



AW3913-T3-F

Common Name - 18 (6/12) Port Small Cell Tri-Sector - 65°

Frequency	Ports	Tilt	Gain	Beamwidth
1695-2690MHz	6	Fixed	12	65°
3400-3800MHz	12	Fixed	12	65°

PRODUCT INFORMATION

This antenna has six Mid-band ports and twelve 3.5GHz (CBRS) ports in a two foot high canister housing. The antenna is made up of three sectors orientated at 0°, 120° and 240° degrees azimuth. Each sector has two Mid-band ports and four 3.5GHz ports designed for 65° Azimuth Beamwidth.

APPLICATION

Alpha Wireless multi-band small cell 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 urban environment where low visual impact is required. There are a number of mounting options available making deployments on lamp posts, utility poles, walls and other vertical structures possible.

STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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FEATURES

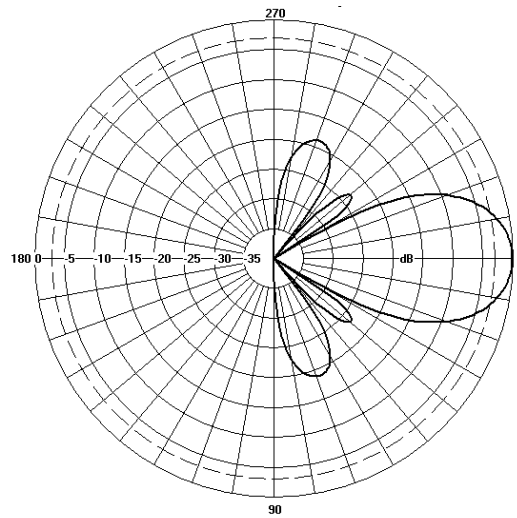
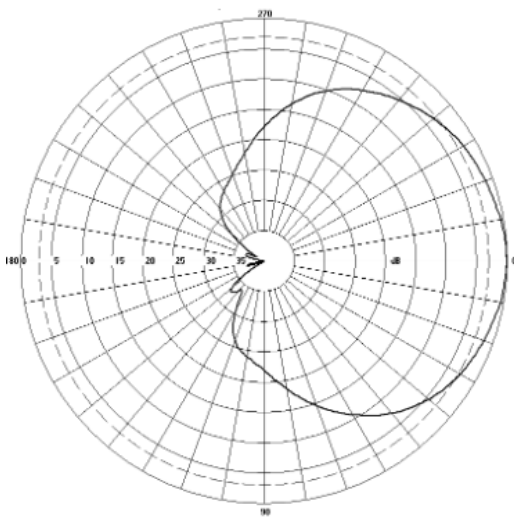
- Compact design - Low visual impact.
- Total of six Mid-band ports and twelve 3.5GHz ports.
- Two Mid band ports per sector and four 3.5GHz ports per sector.
- Three sectors orientated at 0, 120 and 240 degrees azimuth.
- 65° Azimuth Beamwidth on each of the three sectors..

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

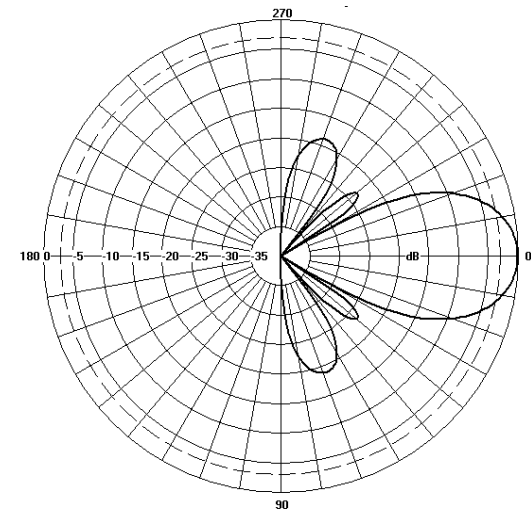
TECHNICAL SPECIFICATION

Electrical Specifications								
Frequency Range	MHz	1695-1995	1920-2170	2170-2500	2500-2690	3400-3600	3600-3800	
Polarisation	Degree	+/- 45° Slant Linear						
Gain	Basta	dBi	11.8±0.5	12.2±0.5	12.5±0.5	13.2±0.5	12.3±0.5	12.8±0.5
	Max	dBi	12.3	12.7	13.0	13.7	12.8	13.3
Azimuth Beamwidth	Degree	68°±7°	67°±7°	67°±7°	63°±7°	60°±6°	60°±6°	
Elevation Beamwidth	Degree	28°±2°	26°±2°	23°±2°	20°±2°	23°±2°	21°±2°	
Electrical Downtilt	Degree	T3°	T3°	T3°	T3°	T3°	T3°	
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



