



# DATASHEET

## AW3821-T0-F

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

703-803MHz	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 800MHz 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
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### FEATURES

- Band 28 - Low band antenna
- Compact design for small cell deployment - low visual impact.
- Optimized Pseudo omni with reduced azimuth ripple.
- Slim monopole design to reduce wind loading.

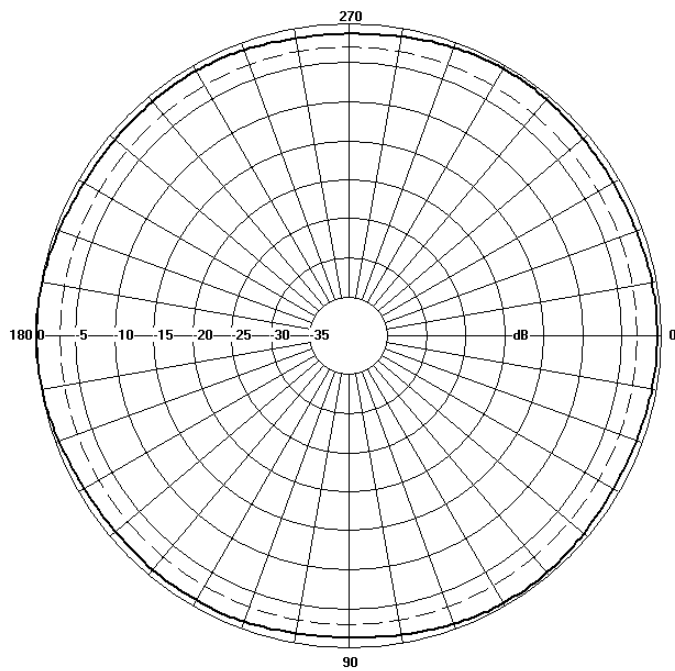
*The parameters in this specification follow the definitions and recommendations per NGMN P-Basta, Release 9.6.*

## TECHNICAL SPECIFICATION

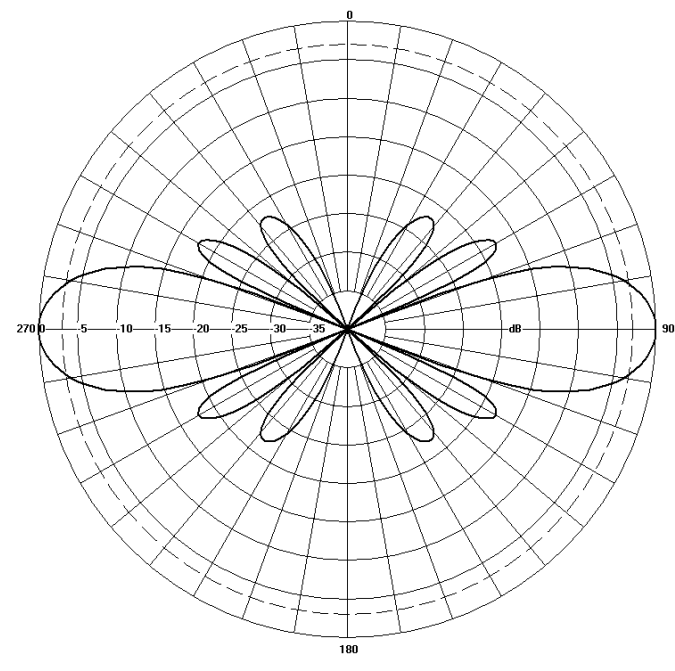
## Electrical Specifications

Frequency Range	MHz	703-803	
Polarisation	Degree	+/- 45° 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<	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>	15	
Cross-Polar Discrimination	dB>	10	
Maximum Effective Power Per Port	W	150	

## Representative Pattern Files



Azimuth



Elevation

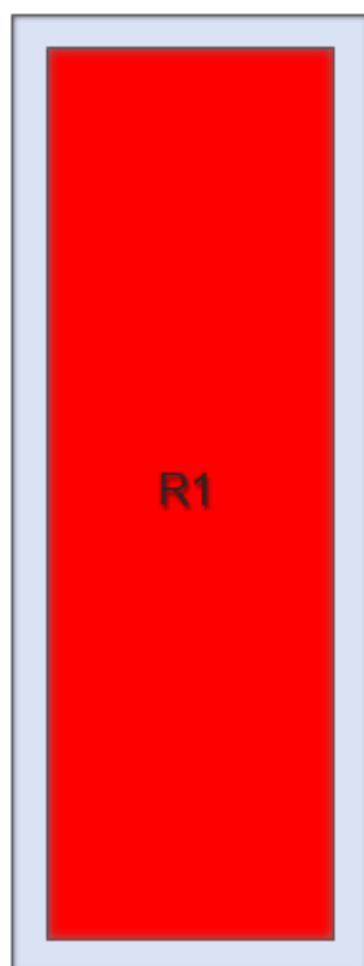
For radiation pattern files, please login at [www.alphawireless.com](http://www.alphawireless.com)

