



DATASHEET

AW3625-M-F-G

Common Name- 2Port, 24", MIMO, Bands 42, 43 & 48, MET & GPS Small Cell Omni

3300-3800MHz	2	MET	8.5	360°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

This product was developed to offer a Tri-Sector pseudo omni solution with independent tilt control on each of the three sectors across Bands 42/43 in a small form factor canister. It has a built in GPS antenna. Operates between 3300-3800MHz covering LTE Bands B42, 43 & 48 and 5G NR Band n78.

APPLICATION

Alpha Wireless pseudo omni antenna provides 360° coverage whilst in an ultra-compact radome design. The wide-band antenna is designed to be installed in urban environment where low visual impact is required. There are a number of mounting options available making deployments on lamp posts, utility poles, walls and other vertical structures possible. The 2 port antenna provides 2X2 MIMO for improved data throughput with electrical variable tilt for maximum optimization.

STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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FEATURES

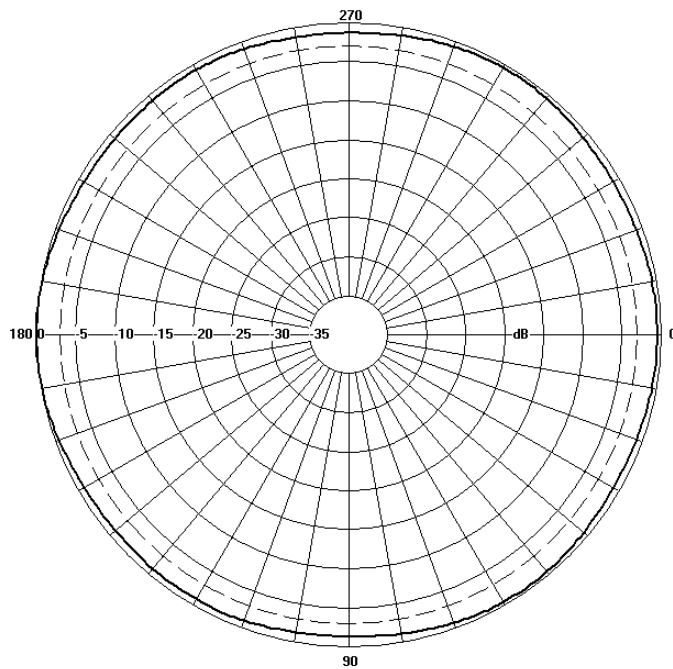
- Wide-band antenna that covers LTE Bands 42, 43 & 48 and 5G NR Band n78. Includes CBRS Band.
- Optimized Pseudo omni with reduced azimuth ripple
- Slim monopole design to reduce wind loading
- Independent RET control for each array (x3)
- Built in GPS antenna.

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

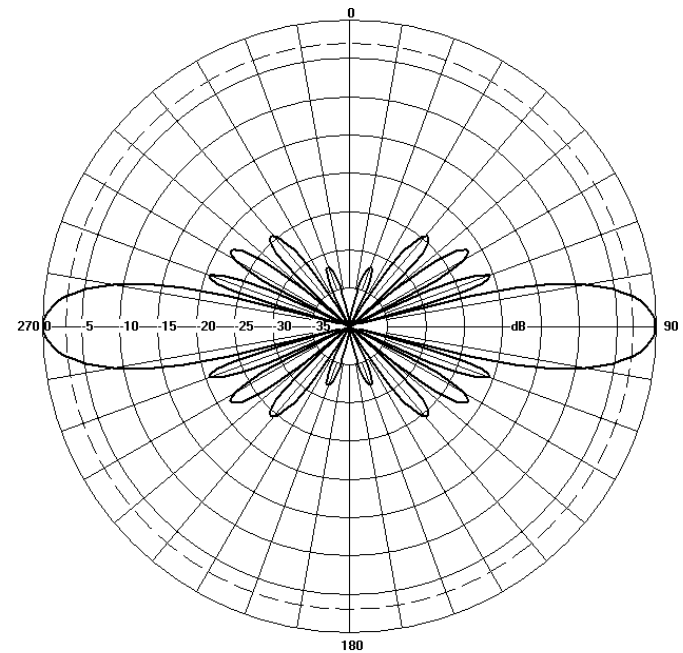
TECHNICAL SPECIFICATION

Electrical Specifications			
Frequency Range	MHz	3300 - 3800MHz	
Polarisation	Degree	+/- 45° Slant Linear	
Gain	Basta	dBi	8.0±0.5
	Max	dBi	8.5
Azimuth Beamwidth	Degree	360°	
Elevation Beamwidth	Degree	12°	
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>	16	
Cross-Polar Discrimination	dB>	12	
Maximum Effective Power Per Port	W	50	

