



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
---------------	---------------------



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

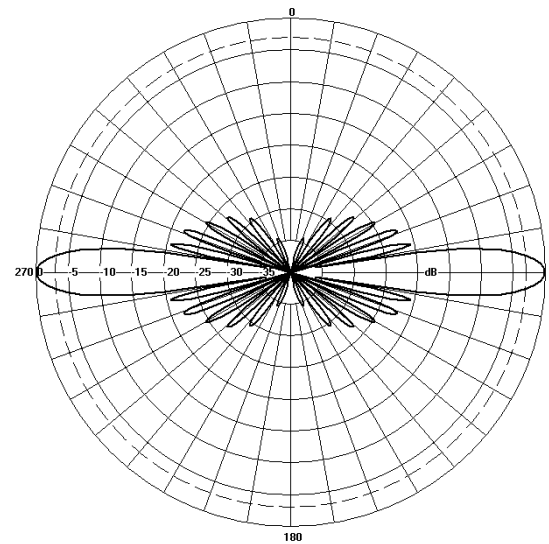
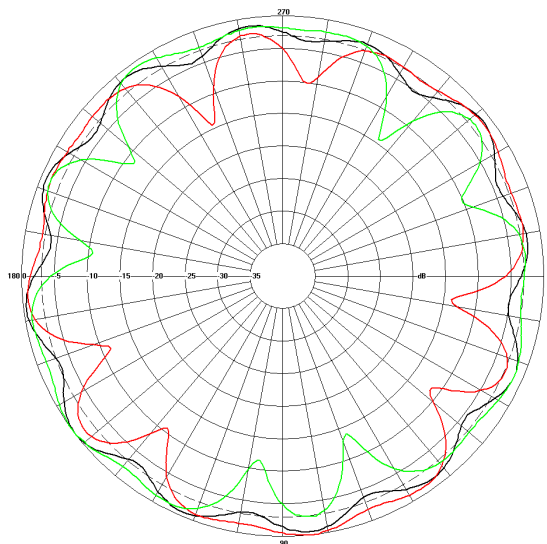


The parameters in this specification follow the definitions and recommendations per NGMN P-Basta, Release 9.6.

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
	Max	dBi	13.1	13.2	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.

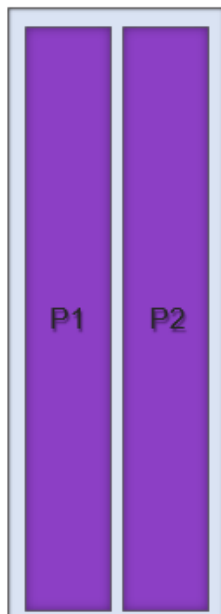
The red curve represents the azimuth pattern of Ports 3 & 4.

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)	965 (38.0) x 265 (10.4) x 385 (15.2)
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)

