



AW3949-T0-F

Common Name 24 Port (4P/4Px3) Mid- and High-Band Tri-Sector

1695-2690MHz	12	Fixed	13.0	65°
3300-3800MHz	12	Fixed	13.0	65°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

This Tri Sector antenna is being deployed on streetworks, rooftops and macro pole applications globally. It is a multi-frequency solution that provides 4 ports per sector across 1695-2690MHz (Mid-Band) and 4 ports per sector across 3300-3800MHz (High-Band). Sectors are equally spaced at 120° orientations at 0°, 120° and 240° degrees azimuth. The three sectors fit in a 9.7 Inch diameter canister to deliver a compact and aesthetically pleasing antenna platform.

APPLICATION

Alpha Wireless multi-band Tri Sector provides 3-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

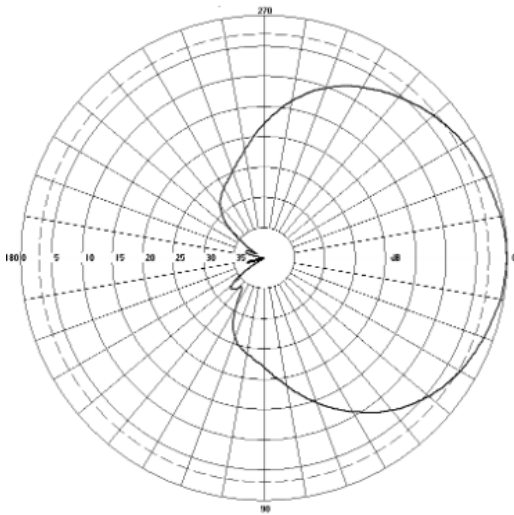
- Supports Mid-Band and high-Band in a compact 9.7" canister
- Three sector canister with sectors orientated at 0°, 120° and 240° in the Azimuth Plane
- 1710-2690MHz x 4 Ports per sector
- 3300-3800MHz x 4 Ports per sector
- 65° Azimuth Beamwidth on each of the three sectors

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

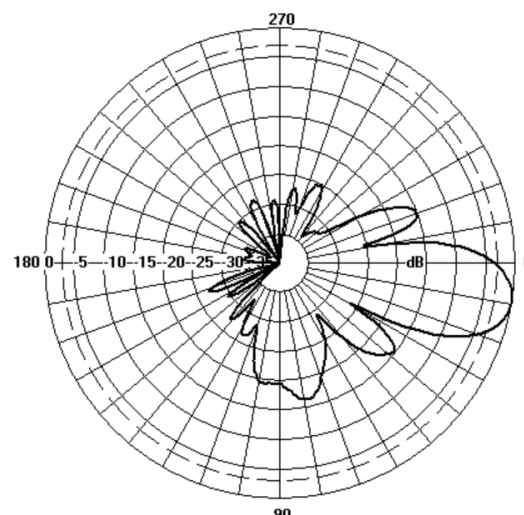
TECHNICAL SPECIFICATION

Electrical Specifications									
Frequency Range	MHz	1695-1920	1920-2170	2300-2500	2500-2690	3300-3600	3600-3800		
Polarisation	Degree	+/- 45° Slant Linear							
Gain	Basta	dBi	12.9±0.5	13.2±0.5	13.4±0.5	13.5±0.5	13.0±0.5	13.1±0.5	
	Max	dBi	13.4	13.7	13.9	14.0	13.5	13.6	
Azimuth Beamwidth	Degree	75°	70°	65°	62°	65°	65°		
Elevation Beamwidth	Degree	19°	18°	16°	14°	16°	15°		
Electrical Downtilt	Degree	T0°	T0°	T0°	T0°	T0°	T0°		
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		

