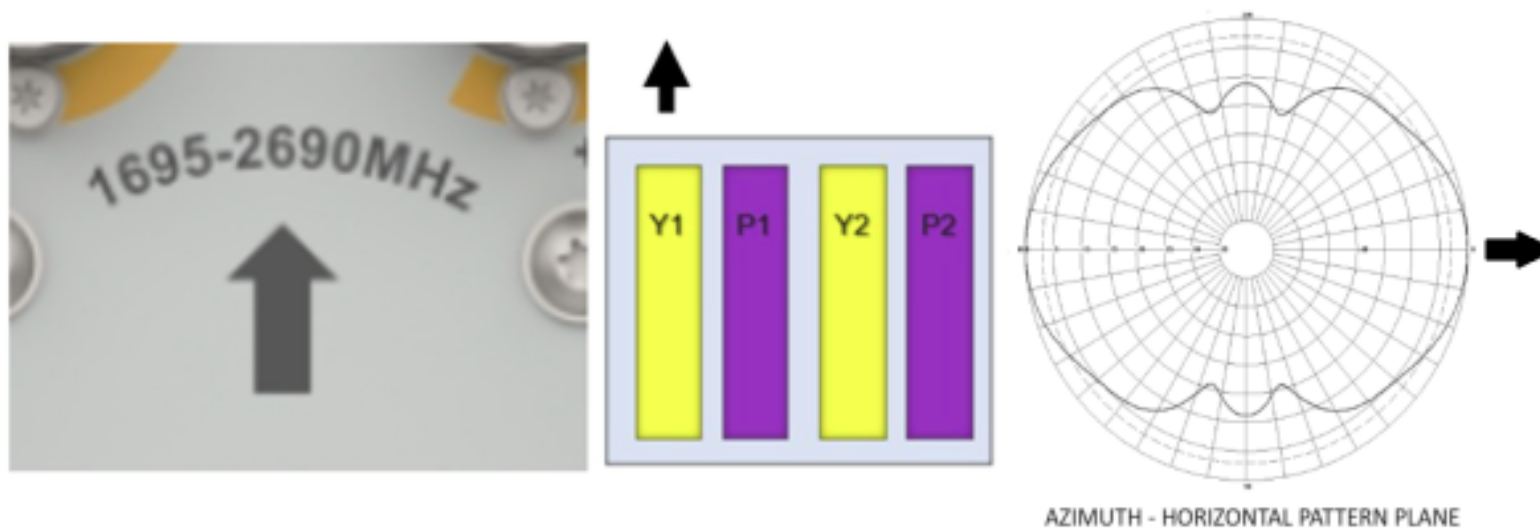
TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions (LxWxD) or (L x Diameter)	mm (in)	249 (9.8) x 220 (8.6)
Packing Size (LxWxD)	mm (in)	550 (21.6) x 280 (11.0) x 430 (16.9)
Net Weight (antenna)	kg (lb)	3.0 (6.6)
Net Weight (mount)	kg (lb)	1.4 (3.1) CL-V-205-V2
Shipping Weight	kg (lb)	6.1 (13.5)
Connector Type (Female)	-	4.3/10
Connector Position	-	Bottom
Connector Quantity	-	8
		4 Ports Mid Band, 4 Ports High Band.
Windload Frontal (at Rated Wind Speed: 150km/h)	N	44 (10)
Windload Lateral (at Rated Wind Speed: 150km/h)	N	44 (10)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	ASA capped ABS
Radome Colour	RAL	9005
Product Compliance Environmental	-	RoHS
Lightning Protection	-	DC Grounded
Cold Temperature Survival	Celsius (Fahrenheit)	-40 (-40)
Hot Temperature Survival	Celsius (Fahrenheit)	70 (158)