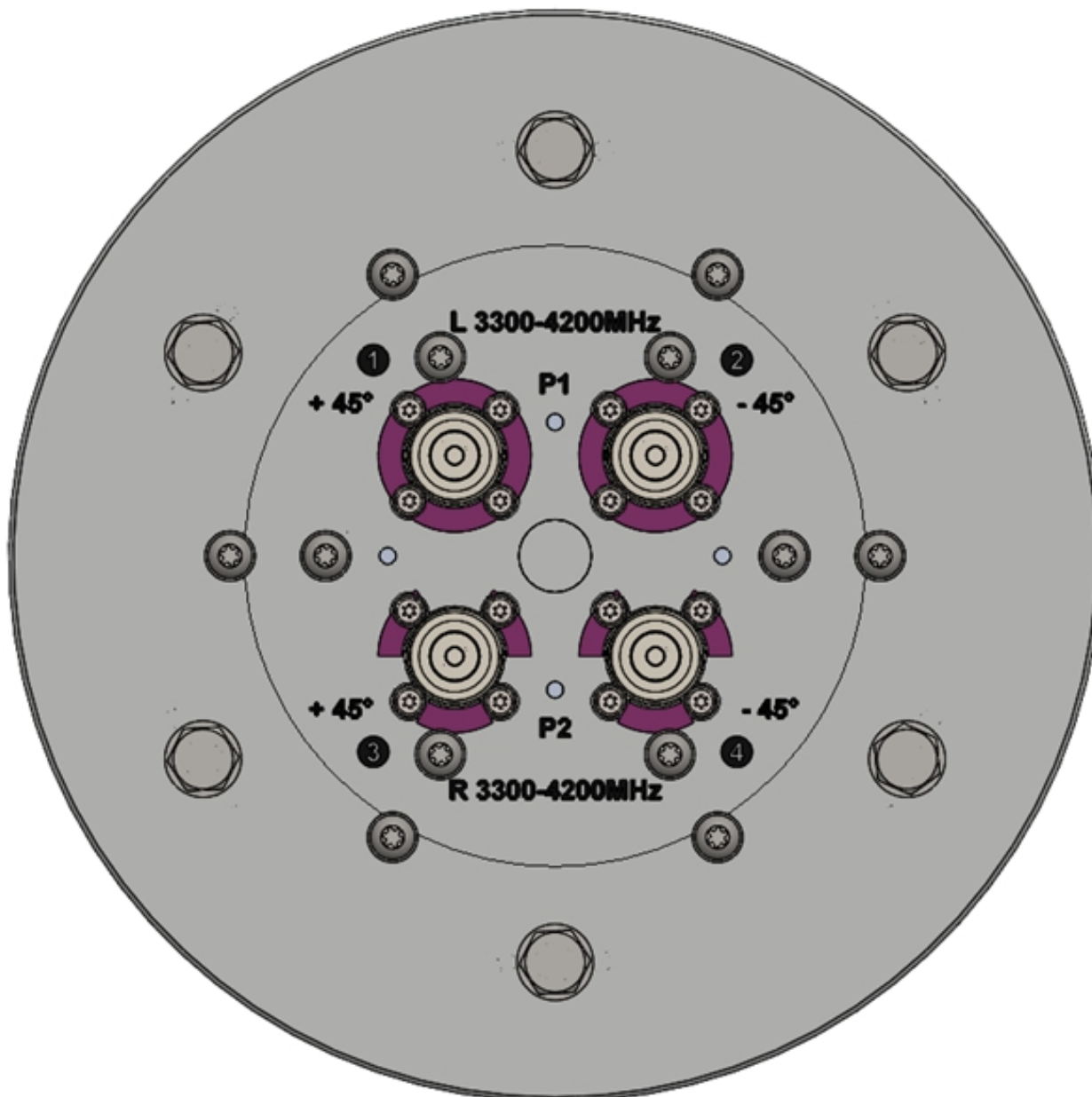
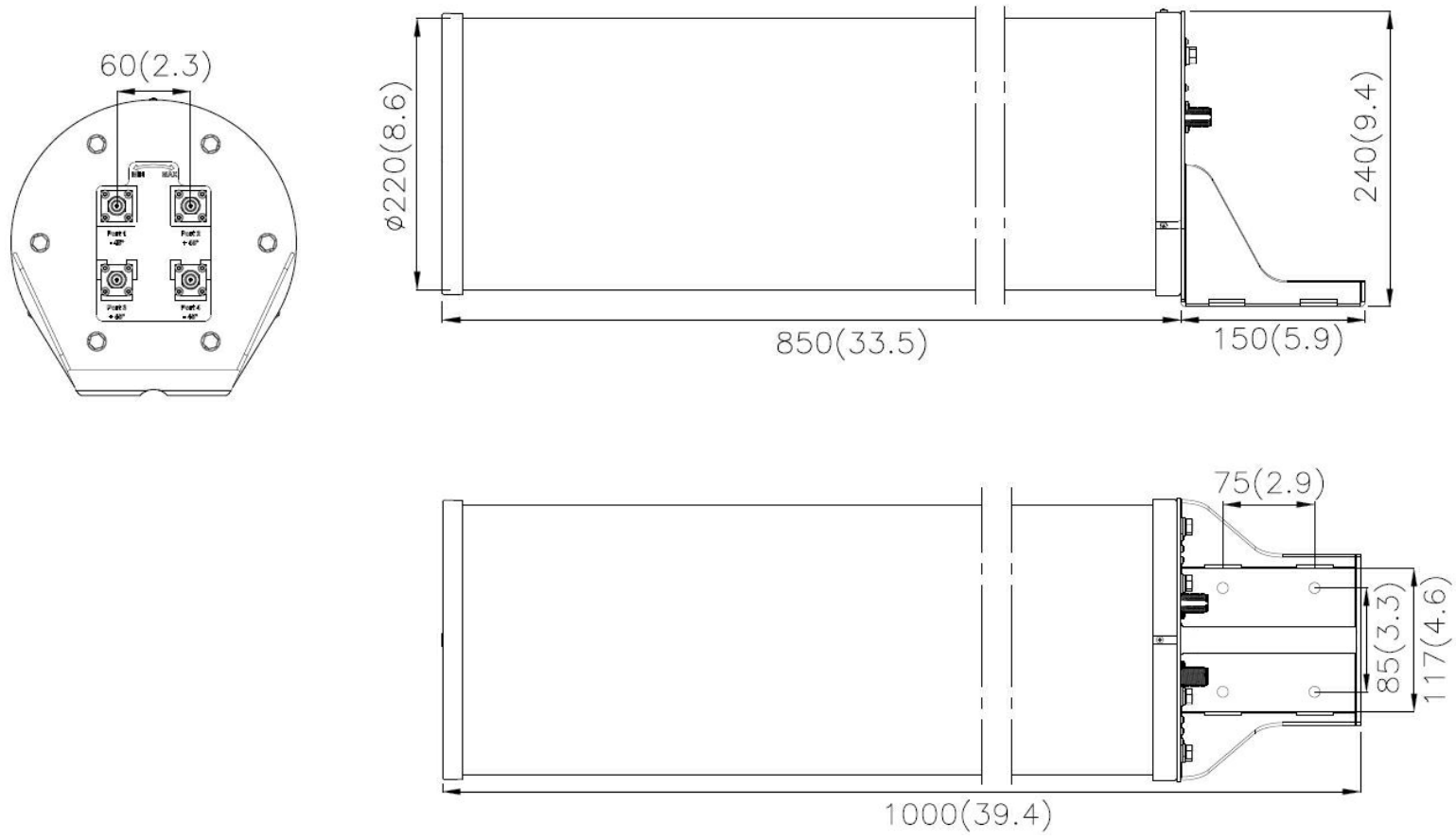
Array Layout and RET Information