3400 - 3800MHz

Azimuth

Elevation

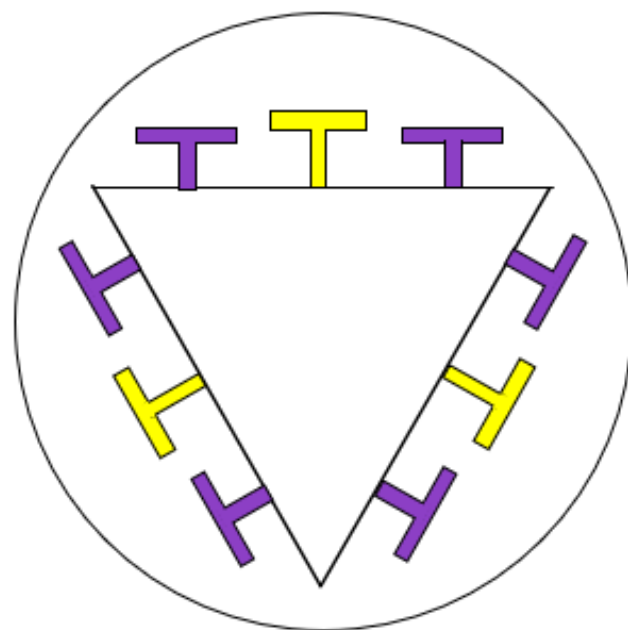
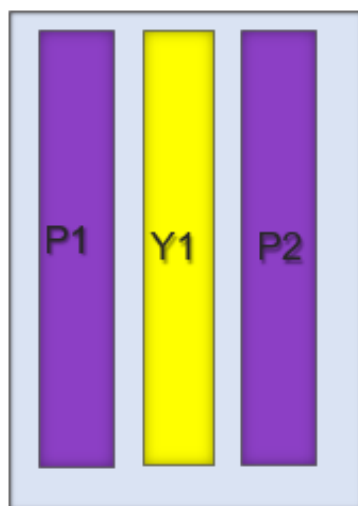
For radiation pattern files, please login at www.alphawireless.com

TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions	mm (in)	610 (24) x 248 (9.8)
Volume	ft ³ (l)	2.32 (65.6)
Net Weight (antenna)	kg (lb)	5 (11)
Shipping Weight	kg (lb)	7 (15.4)
Connector Type (Female)	-	4.3-10
Connector Position	-	Bottom
Connector Quantity	-	18 (6P Mid-Band, 12P High-Band)
Windload Frontal (at Rated Wind Speed: 150km/h)	N	135 (30)
Windload Lateral (at Rated Wind Speed: 150km/h)	N	135 (30)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	UV Stabilised ABS capped 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)

