



AW3939-T0-F

Common Name 4 Port, 34", Band n77 Omni Canister

3300-4200MHz	4	Fixed	12.8	360°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

This is a four port Pseudo-Omni antenna covering 3300-4200MHz in a 8.6" diameter canister housing. The antenna enables 4x4 MIMO with uniform coverage around the antenna. This antenna offers a smooth Omnidirectional pattern with minimal nulls. This antenna is designed for high capacity C-band sites where high gain is important. It enables 360° 4x4 MIMO coverage for 4G and 5G private networks using the 3.5 GHz Citizens Broadband Radio Service (CBRS) and C-band spectrums (bands n48, n77, n78, 42, 43, and 52).

APPLICATION

Alpha Wireless pseudo omni antenna provides 360° coverage whilst in an ultra-compact Radome. This 4X4 MIMO Omni antenna enables improved Azimuth Pattern Control.

Designed for high-capacity C-band sites where high gain is important.

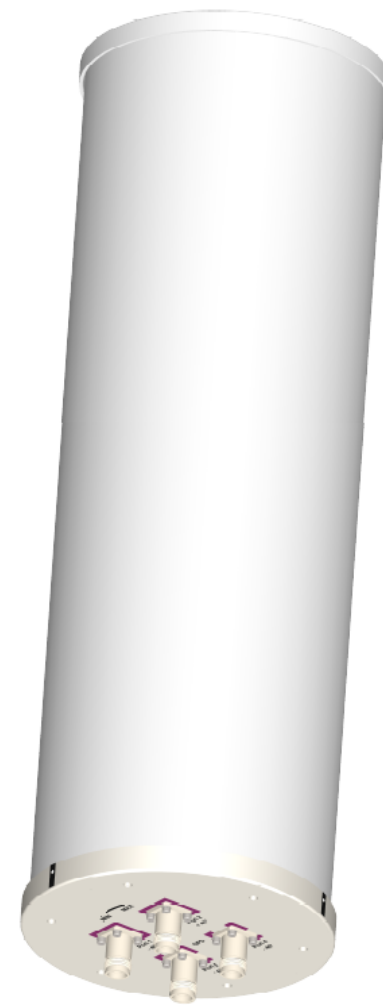
STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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FEATURES

- Covers entire C-band n77 spectrum, covering bands n48 and n78 as a result.
- Compact 34" design - Low visual impact.
- Minimal nulls in the azimuth pattern with patented 4x4 MIMO technology
- 4x4 MIMO for maximum throughput

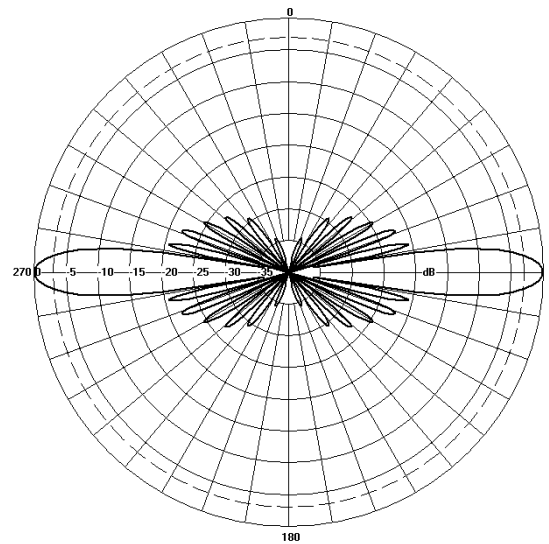
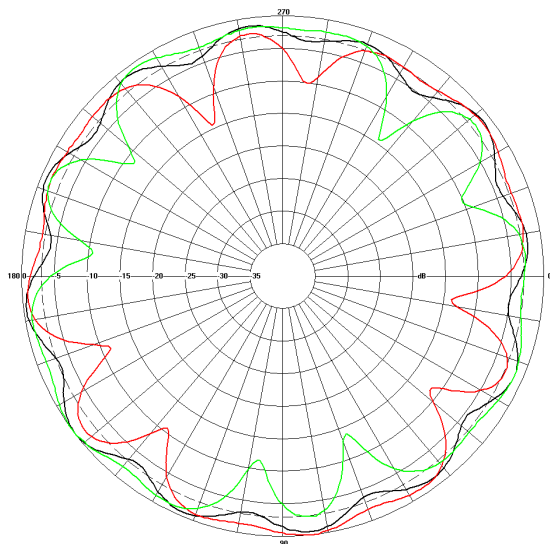


The parameters in this specification follow the definitions and recommendations per NGMN P-Basta, Release 9.6.