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.

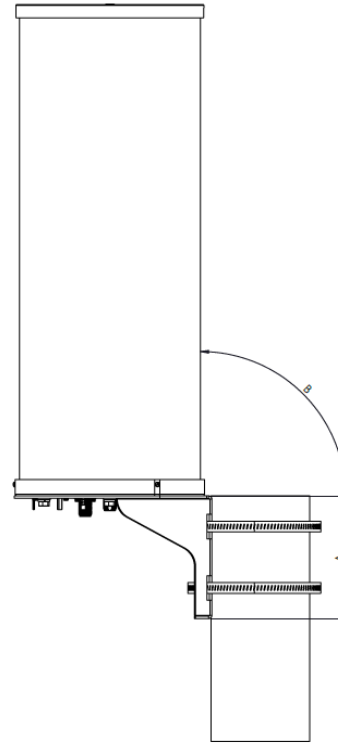
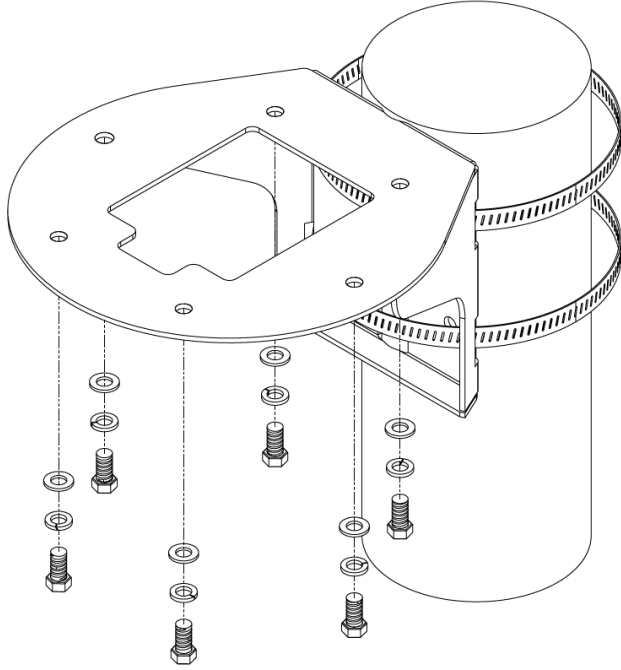
Mechanical Illustration



TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-197 Mount Kit (Mount Kit included with 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

DISCLAIMER

The information in this document is provided solely regarding Alpha Wireless products. The information is not a guarantee of performance or characteristics. Alpha Wireless reserves the right to modify, change, amend, improve or make corrections to this document and its products, at any time and its sole discretion without prior written consent or notice. No license to any intellectual property rights is granted or implied under this document. Alpha Wireless disclaims warranties and liabilities of any kind including non-infringement of intellectual property rights of any third party.