



AWL3971-T0-F

Common Name 8 Port (4P/4P) Mid- and High-Band 65° Canister

1695-2690MHz	4	Fixed	14.0	65°
3300-4200MHz	4	Fixed	14.3	65°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

This 65° canister antenna is being deployed on streetworks, rooftops and macro pole applications globally. It is a multi-frequency solution that provides 4 ports across 1695-2690MHz (Mid-Band) and 4 ports across 3300-4200MHz (High-Band). The sector fits in a 9.7 Inch diameter canister to deliver a compact and aesthetically pleasing antenna platform.

APPLICATION

Alpha Wireless multi-band canister provides 65° sector coverage whilst in an ultra-compact radome design. This very special antenna provides 2G to 5G ports for ultimate data throughput. The antenna is designed to be installed in an municipalities where low visual impact is required.

STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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FEATURES

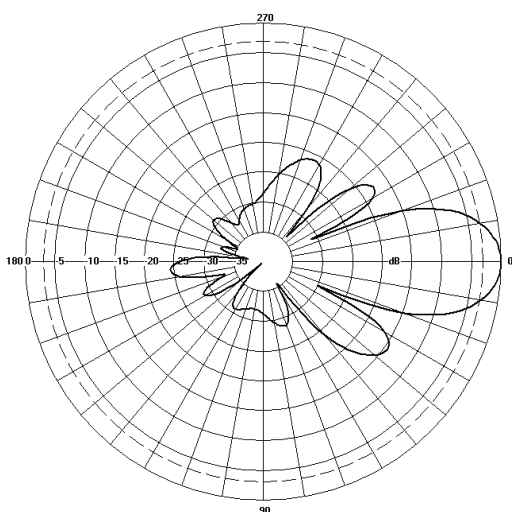
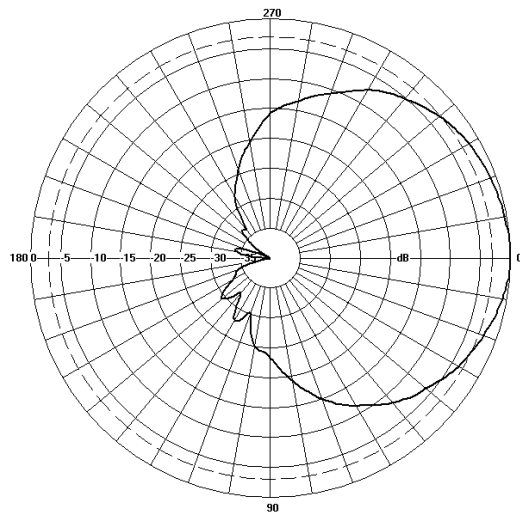
- 65° Azimuth beamwidth sector
- Supports 4 ports Mid-Band and 4 ports High Band in a compact 9.7" canister
- 1695-2690MHz x 4 Ports
- 3300-4200MHz x 4 Ports

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

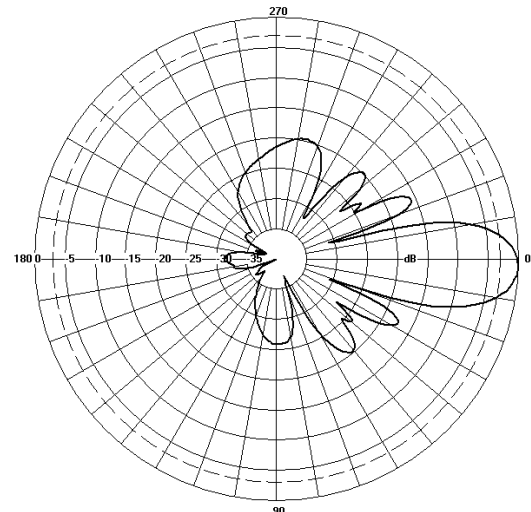
TECHNICAL SPECIFICATION

Electrical Specifications								
Frequency Range		MHz	1695-1920	1920-2170	2300-2500	2500-2690	3300-3800	3800-4200
Polarisation		Degree	+/- 45° Slant Linear					
Gain	Basta	dBi	12.9±0.5	13.2±0.5	13.4±0.5	13.5±0.5	13.3±0.5	13.8±0.5
	Max	dBi	13.4	13.7	13.9	14.0	13.8	14.3
Azimuth Beamwidth		Degree	75°	70°	65°	62°	65°	65°
Azimuth Beam Squint		Degree<						
Elevation Beamwidth		Degree	19°	18°	16°	14°	16°	15°
Electrical Downtilt		Degree	0°	0°	0°	0°	0°	0°
Electrical Downtilt Deviation		Degree<	1.5°	1.5°	1.5°	1.5°	1.5°	1.5°
Impedance		Ohms	50					
VSWR		<	1.5					
Return Loss		dB>	14					
Isolation		dB>	25	25	25	25	22	22
Passive Intermodulation		dBc<	-150	-150	-150	-150	N/A	N/A
Cross-Polar Discrimination (0°)		dB>	15	15	15	15	15	15
Maximum Effective Power Per Port		W	150	150	150	150	50	50