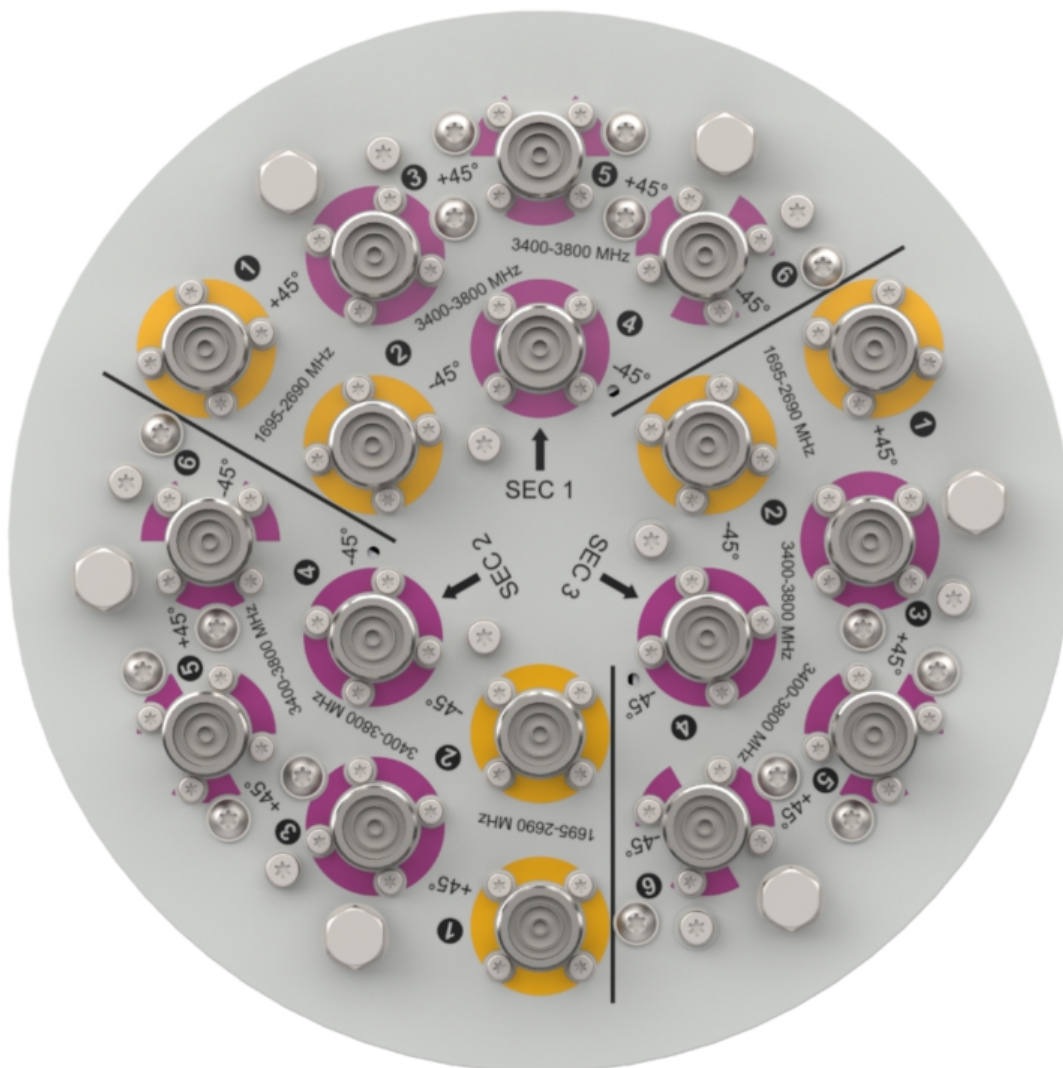
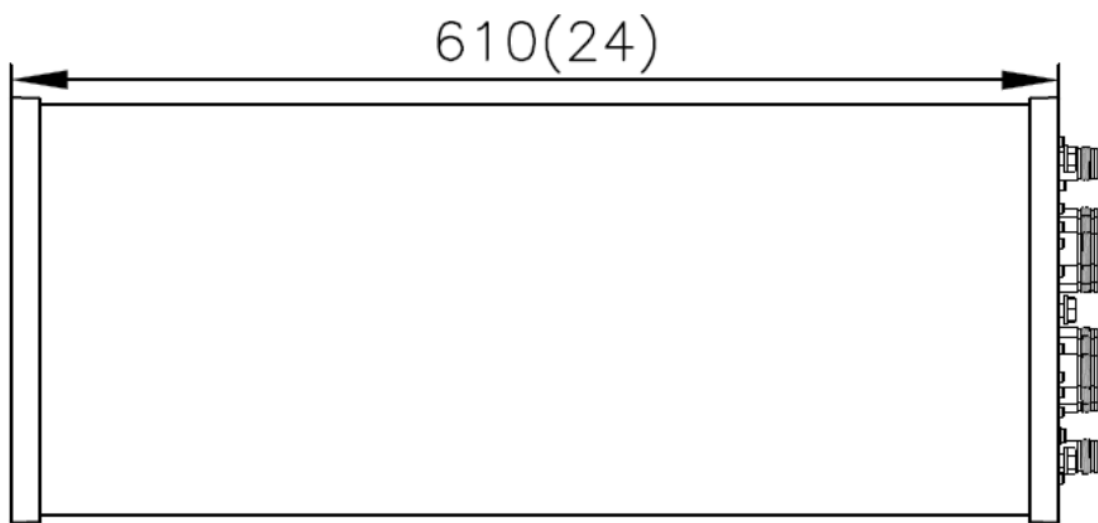
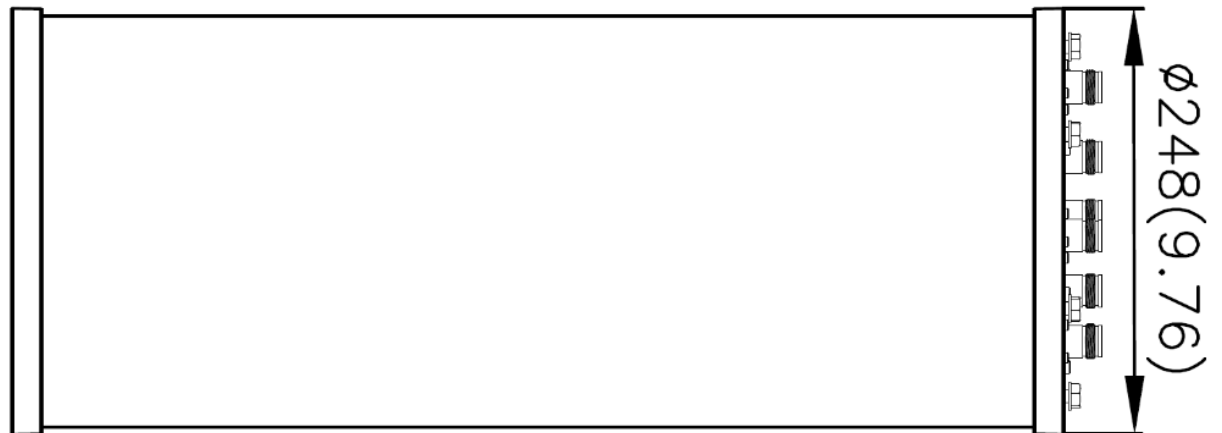
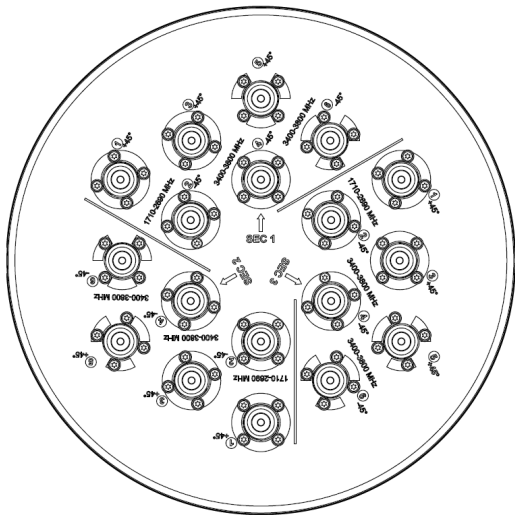
Array Layout and RET Information



