



DATASHEET

AW3672-M-F-G

Common Name- 4Port, 24", Bands 42, 43 & 48, MET and Integrated GPS Small Cell Omni

3400 - 3800MHz	4	MET	8.5	360°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

This product offers patented 4x4 MIMO capability in a pseudo omni configuration. In addition it offers independent tilt control on each of the six sectors across Bands 42/43 in 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. The Radiation Pattern section on page 2 describes this in more detail.

The Variable Tilt feature of this Omni antenna enables the user to optimise the Elevation Beam for improved coverage and throughput.

This wide-band antenna was designed for urban environments where low visual impact is important. 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

- Wide-band antenna for 3GPP bands 42, 43 & 48.
- Optimized Pseudo omni with reduced azimuth ripple
- Independent RET control for each array (x6)
- Slim monopole design to reduce wind loading
- Integrated GPS

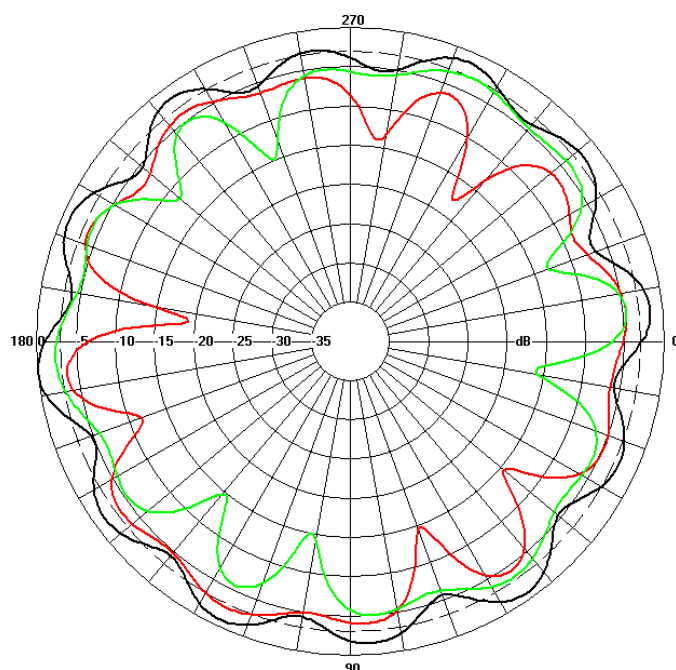
The parameters in this specification follow the definitions and recommendations per NGMN P-Basta, Release 9.6.

TECHNICAL SPECIFICATION

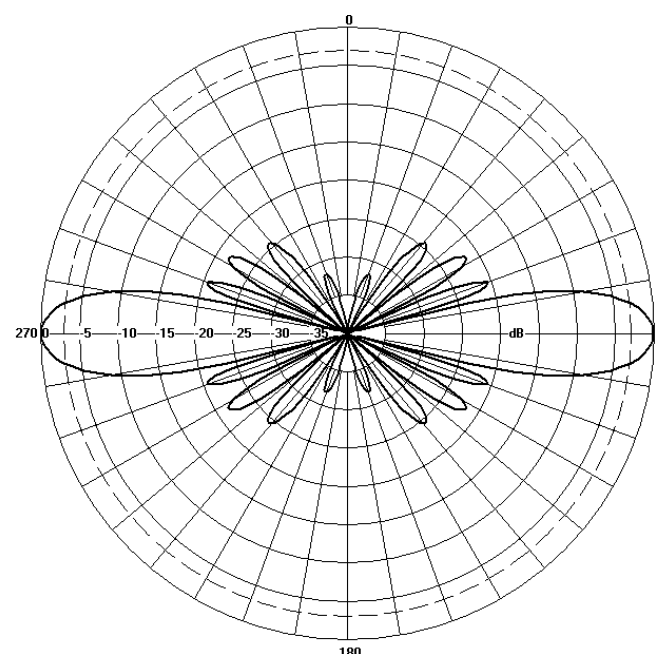
Electrical Specifications

Frequency Range		MHz	3400 - 3800MHz
Polarisation		Degree	+/- 45° Slant Linear
Gain	Basta	dBi	8.0±0.5
	Max	dBi	8.5
Azimuth Beamwidth		Degree	360°
Elevation Beamwidth		Degree	11°
Electrical Downtilt		Degree	T0° - T10°
Electrical Downtilt Deviation		Degree<	1°
Impedance		Ohms	50
VSWR		<	1.5
Return Loss		dB>	14
Isolation		dB>	25
Passive Intermodulation		dBc<	-150
Upper Sidelobe Suppression, Peak to 20°		dB>	10
Cross-Polar Discrimination		dB>	7
Maximum Effective Power Per Port		W	50