Representative Pattern Files



1695 - 2690MHz



3300 - 4200MHz

Azimuth

Elevation

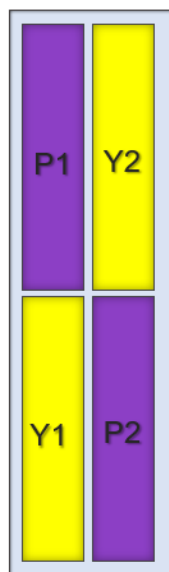
For radiation pattern files, please login at www.alphawireless.com

TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions	mm (in)	950 (37.4) x 240 (9.4)
Packing Size (LxWxD)	mm (in)	1115(43.9) x 350 (13.7) x 400 (15.7)
Net Weight (antenna)	kg (lb)	8.0 (17.6)
Net Weight (mount)	kg (lb)	2.5 (5.5)
Shipping Weight	kg (lb)	11 (24.2)
Connector Type (Female)	-	4.3-10
Connector Position	-	Bottom
Connector Quantity	-	8 (4P Mid-Band, 4P High-Band)
Windload Frontal (at Rated Wind Speed: 150km/h)	N	173 (39)
Windload Lateral (at Rated Wind Speed: 150km/h)	N	173 (39)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	ASA-Capped ABS
Radome Colour	RAL	7035 (light grey)
Product Compliance Environmental	-	RoHS
Lightning Protection	-	DC Grounded
Cold Temperature Survival	Celsius (Fahrenheit)	-40 (-40)
Hot Temperature Survival	Celsius (Fahrenheit)	70 (158)

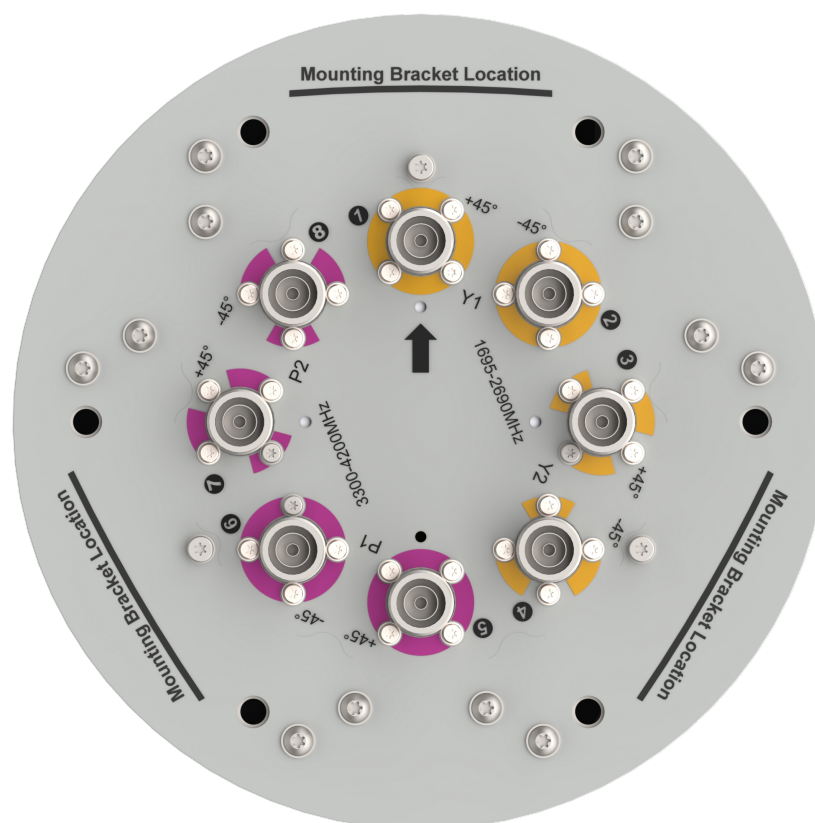
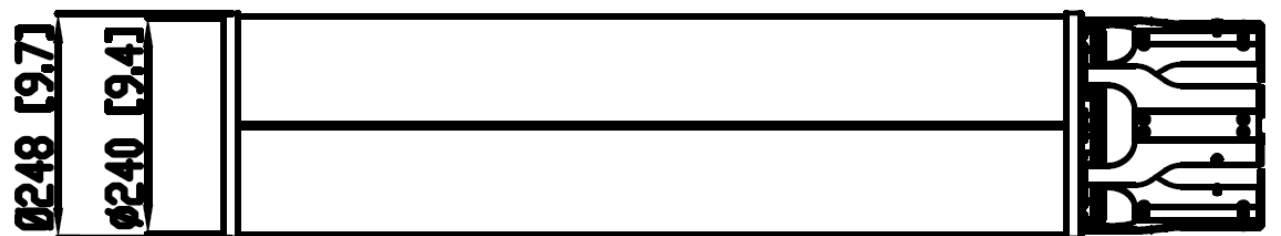
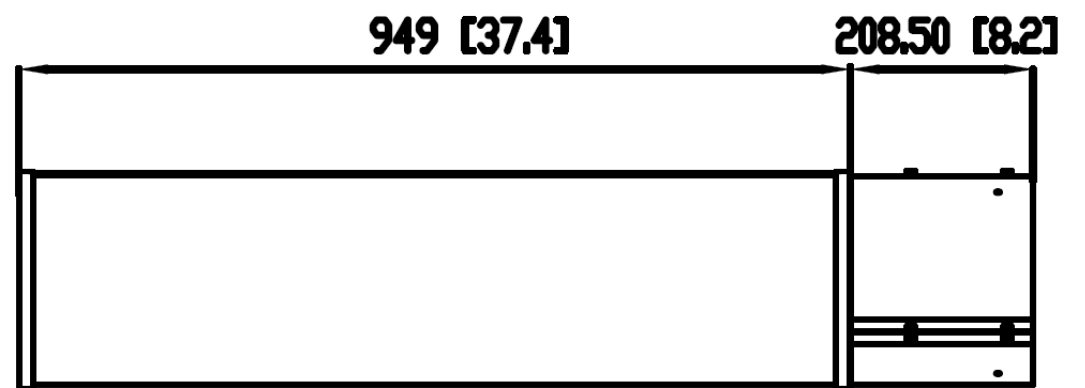
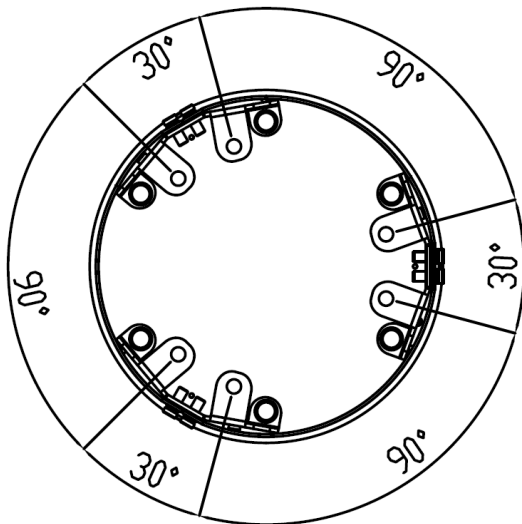
Array Layout and RET Information



