

DATASHEET AW3821-T0-F

Common Name- 2 Port, 1.3M, Band 28, Small Cell Omni

698-960MHz 2 Fixed 7.7 360° Frequency Ports Tilt Gain Beamwidth

PRODUCT INFORMATION

This product was developed to offer a small form factor solution for the 698-960MHz LTE applications. The compact size is intended to minimize planning requirements.

APPLICATION

Alpha Wireless pseudo omni provides 360° coverage whilst in an ultra-compact radome design. The low-band antenna is designed to be installed in environment's where low visual impact is required. The 2 Port antenna provides 2x2 MIMO.

STANDARD & CERTIFICATIONS

Certification BS EN ISO 9001:2015







FEATURES

- Two port omni antenna covering 698-960MHz
- Compact design for small cell deployment low visual impact.
- Optimized Pseudo omni with reduced azimuth ripple.

1 (FT)

• Slim monopole design to reduce wind loading.

The parameters in this specification follow the definitions and recommendations per NGMN P-Basta, Release 11.1.

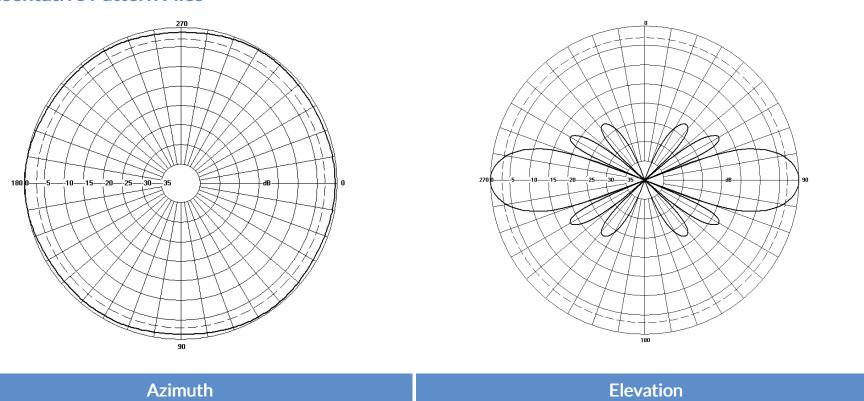


AW3821-T0-F

TECHNICAL SPECIFICATION

Electrical Spe	cifications		
Frequency Range		MHz	698-960
Polarisation		Degree	+/- 45º Slant Linear
Gain	Basta	dBi	7.2±0.5
	Max	dBi	7.7
Azimuth Beamwidth		Degree	360°
Elevation Beamwidth		Degree	18°
Electrical Downtilt		Degree	T0°
Electrical Downtilt Deviation		Degree<	1º
Impedance		Ohms	50
VSWR		<	1.5
Return Loss		dB>	14
Isolation		dB>	25
Passive Intermodulation		dBc<	-150
Upper Sidelobe Suppression, Peak to 20°		dB>	15
Cross-Polar Discrimination		dB>	10
Maximum Effective Power Per Port		W	150

Representative Pattern Files



 $For \ radiation \ pattern \ files, \ please \ login \ at \ www. alphawire less. com$

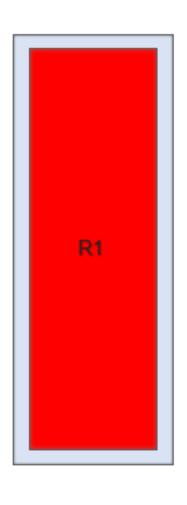


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TECHNICAL SPECIFICATION

Mechanical Specifications		
Dimensions	mm (in)	1300 (51.1) x 298 (11.7) - (L x Ø)
Packing Size (LxWxD)	mm (in)	1430 (56.2) x 400 (15.7) x 340 (13.3)
Net Weight (antenna)	kg (lb)	13 (29)
Net Weight (mount)	kg (lb)	1.5 (3.3)
Net Weight (Shroud and Mount)	kg (lb)	
Shipping Weight	kg (lb)	24 (53)
Connector Type (Female)	-	4.3-10
Connector Quantity	-	2
Connector Position	-	Bottom
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	400 (90)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	400 (90)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	UV-Stabilized PVC
Radome Colour	RAL	7035 (light grey)
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
R1	698 - 960	1 - 2

Note: Coloured box sizes do not represent antenna sizes.