## TECHNICAL SPECIFICATION

## Mechanical Specifications

Dimensions	mm (in)	1300 (51.1) x 298 (11.7) - (L x Ø)
Packing Size (LxWxD)	mm (in)	1450 (46) x 351 (13.8) x 351 (13.8)
Net Weight (antenna)	kg (lb)	13 (29)
Net Weight (mount)	kg (lb)	1.5 (3.3)
Shipping Weight	kg (lb)	14.5 (32)
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	703 - 803	1 - 2

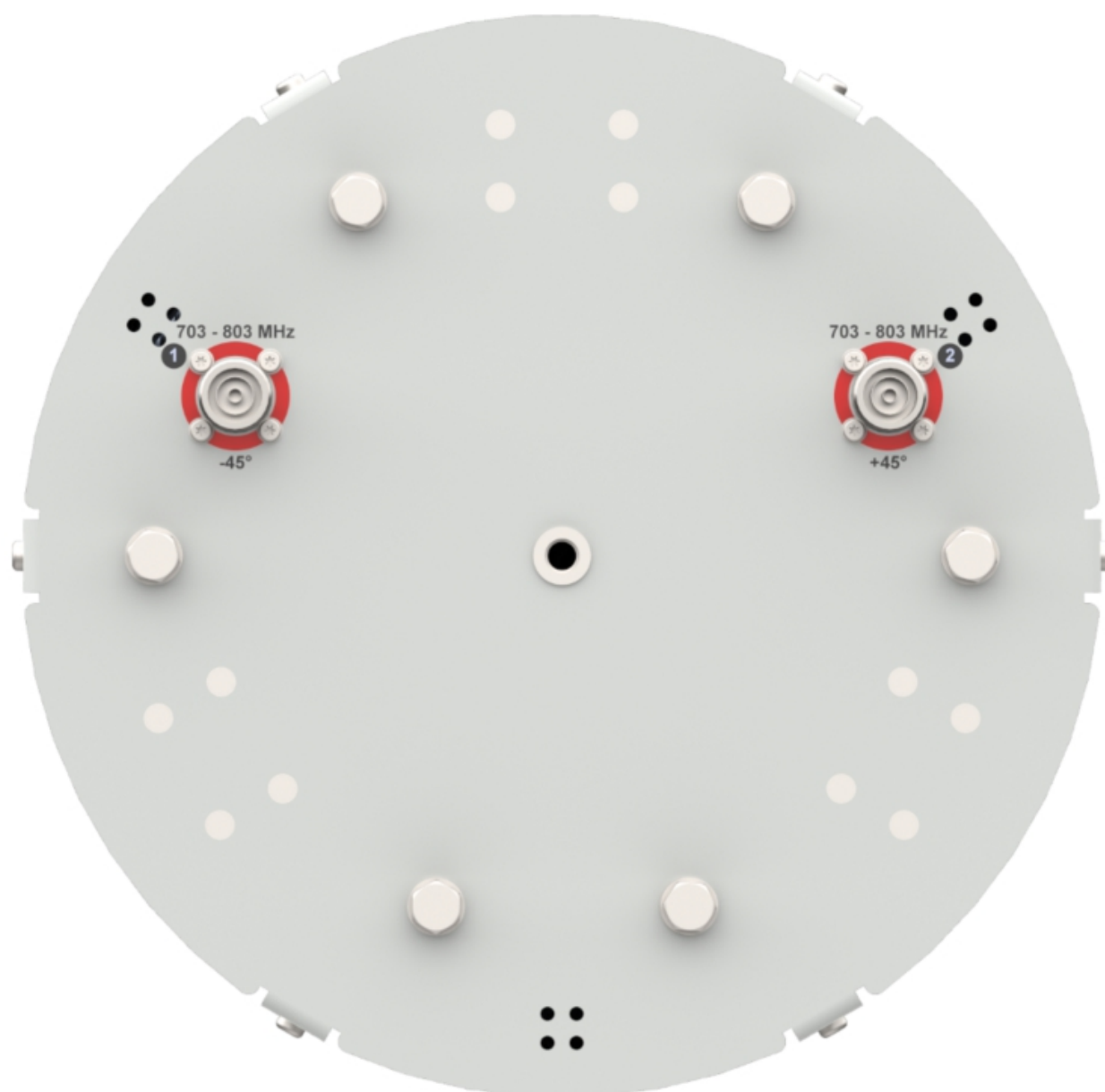
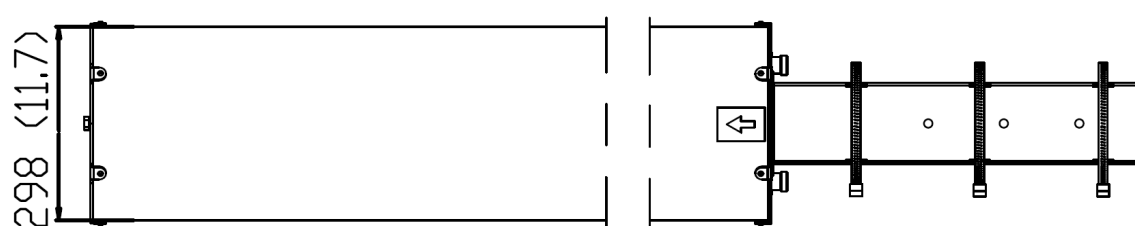
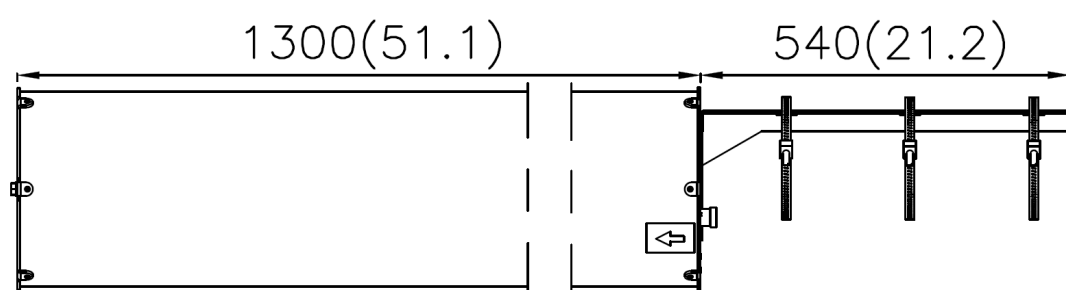
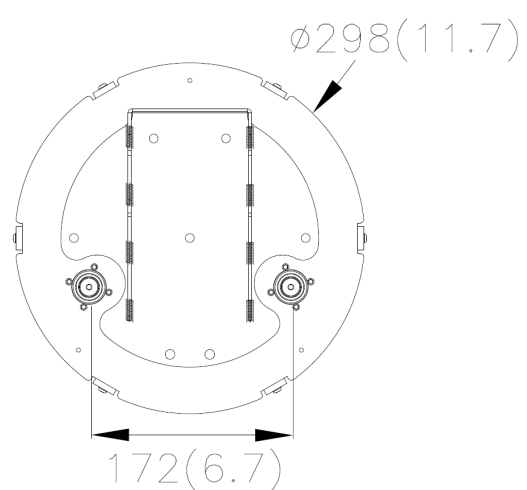
*Note: Coloured box sizes do not represent antenna sizes.*