Array	Frequency MHz	Ports
Y1	1695 - 2690	1 - 2
Y2	1695 - 2690	3 - 4
P1	3300 - 4200	5 - 6
P2	3300 - 4200	7 - 8

Note: Coloured box sizes do not represent antenna sizes.

Mechanical Illustration



TECHNICAL SPECIFICATION

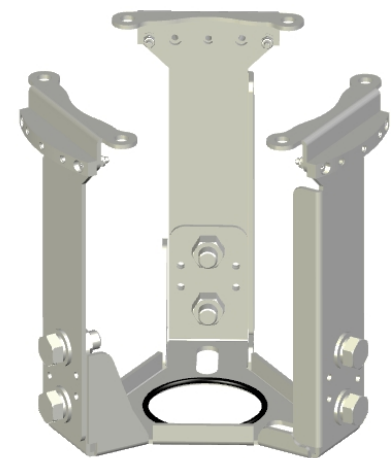
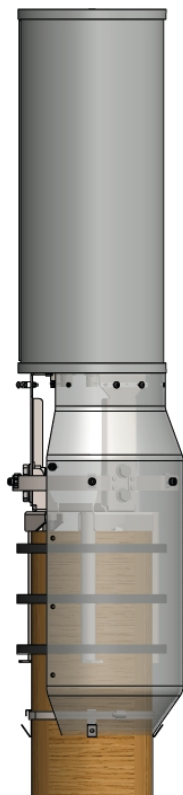
Mounting Bracket Kit

Note: The AWL3971-T0-F is not supplied with a mounting bracket.

CL-V-187 is a Mounting Bracket that can be used with the AWL3971-T0-F and is sold separately.

Mount brackets can be designed for particular application, e.g. Top of Pole Mount, Side of Pole Mount, depending on customer requirements.

CL-V-187 Tri-Leg Mount Kit for 9.8" Canister (Not included with Antenna, must be ordered separately)



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
N/A (No Mechanical tilt with Omni's)	Stainless Steel	89mm to 241mm (3.5" - 9.5")

Ordering Info

Order Code - Antenna

AWL3971-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. Mount Bracket not included.

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

Global Headquarters

Ashgrove Business Centre,
Ballybrittas, Portlaoise,
R32 DTOA, IRELAND
sales@alphawireless.com
+353 57 86 33847

North America

7301 W. 129th Street, Suite 150,
Overland Park,
KS 66213, USA
sales@alphawireless.com
+1 913 279 0008

Australia

3/76 Regentville Rd,
Jamisontown,
NSW 2750, AUSTRALIA
sales@alphawireless.com
+ 61 2 4504 8212

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