



DATASHEET

AWL3970-T0-F

Common Name- 4 Port, 13" C-Band, 65° Canister Antenna

3300-4200MHz	4	Fixed	14	65°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

The Alpha Wireless AWL3970 canister antenna houses a 3300-4200MHz (C Band) sector panel inside a compact 13" height package. This antenna offers four C Band ports providing directional 65° sector coverage with a fixed electrical downtilt.

APPLICATION

Canisters support multiple antennas into one attractive package. This canister is 5G capable with the addition of C-Band. The wide elevation beamwidth and high gain extends cell range and provides consistent coverage for in-fill applications.



FEATURES

- Wide Band antenna covering 3300-4200MHz
- Compact design - Low visual impact
- 4x4 MIMO for maximum throughput
- Wide elevation beamwidth
- Dual Cross polarization +/- 45 Slant

STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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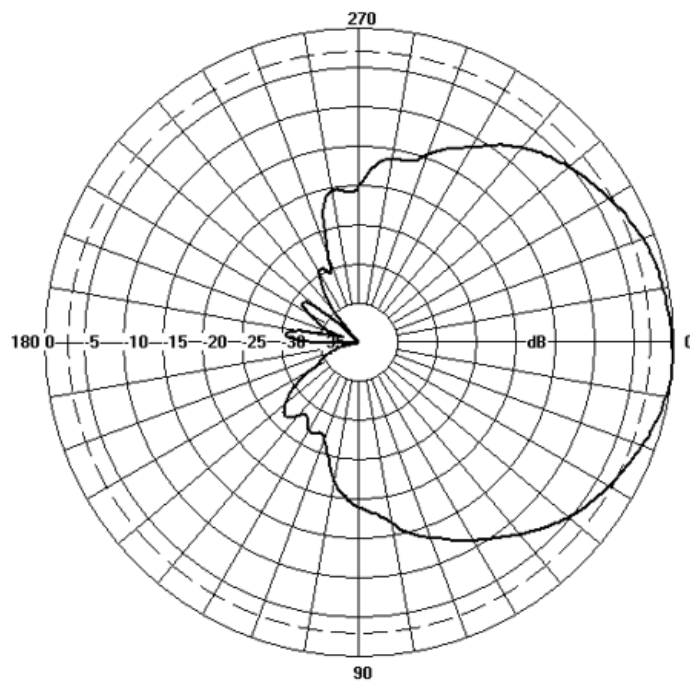


The paramenters in this specification follow the definitions and recommendations per NGMN P-Basta, Release 9.6.

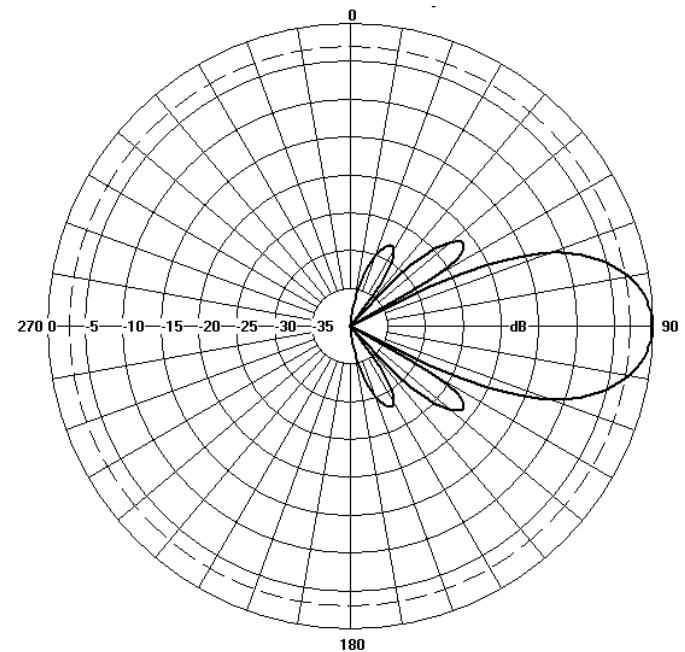
TECHNICAL SPECIFICATION

Electrical Specifications				
Frequency Range		MHz	3300 - 3800	3800 - 4200
Polarisation		Degree	+/- 45° Slant Linear	
Gain	Basta	dBi	14.0±0.5	14.5±0.5
	Max	dBi	14.5	15.0
Azimuth Beamwidth		Degree	65°	
Azimuth Beam Squint		Degree<	3°	
Elevation Beamwidth		Degree	16.5°	14.5°
Electrical Downtilt		Degree	T0°	
Electrical Downtilt Deviation		Degree<	1°	
Impedance		Ohms	50	
VSWR		<	1.5	
Return Loss		dB>	14	
Isolation		dB>	25	
Front to Back Ratio: Total Power +/-30°		dB>	25	
Cross-Polar Discrimination		dB>	18	
Maximum Effective Power Per Port		W	100	