Representative Pattern Files



Azimuth



Elevation

The Azimuth plots shown above are achieved using Alpha Wireless's patented 4x4 MIMO Omni technology. The plot shows three different coloured Azimuth plots. The AW3672 has four Omnidirectional ports with Ports 1 & 2 represented by the Green plot, ports 3 & 4 represented by the Red plot. The Black coloured Azimuth plot represents the 4x4 MIMO Omni combination of the Red and Green plots. Using this technology of 4x4 MIMO in an Omni antenna, enables the improved Azimuth pattern demonstrated by the Black Azimuth plot. This results in a much reduced Azimuth ripple compared to the individual Red and Green plots. This smoother Azimuth ripple enables the Network Operator to achieve better predictability regarding RF coverage.

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



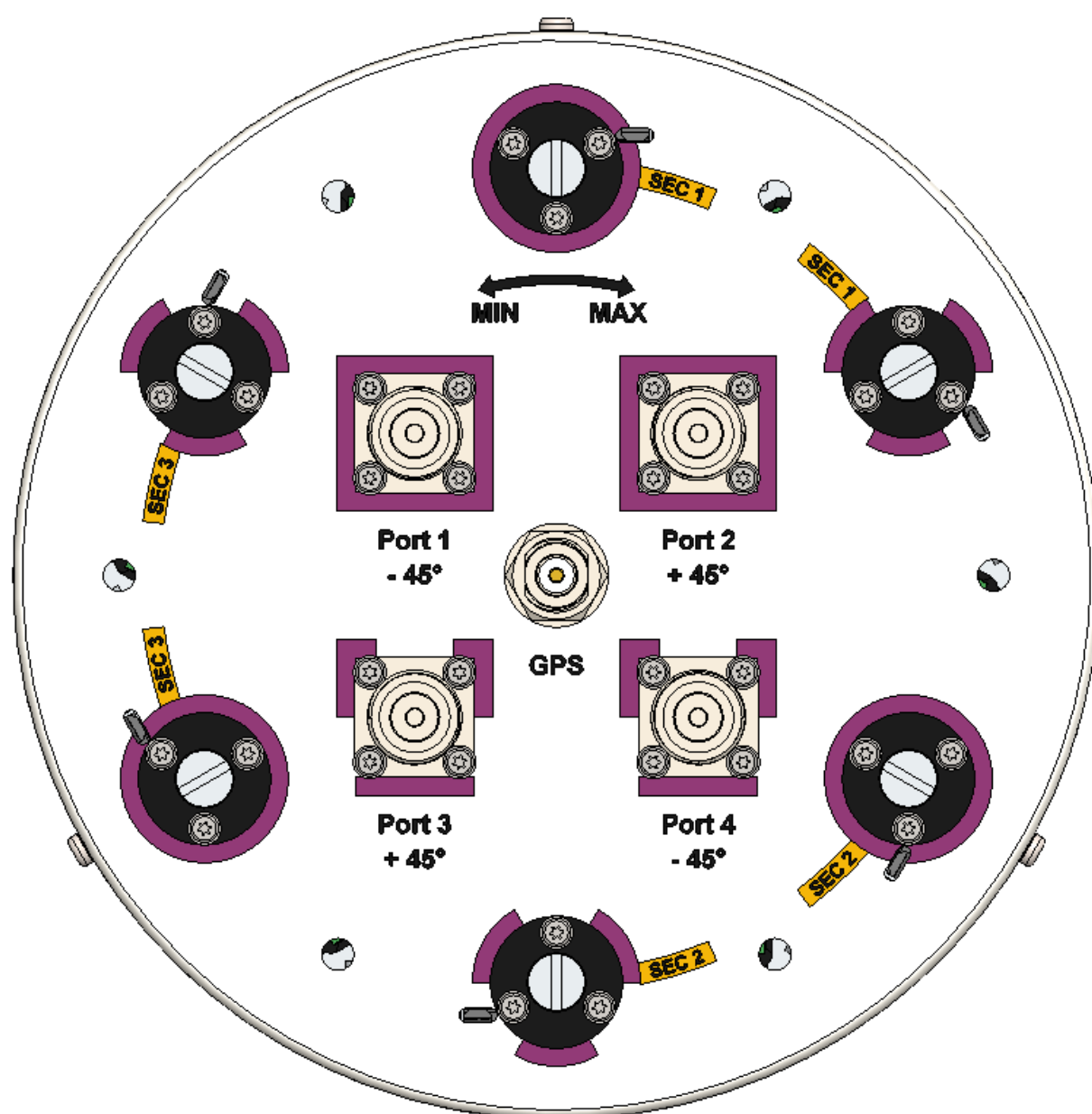