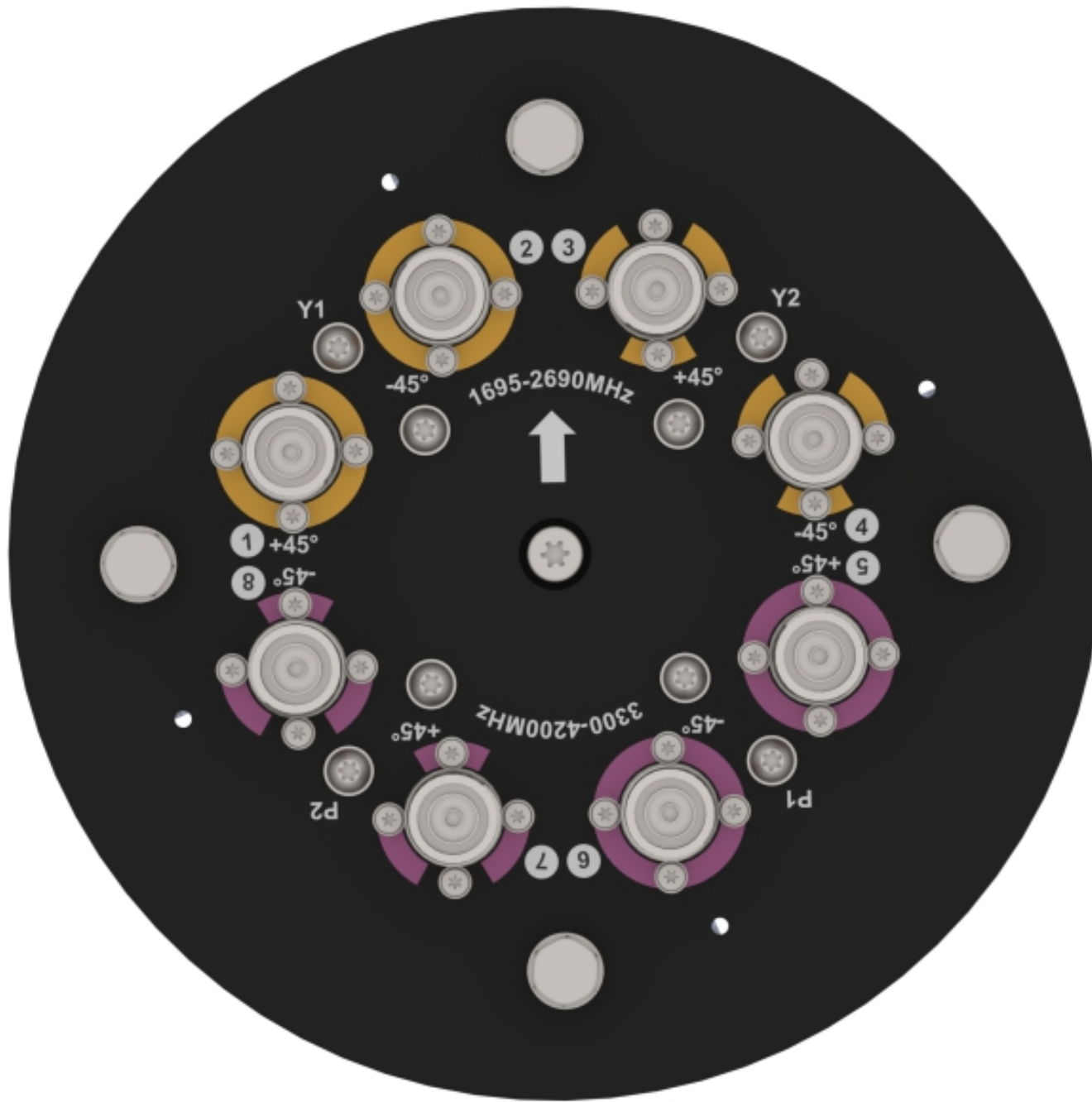
Array Layout and RET Information

	<table border="1"> <thead> <tr> <th>Array</th> <th>Frequency</th> <th>Ports</th> </tr> </thead> <tbody> <tr> <td>Y1</td> <td rowspan="2">1695 – 2690 MHz</td> <td>1 – 2</td> </tr> <tr> <td>Y2</td> <td>3 – 4</td> </tr> <tr> <td>P1</td> <td rowspan="2">3300 – 4200 MHz</td> <td>5 – 6</td> </tr> <tr> <td>P2</td> <td>7 – 8</td> </tr> </tbody> </table>	Array	Frequency	Ports	Y1	1695 – 2690 MHz	1 – 2	Y2	3 – 4	P1	3300 – 4200 MHz	5 – 6	P2	7 – 8
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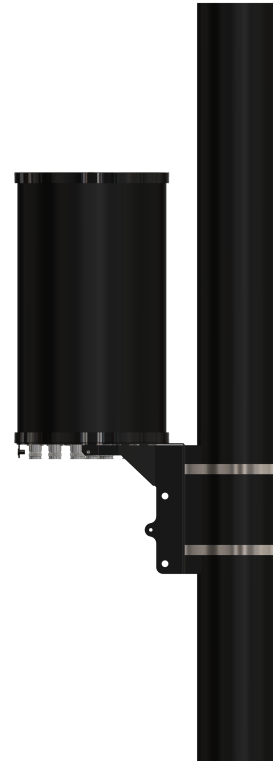
Note: Arrow indicator on Connector Plate represents the location of the Radiator / Azimuth Beam Peak for Array Y1 for Midband Ports 1 and 2.

Mechanical Illustration



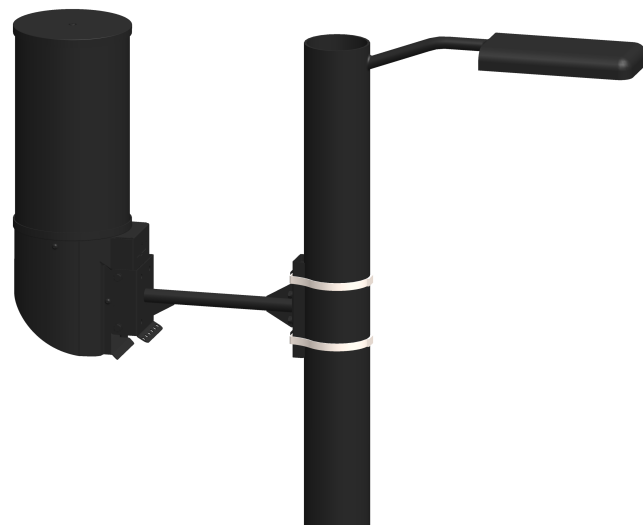
Mounting Bracket Kit

CL-V-205-BL-V2 Mount Bracket, Black Powder Coat, ships with Antenna. (Steel Mount Straps 150mm diameter included).



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
N/A	Black Powder Coated Stainless Steel	76mm-127mm (3" to 5")

CL-V-211-BL-V2 Horizontal Extension Arm for CL-V205-BL-V2, Black. **NOTE:** Not included with antenna, must be ordered separately.



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
N/A	Black Powder Coated Stainless Steel	N/A



AWL4015-T0-F-BL-V2

TECHNICAL SPECIFICATION

Ordering Info

Order Code - Antenna

AWL4015-T0-F-BL-V2

Order Code - Accessories

CL-V-211-BL-V2

AW1012-2-FM-FM

AW1012-2-FM-NM

AW1014-2-FM-TM

Description

Zero Degrees Fixed Tilt with 4.3/10 Connectors.

Description

Horizontal Mounting Arm (Black) for CL-V-205-BL-V2

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

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

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

Enquiries

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Page 6/6