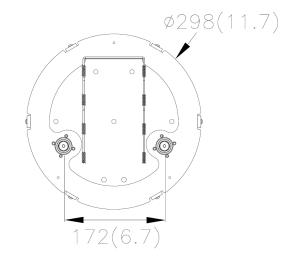
1 (FT)

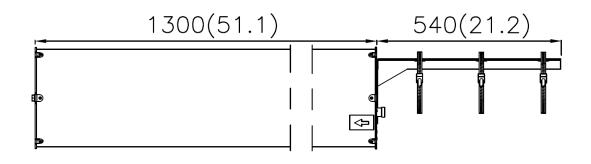


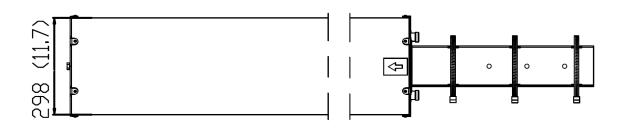
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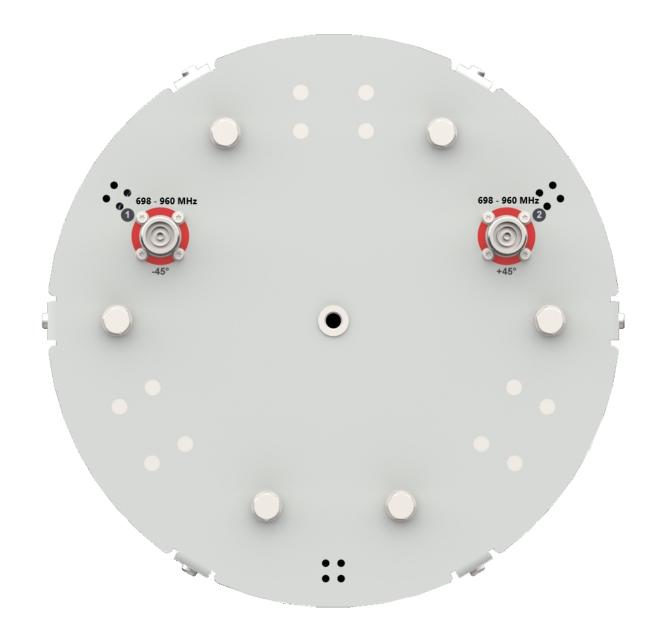
Mechanical Illustration

All measurements are in mm (in)









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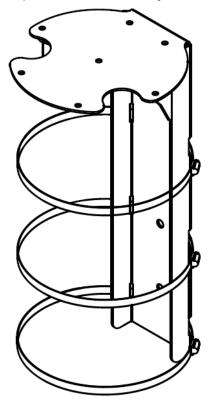


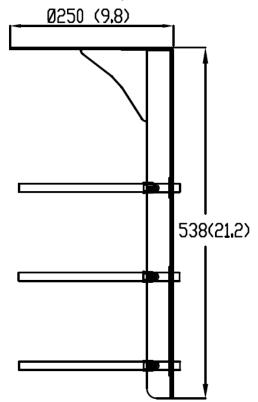
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TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-166 (210mm-242mm Quick Release Hose Strap & Mounting Kit Included with Antenna)





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

RF Jumper Cable, connector types 4.3-10 (m) / Nex10 (m), length 2 metres (6'6")

Ordering Info

AW1014-2-FM-TM

Order Code - Antenna	Description
AW3821-T0-F	Zero Degrees Fixed Tilt with 4.3-10 Connectors
Order Code - Accessories	Description
AW1012-2-FM-FM	RF Jumper Cable, connector types 4.3-10 (m) / 4.3-10 (m), length 2 metres (6'6")
AW1012-2-FM-NM	RF Jumper Cable, connector types 4.3-10 (m) / N-Type (m), length 2 metres (6'6")

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