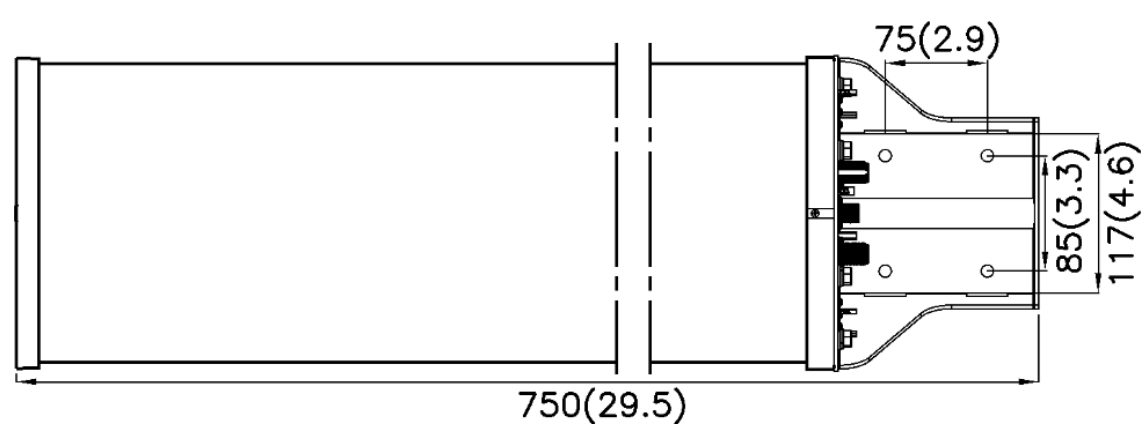
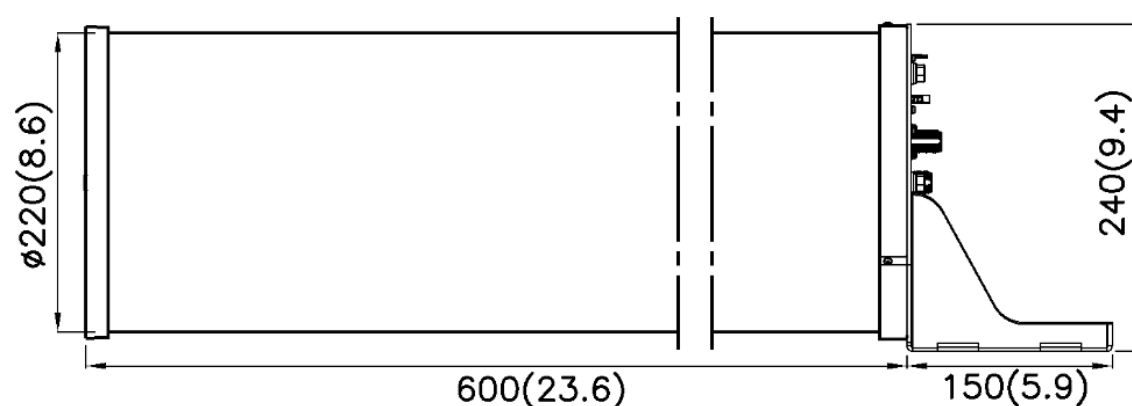
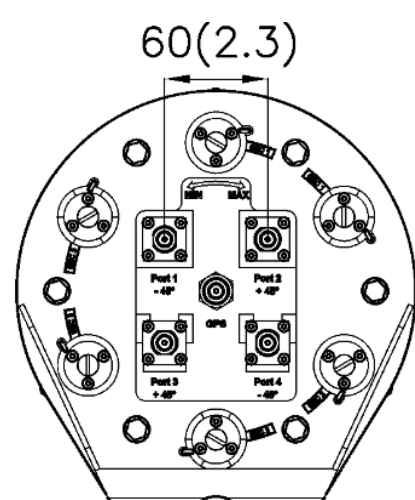
TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions	mm (in)	600 (23.6) x 220 (8.6) - (L x Ø)
Packing Size (LxWxD)	mm (in)	680 (26.7) x 295 (11.6) x 445 (17.5)
Net Weight (antenna)	kg (lb)	7.5 (16.5)
Net Weight (mount)	kg (lb)	1 (2.2)
Shipping Weight	kg (lb)	10(22)
Connector Type (Female)	-	4.3-10
Connector Quantity	-	4
Connector Position	-	Bottom
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	110 (25)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	110 (25)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	UV-Stabilised PVC
Radome Colour	RAL	9010
Product Compliance Environmental	-	RoHS
Lightning Protection	-	DC Grounded
Cold Temperature Survival	°C (°F)	-40 (-40)
Hot Temperature Survival	°C (°F)	70 (158)

