



## AW3938-M-F

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

3300-4200MHz	4	MET	11.6	360°
Frequency	Ports	Tilt	Gain	Beamwidth

## PRODUCT INFORMATION

This is a four port Pseudo-Omni antenna covering 3300-4200MHz in an 9.8" diameter canister housing. The antenna enables 4x4 MIMO with uniform coverage around the antenna. This antenna offers a smooth Omnidirectional pattern with minimal nulls. The elevation beam's tilt angle can be independently controlled across six sectors around the Omni. The antenna supports the entire Band n77 with a small form factor canister.

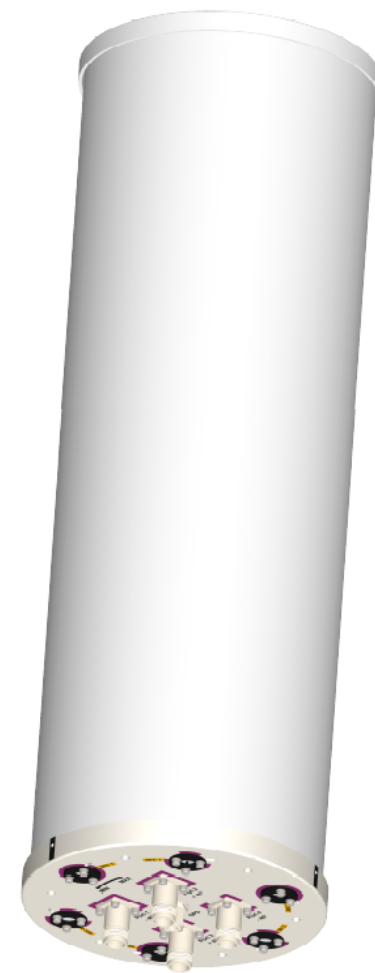
## APPLICATION

Alpha Wireless pseudo omni antenna provides 360° coverage whilst in an ultra-compact radome. This 4X4 MIMO Omni antenna enables improved Azimuth Pattern Control with minimal pattern ripple. The Variable Tilt feature of this Omni antenna enables the user to optimise the Elevation Beam for improved coverage and throughput.

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

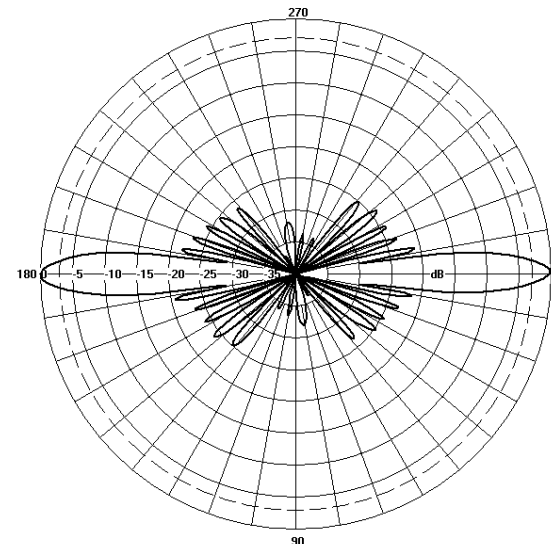
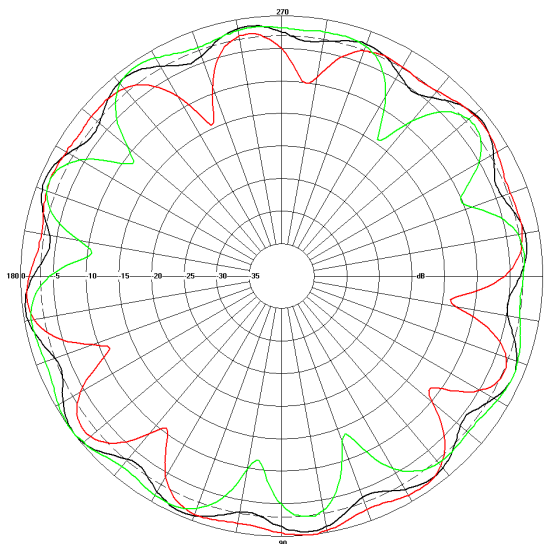
- Covers entire C-band n77 spectrum
- Compact 34" design - Low visual impact.
- Minimal nulls in the azimuth pattern with patented 4x4 MIMO technology
- Individual tilt control with six sectors