Representative Pattern Files



Azimuth



Elevation

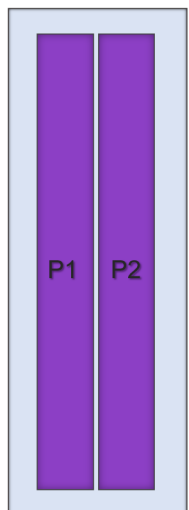
For radiation pattern files, please login at www.alphawireless.com

TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions	mm (in)	406 (15.9) x 220 (8.7) - (LxD) (with mounting bracket)
Packing Size (LxWxD)	mm (in)	400 (15.7) x 295 (11.6) x 445 (17.5)
Net Weight (antenna)	kg (lb)	4.5 (9.9)
Net Weight (mount)	kg (lb)	0.5 (1.1)
Shipping Weight	kg (lb)	5 (11)
Connector Type (Female)	-	4.3-10
Connector Quantity	-	4
Connector Position	-	Bottom
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	57 (13)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	57 (13)
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	°C (°F)	-40 (-40)
Hot Temperature Survival	°C (°F)	70 (158)

Array Layout and RET Information



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

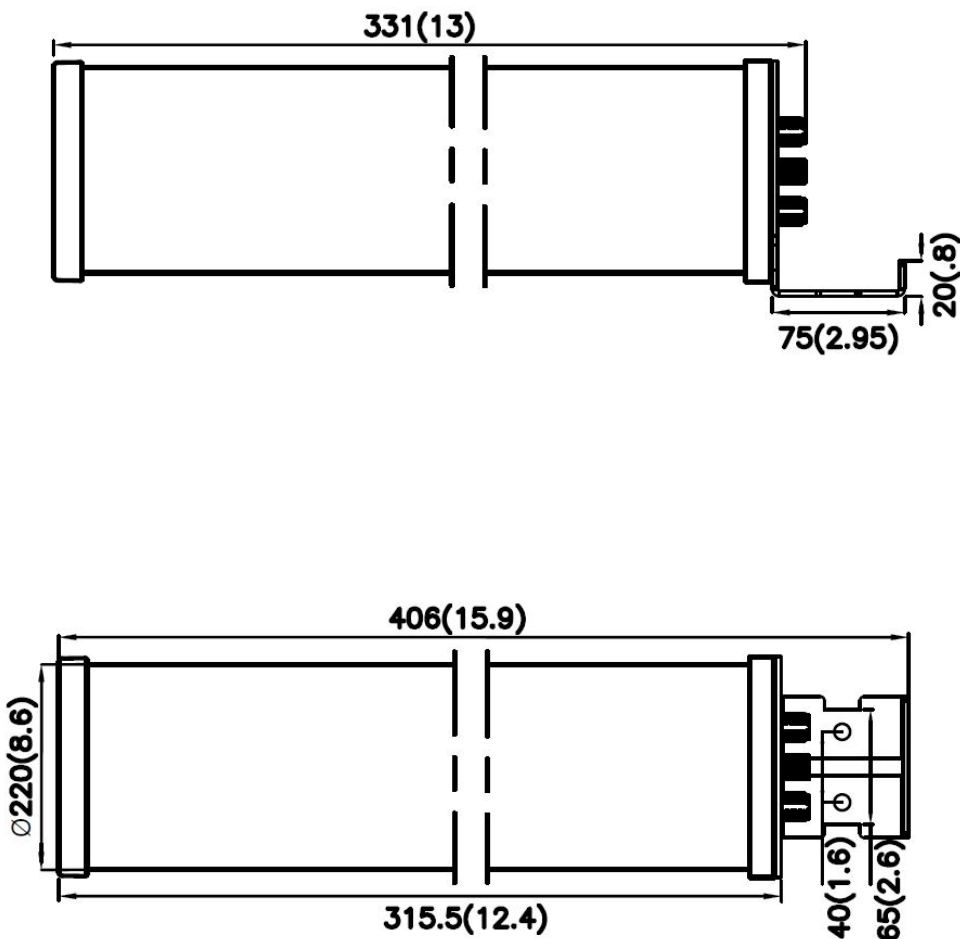
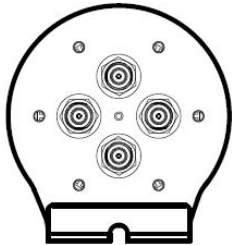
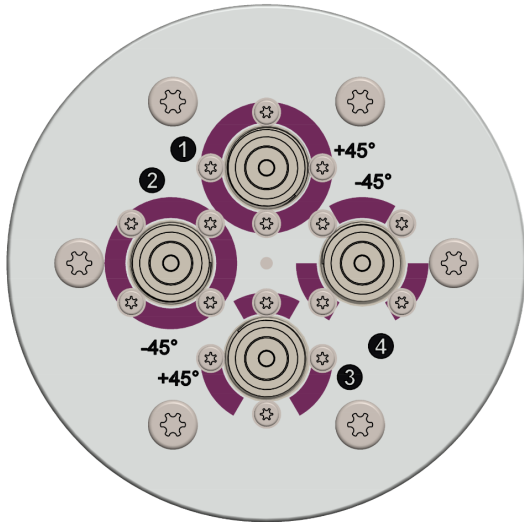
Note: Coloured box sizes do not represent antenna sizes.