TECHNICAL SPECIFICATION

Electrical Specifications						
Frequency Range		MHz	3300-3600	3600-3800	3800-4000	4000-4200
Polarisation		Degree	+/-45°			
Gain	Basta	dBi	12.6 ±0.5	12.7 ±0.5	12.8 ±0.5	12.8±0.5
	Max	dBi	13.1	13.2	13.3	13.3
Azimuth Beamwidth		Degree	360°	360°	360°	360°
Elevation Beamwidth		Degree	7.0°	6.9°	6.8°	6.7°
Electrical Downtilt		Degree	0°			
Electrical Downtilt Deviation		Degree<	1°			
Impedance		Ohms	50			
VSWR		<	1.5			
Return Loss		dB>	14			
Isolation		dB>	25			
Upper Sidelobe Suppression, Peak to 20°		dB>	14			
Cross-Polar Discrimination		dB>	10			
Maximum Effective Power Per Port		W	150			

Representative Pattern Files



Azimuth

Elevation

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

The green curve represents the azimuth pattern of Ports 1 & 2.

The red curve represents the azimuth pattern of Ports 3 & 4.

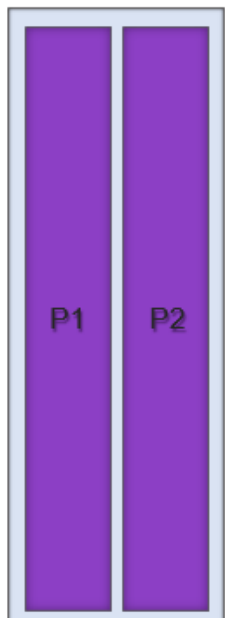
The black curve represents the composite azimuth pattern, a smooth Omni pattern with minimized nulls.

TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions	mm (in)	850 (33.5) x 220 (8.6) - (L x Ø) (without mounting bracket)
Packing Size (LxWxD)	mm (in)	980 (38.5) x 390 (15.3) x 470 (18.5)
Net Weight (antenna)	kg (lb)	6.5 (14.3)
Net Weight (mount)	kg (lb)	1.5 (3.3)
Shipping Weight	kg (lb)	8 (17.6)
Connector Type (Female)	-	4.3-10
Connector Position	-	Bottom
Connector Quantity	-	4
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	150 (34)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	150 (34)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	ASA capped ABS
Radome Colour	RAL	7035
Product Compliance Environmental	-	RoHS
Lightning Protection	-	DC Grounded
Cold Temperature Survival	Celsius (Fahrenheit)	-40 (-40)
Hot Temperature Survival	Celsius (Fahrenheit)	70 (158)