Representative Pattern Files



Azimuth



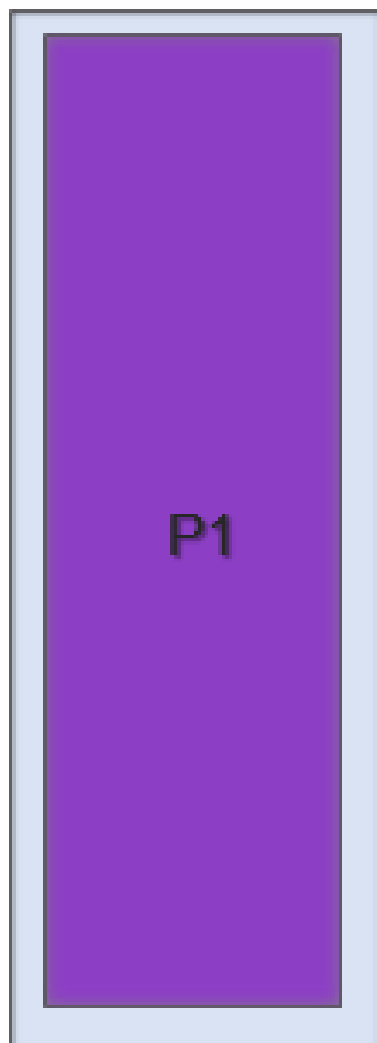
Elevation

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

TECHNICAL SPECIFICATION

Mechanical Specifications		
Dimensions	mm (in)	600 (23.6) x 125 (4.9) - (L x Ø)
Packing Size (LxWxD)	mm (in)	670 (26.3) x 190 (7.4) x 250 (9.8)
Net Weight (antenna)	kg (lb)	3 (6.6)
Net Weight (mount)	kg (lb)	2 (4.4)
Shipping Weight	kg (lb)	6 (13.2)
Connector Type (Female)	-	4.3-10 (GPS)
Connector Quantity	-	2 + 1
Connector Position	-	Bottom
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	80 (18)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	80 (18)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	UV-Stabilised PVC
Radome Colour	RAL	7035
Product Compliance Environmental	-	RoHS
Lightning Protection	-	DC Grounded
Cold Temperature Survival	°C (°F)	-40 (-40)
Hot Temperature Survival	°C (°F)	70 (158)

Array Layout and RET Information



Array	Frequency MHz	Ports	MET ID
P1	3300 – 3800	1 – 2	1

Note: Coloured box sizes do not represent antenna sizes.



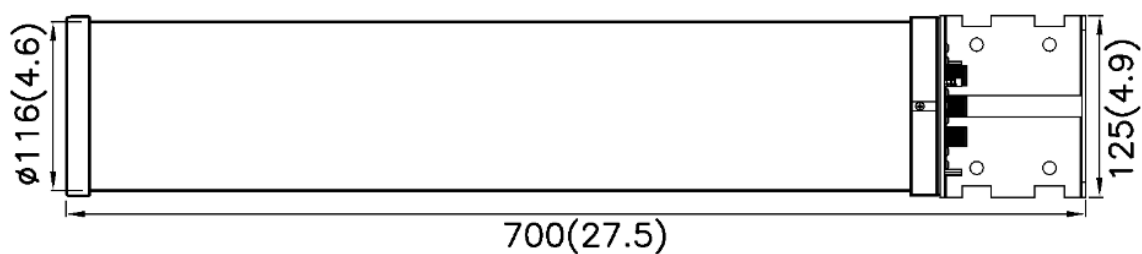
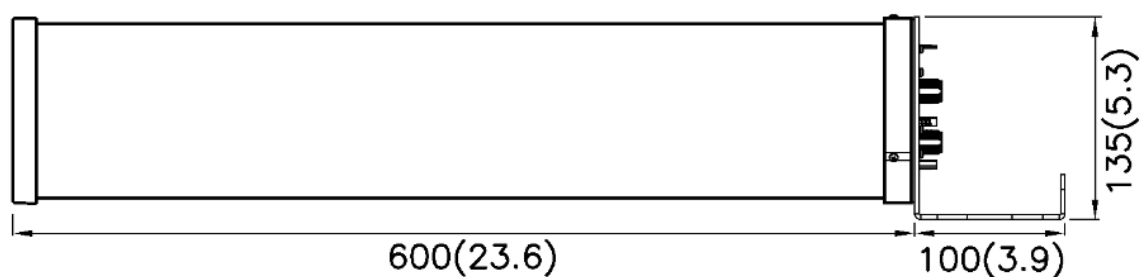
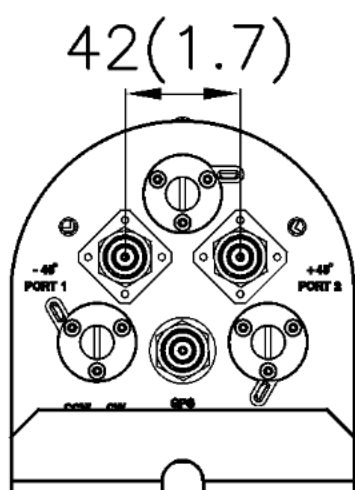
TECHNICAL SPECIFICATION