TECHNICAL SPECIFICATION

Mechanical Illustration

All measurements are in mm (in)

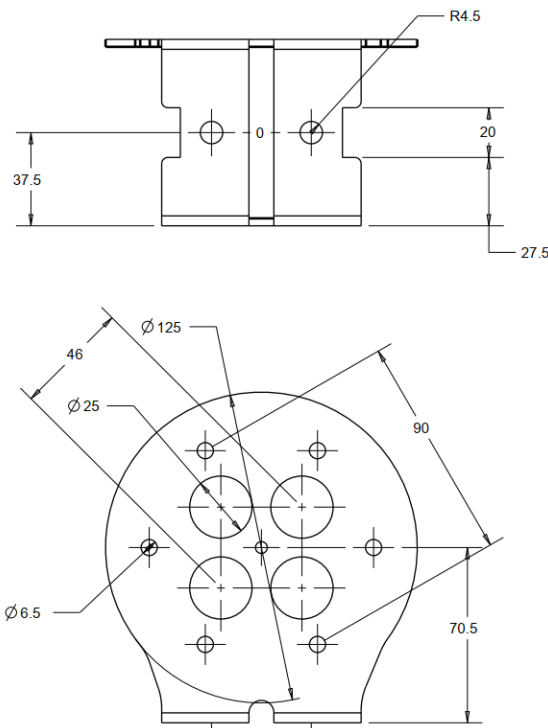
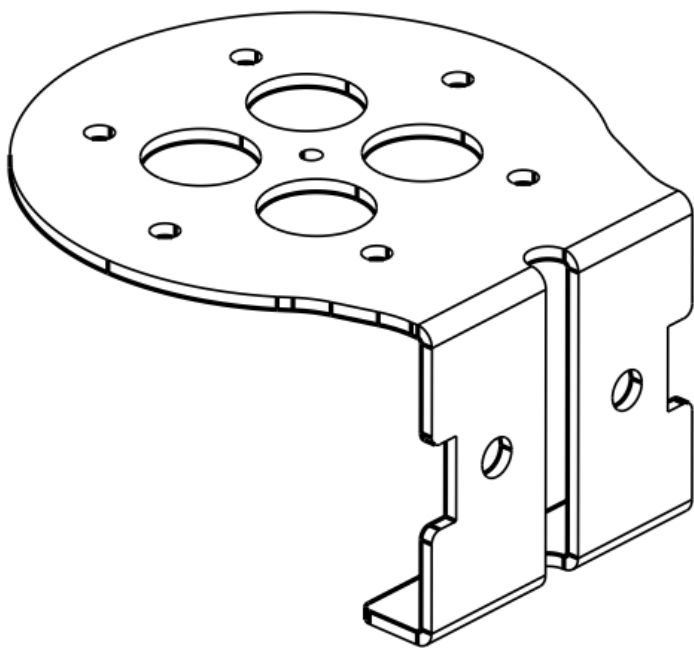




TECHNICAL SPECIFICATION

Mounting Bracket Kit

Note: The AWL3970-T0-F is not supplied with a mounting bracket .
The mounting bracket shown below is for demonstrative purpose only.
Mount brackets can be designed for particular application, e.g. Top of Pole Mount, Side of Pole Mount, depending on customer requirements.



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
0°	Stainless Steel	152mm-254mm (6" to 10")

Ordering Info

Order Code - Antenna	Description
AWL3970-T0-F	Zero Degrees Fixed Tilt with 4.3/10 Connectors
Description	Order Code - Antenna
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")
AW1014-2-FM-TM	RF Jumper Cable, connector types 4.3-10 (m) / Nex10 (m), length 2 metres (6'6")

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