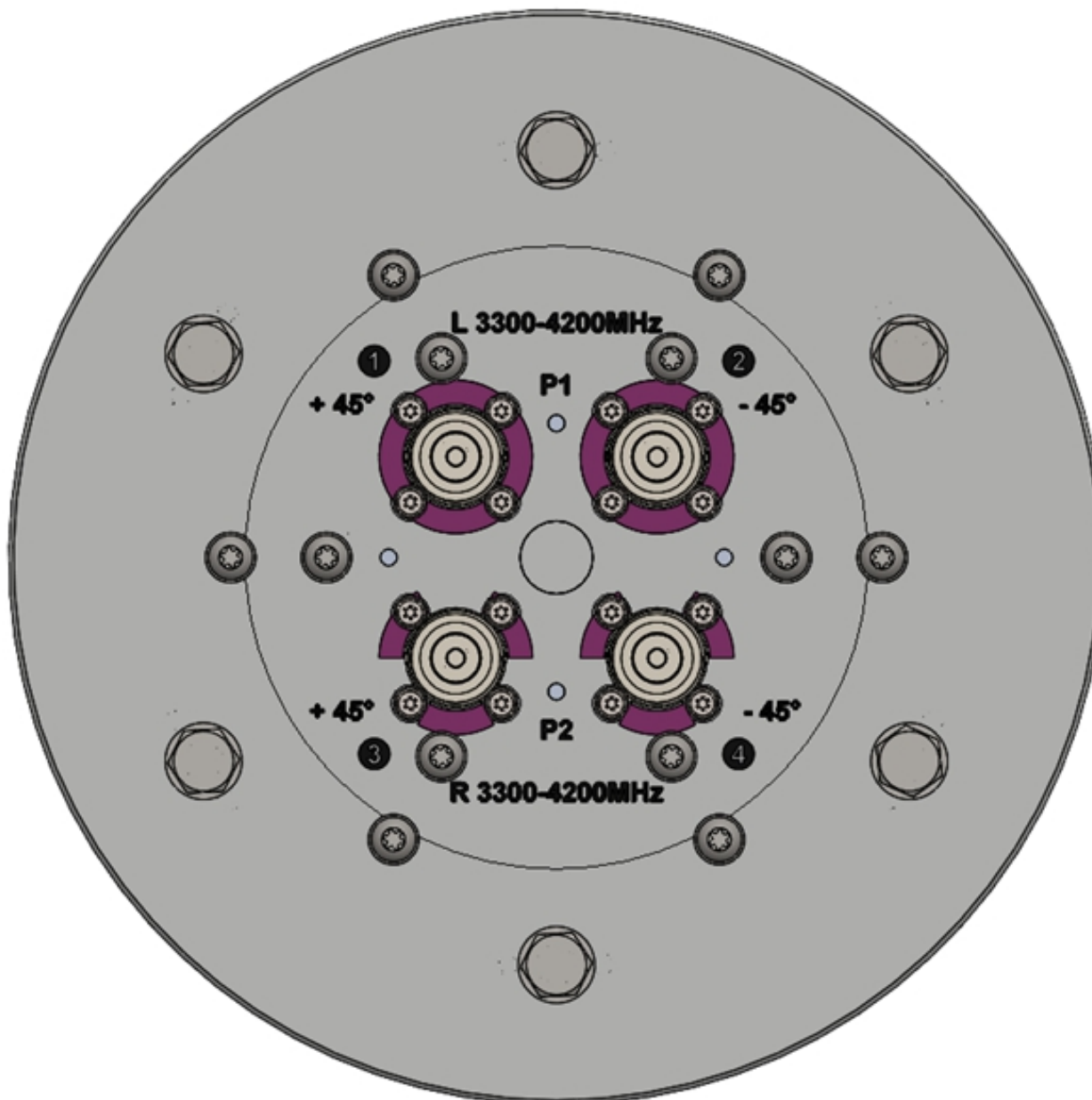
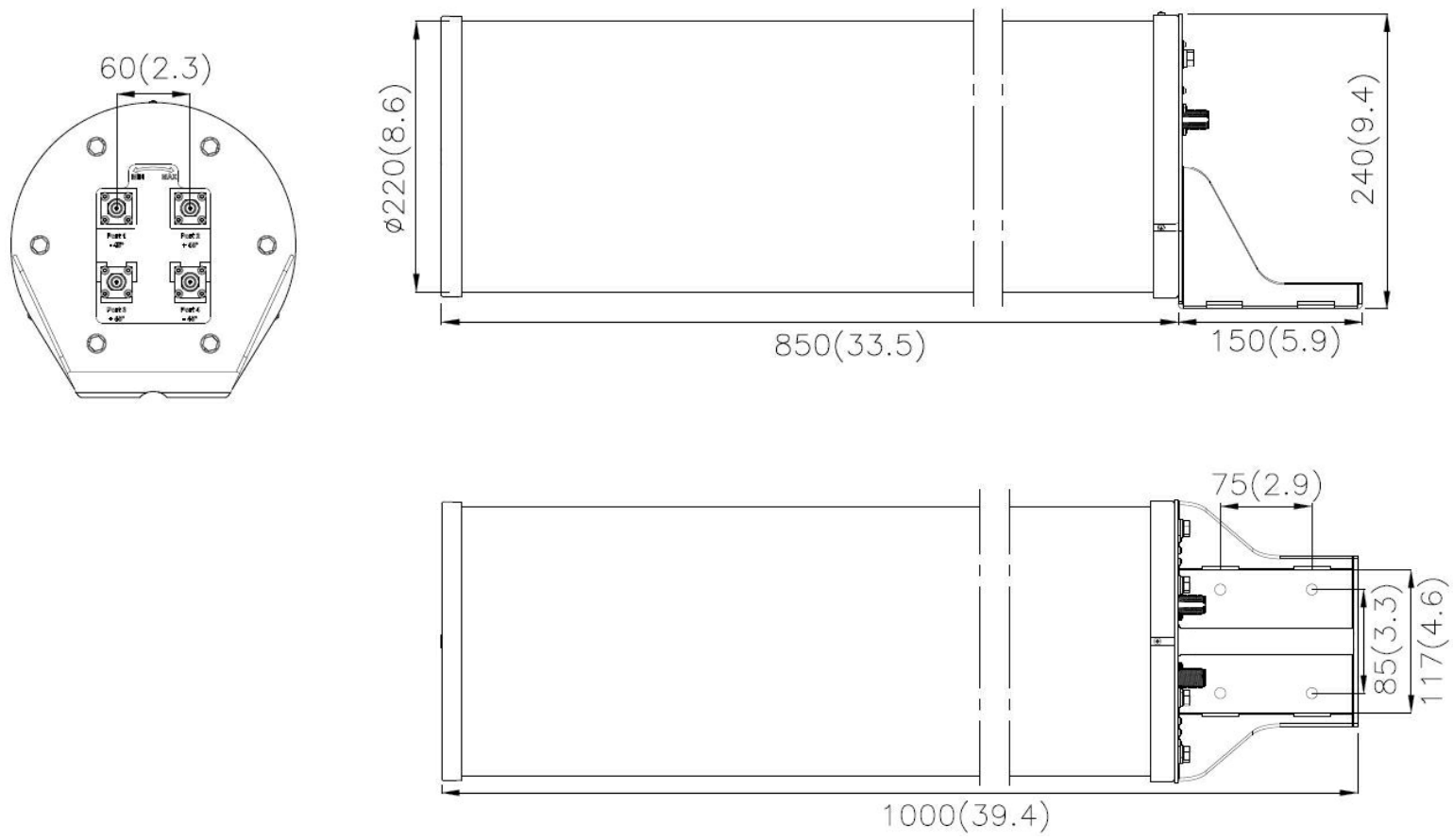
Array Layout and RET Information