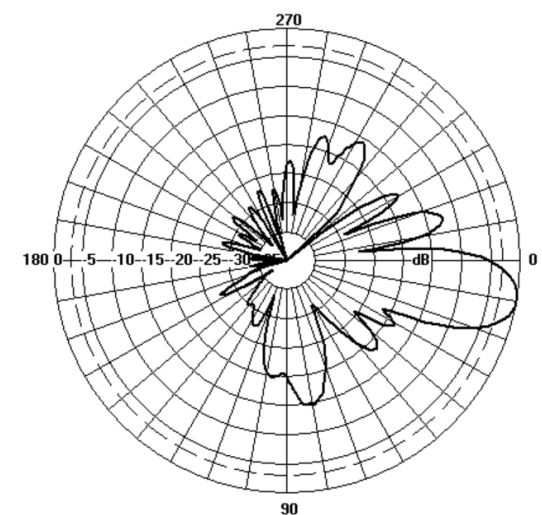
Representative Pattern Files



Azimuth



Elevation



3300 - 3800MHz

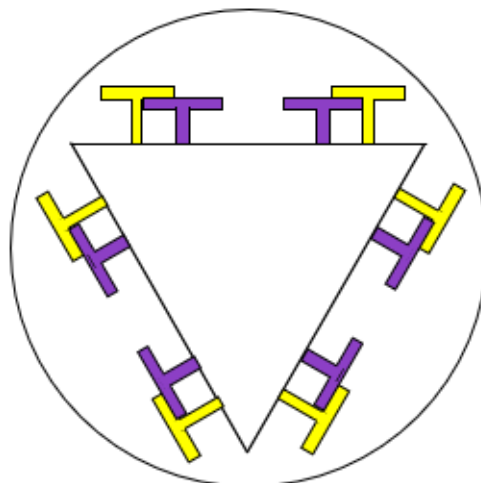
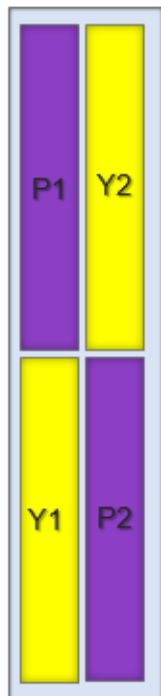
For radiation pattern files, please login at www.alphawireless.com

TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions	mm (in)	1157 (45.5) x 248 (9.7) (with mounting bracket)
Net Weight (antenna)	kg (lb)	30 (66)
Connector Type (Female)	-	4.3-10
Connector Position	-	Bottom
Connector Quantity	-	24 (12P Mid Band, 12P CBRS)
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
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)