Mechanical Illustration

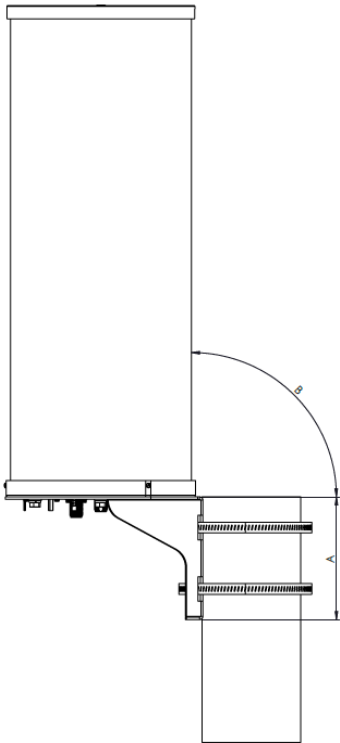
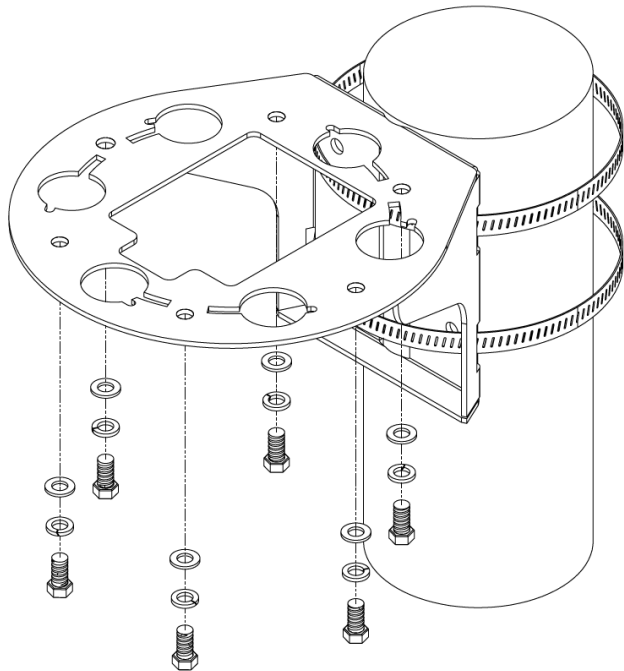
All measurements are in mm (in)





TECHNICAL SPECIFICATION
Mounting Bracket Kit

CL-V-144 (Mounting Kit included with Antenna)



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
0°	Stainless Steel	N/A

Ordering Info

Order Code - Antenna

AW3672-M-F-G

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 and Integrated GPS

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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