Array	Frequency MHz	Ports
R1	3300- 4200	1 – 2
R2	3300- 4200	3 – 4

Array layout depicts one individual sector.
Note: Coloured box sizes do not represent antenna sizes.

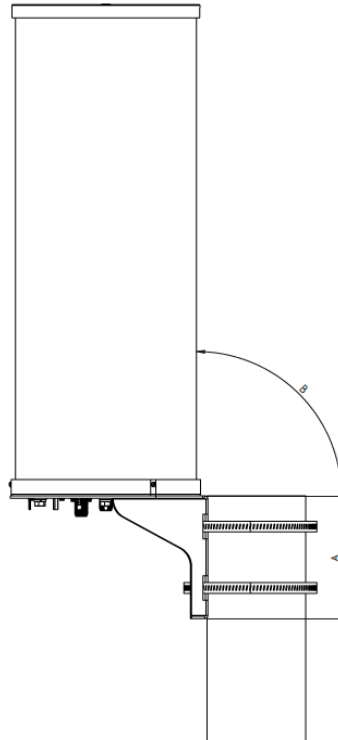
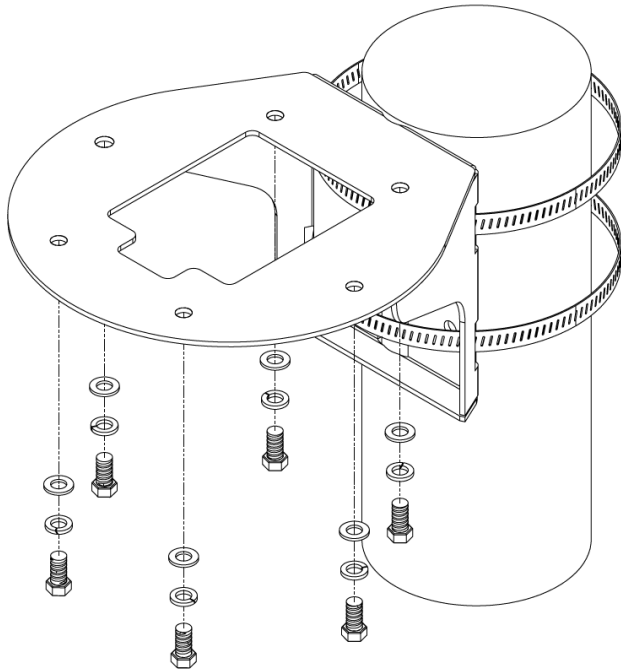
Mechanical Illustration



TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-197 (Mounting kit included with Antenna) Note: Mounting straps are not included with the antenna



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

Ordering Info

Order Code - Antenna
AW3939-T0-F

Description
Zero degrees Fixed tilt with 4.3-10 connectors.

Order Code - Accessories

AW1012-2-FM-FM
AW1012-2-FM-NM
AW1014-2-FM-TM

Description
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

Global Headquarters
Ashgrove Business Centre,
Ballybrittas, Portlaoise, Ireland
R32 DTOA, IRELAND
sales@alphawireless.com
+353 57 86 33847

North America
7301 W. 129th Street, Suite 150,
Overland Park,
KS 66213, USA
sales@alphawireless.com
+1 913 279 0008

Australia
3/76 Regentville Rd,
Jamisontown,
NSW 2750, AUSTRALIA
sales@alphawireless.com
+ 61 2 4504 8212

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