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## Mechanical Illustration

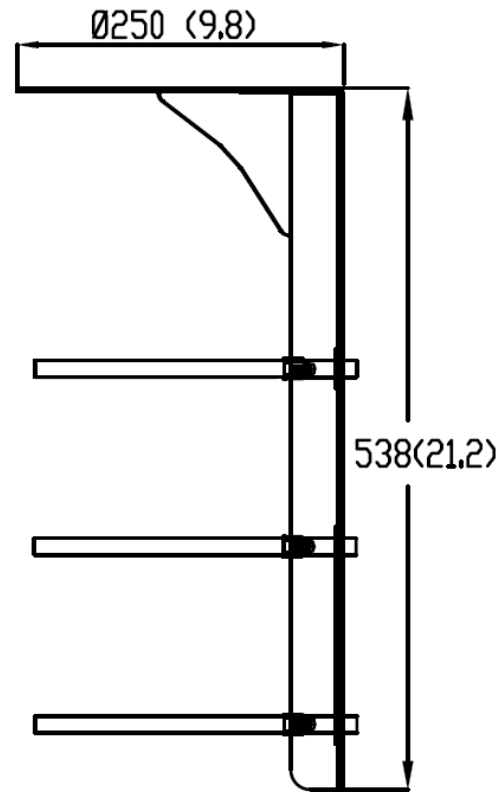
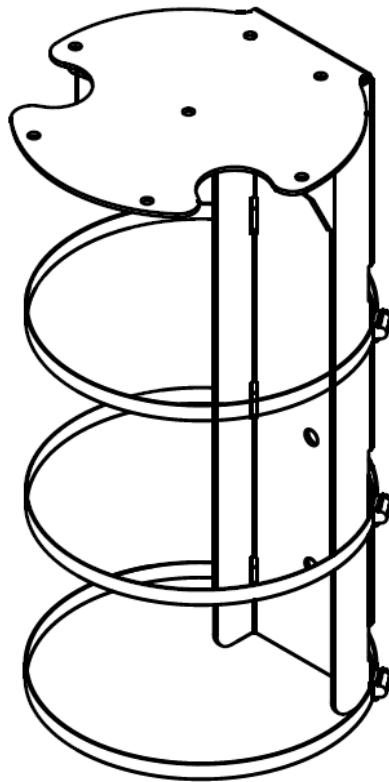
All measurements are in mm (in)





**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")

**Ordering Info**

**Order Code - Antenna**

AW3821-T0-F

**Order Code - Accessories**

AW1012-2-FM-FM

AW1012-2-FM-NM

AW1014-2-FM-TM

**Description**

Zero Degrees Fixed Tilt 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")

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