*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	10.9 ±0.5	10.9±0.5	11.0 ±0.5	11.1 ±0.5
	Max	dBi	11.4	11.4	11.5	11.6
Azimuth Beamwidth	Degree		360°	360°	360°	360°
Elevation Beamwidth	Degree		7.0°	6.9°	6.8°	6.7°
Electrical Downtilt	Degree		T0° - T10°			
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>		15			
Cross-Polar Discrimination	dB>		10			
Maximum Effective Power Per Port	W		50			

## Representative Pattern Files



Azimuth

Elevation

For radiation pattern files, please login at [www.alphawireless.com](http://www.alphawireless.com)

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

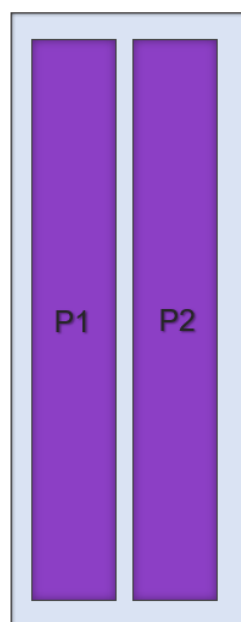
The red curve represents the azimuth pattern of Ports 3 & 4.

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 248 (9.8) - (L x Ø)
Packing Size (LxWxD)	mm (in)	950 (37.4) x x 350 (13.7) x 310 (12.2)
Net Weight (antenna)	kg (lb)	8 (17.6)
Net Weight (mount)	kg (lb)	2 (4.4)
Shipping Weight	kg (lb)	10 (22)
Connector Type (Female)	-	4.3-10
Connector Position	-	Bottom
Connector Quantity	-	4
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	172 (39)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	172 (39)
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)