Mechanical Illustration

GPS Specifications	
RF Electrical Specifications	
Centre Frequency	1575.42MHz +/- 10MHz
Gain	3 dBic @ 90° -2dBic @ 20°
Polarization	Right Hand Circular
Current Draw	7.5 mA @ 3.3VDC (typical)
Low Noise Amplifier Specifications	
Nominal Impedance	50 Ohm
VSWR	1.5:1 (typical) @ 5.0V , 1.8:1 (typical) @ 3.3V
Nominal Gain	@ 3.3VDC: 25dB @ 5VDC: 25.5dB
Voltage	-5 VDC
Mechanical Specifications	
Connector	1 x N Type
Environmental Specifications	
Temperature Range	-40°C to +85°C operating
Humidity	95% max (non condensing)

Mechanical Illustration

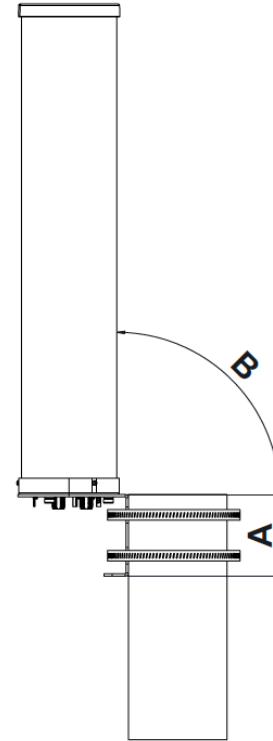
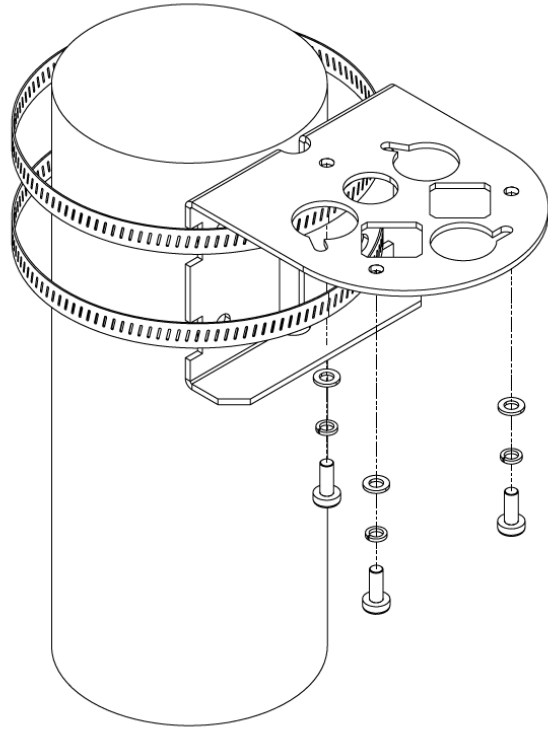
All measurements are in mm (in)



TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-127 (Jubilee Clip 9.5 Stainless Steel 210-242mm & Mounting Kit included with Antenna)



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

Ordering Info

Order Code - Antenna

AW3625-M-F-G

Order Code - Accessories

AW1012-2-FM-FM

AW1012-2-FM-NM

AW1014-2-FM-TM

PADC 1000

SADC 2000

AW0326-3-PM-PF

AW0326-10-PM-PF

AW0326-25-PM-PF

AW0326-50-PM-PF

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")

Portable AISG Controller

Site AISG Controller

AISG Jumper Cable Lengths 3 metres (9' 10")

AISG Jumper Cable Lengths 10 metres (32' 9")

AISG Jumper Cable Lengths 25 metres (82')

AISG Jumper Cable Lengths 50 metres (164')

Enquiries

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