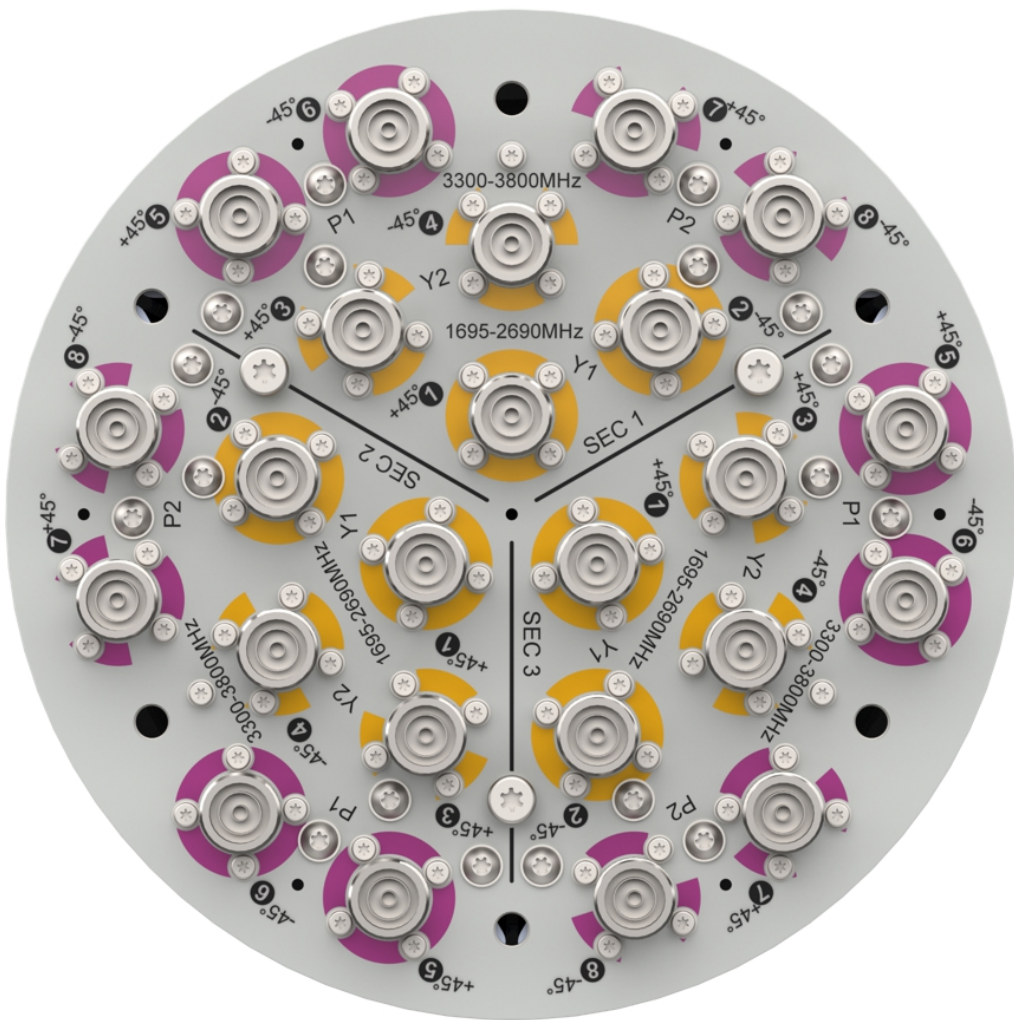
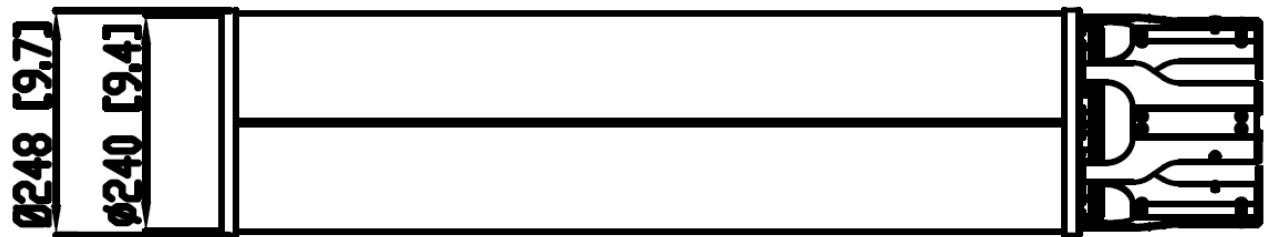
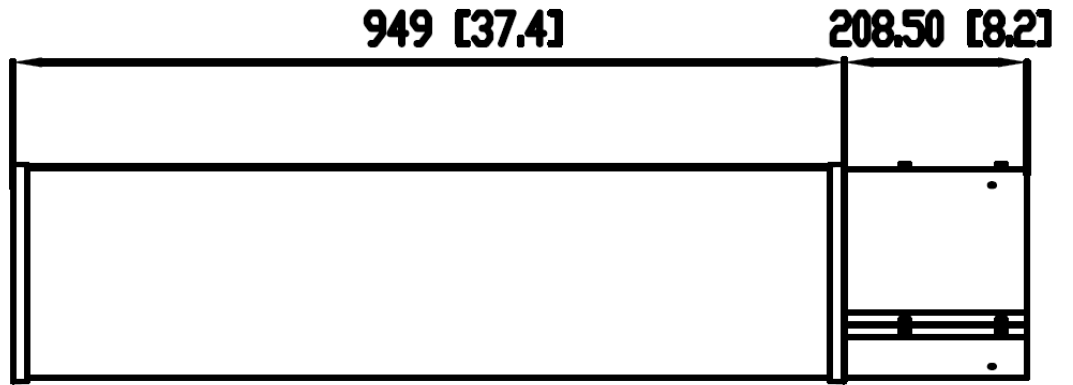
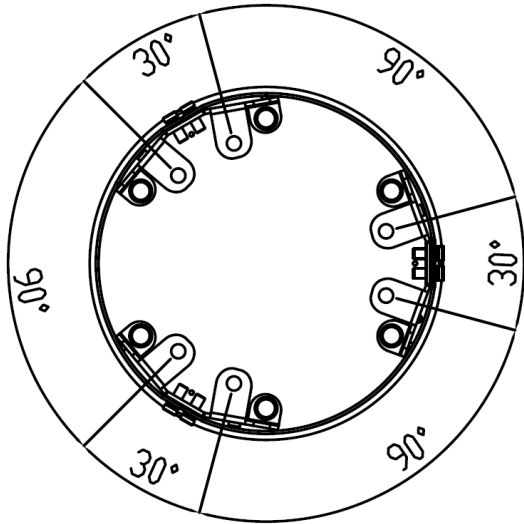
Array Layout and RET Information



Note: Coloured box sizes do not represent antenna sizes.