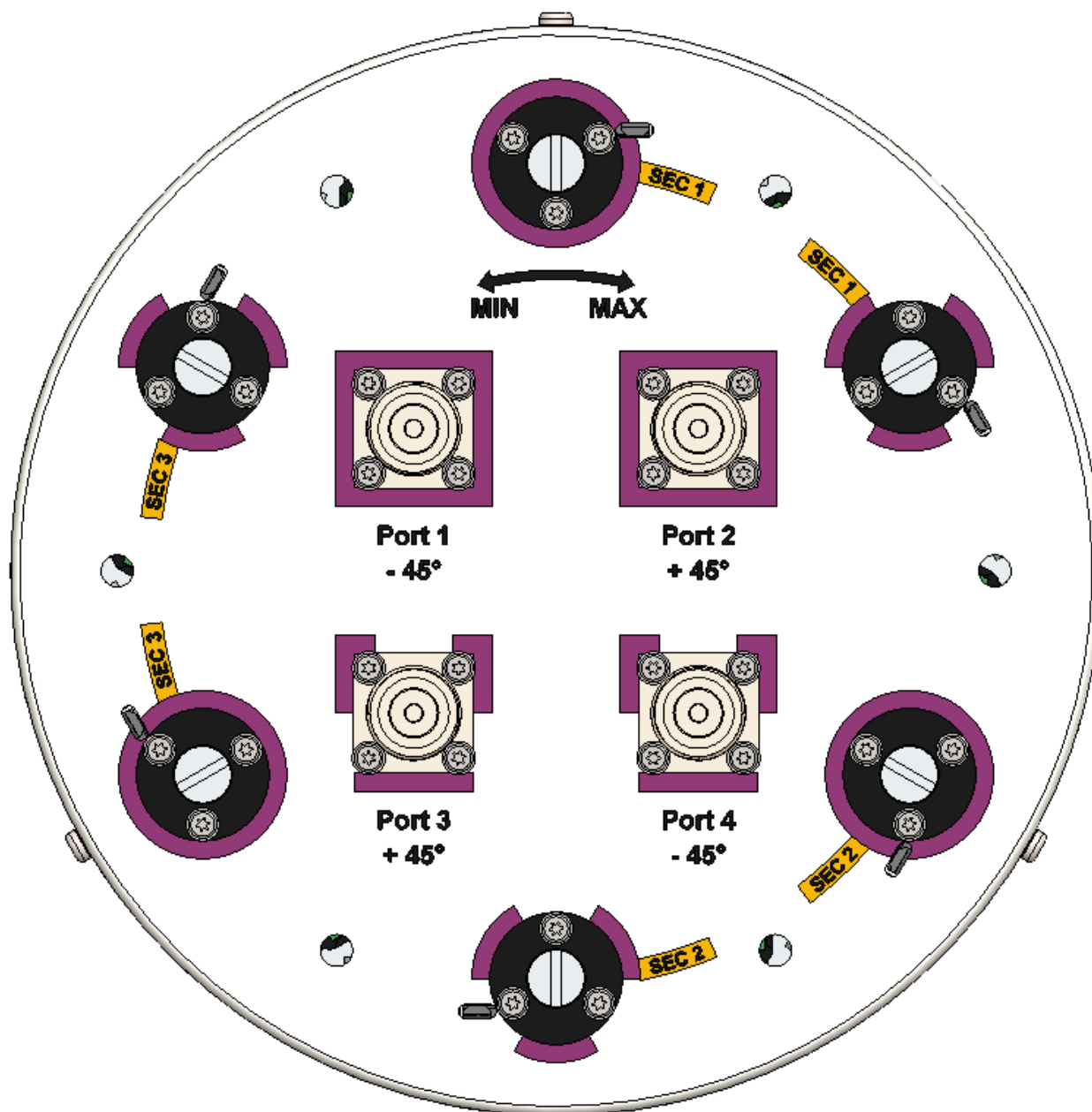
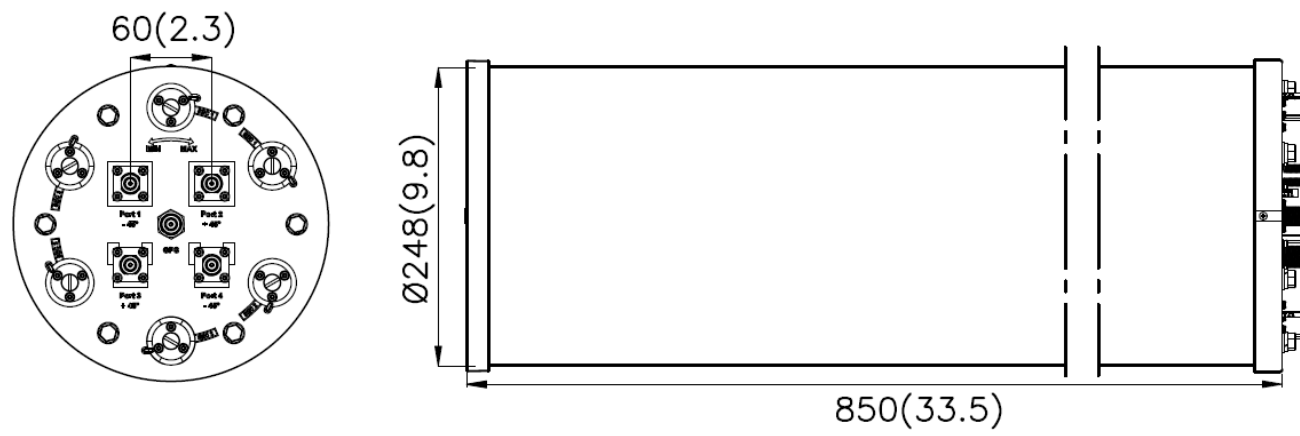
## Array Layout and RET Information



Array	Frequency MHz	Ports	MET ID
P1	3300 - 4200	1 - 2	1
P2	3300 - 4200	3 - 4	1

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

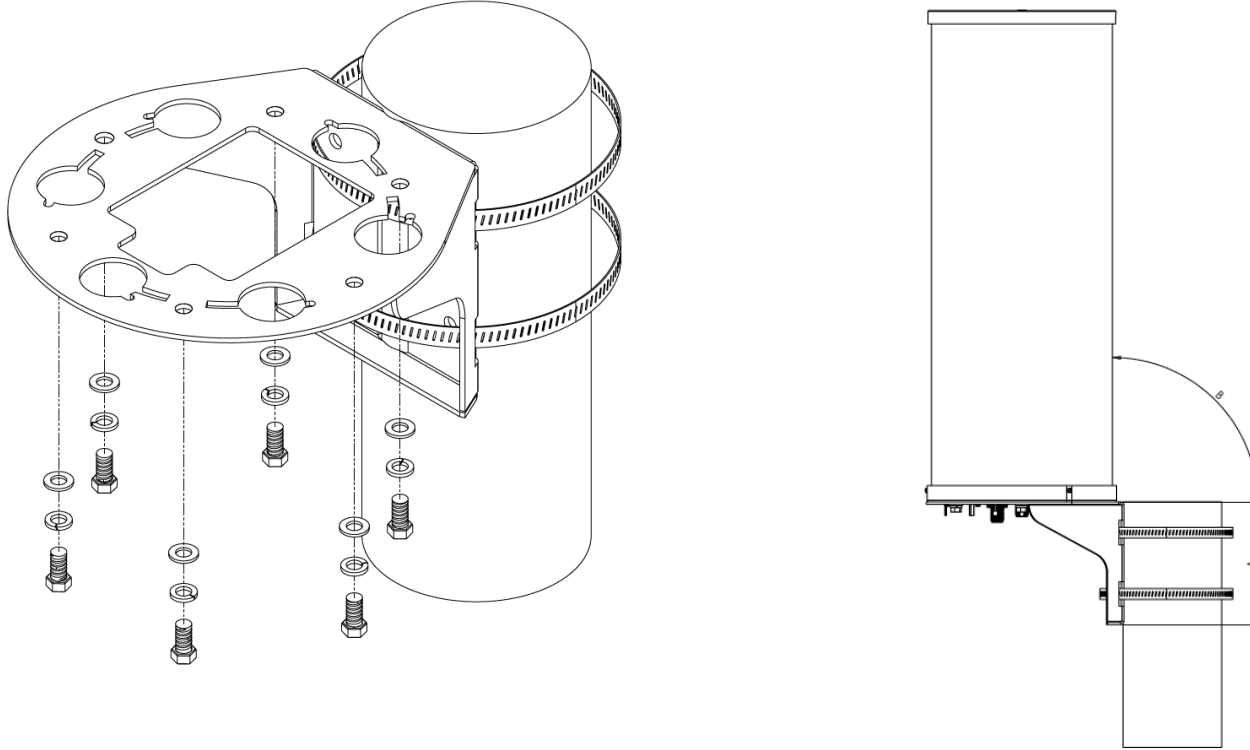
Mechanical Illustration



## TECHNICAL SPECIFICATION

### Mounting Bracket Kit

CL-V-198 (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	N/A

### Ordering Info

#### Order Code - Antenna

AW3938-M-F

#### Order Code - Accessories

AW1012-2-FM-FM

AW1012-2-FM-NM

AW1014-2-FM-TM

#### Description

Manual Electrical Tilt (MET) with 4.3-10 Connectors.

#### 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

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