Array	Frequency MHz	Ports
Y1	1695 - 2690	1 - 2
Y2	1695 - 2690	3 - 4
P1	3300 - 3800	5 - 6
P2	3300 - 3800	7 - 8

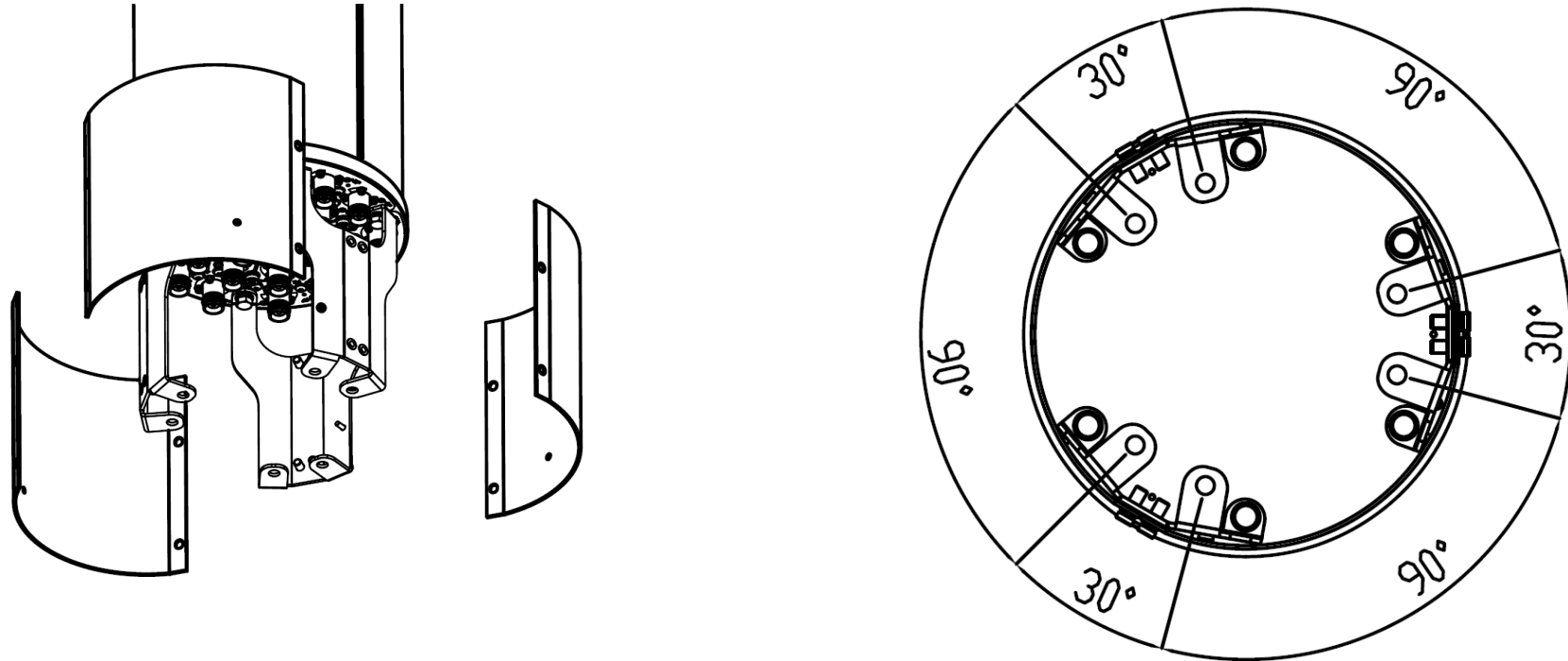
Mechanical Illustration



TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-201 (Mounting Kit included with Antenna)



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
N/A	Stainless Steel	175mm

Ordering Info

Order Code - Antenna
AW3949-T0-F

Description
Ten Degrees Fixed Tilt with 4.3/10 Connectors

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