Array	Frequency MHz	Ports
Y1	1710 - 2690	1 - 2
P1	3400 - 3800	3 - 4
P2	3400 - 3800	5 - 6

Note: Coloured box sizes do not represent antenna sizes.

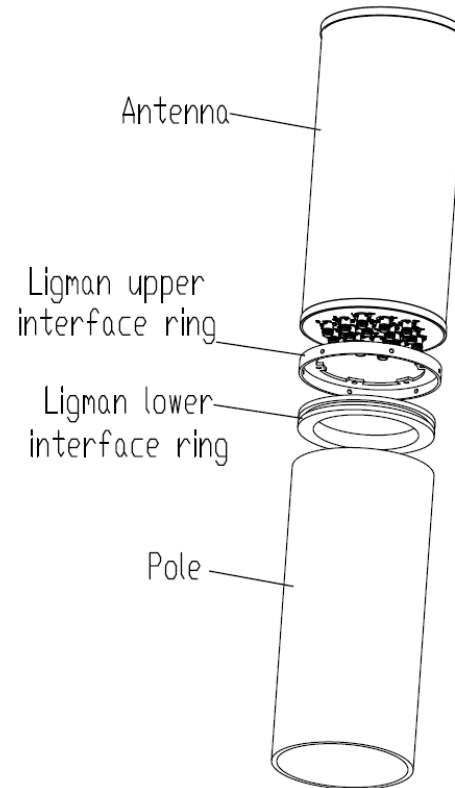
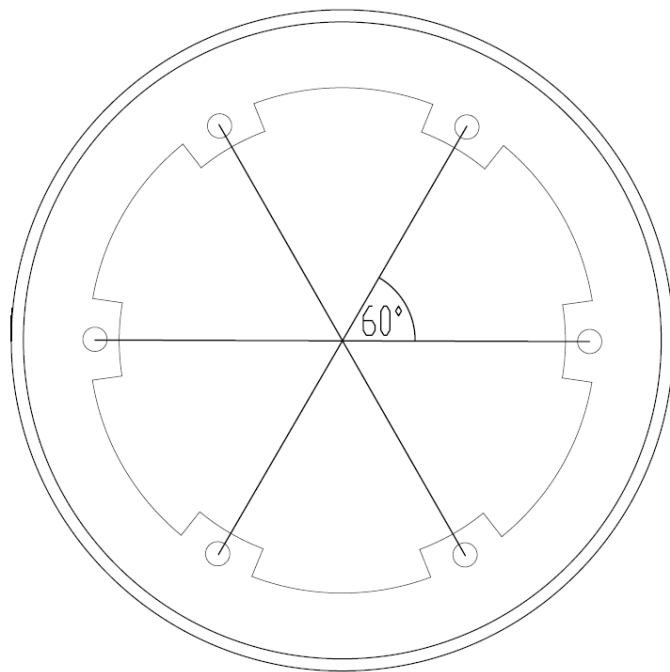
Mechanical Illustration



TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-190 (For Illustration only. Upper and Lower mount interface rings are not included with antenna)



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

Ordering Info

Order Code - Antenna

AW3913-T3-F

Order Code - Accessories

AW1012-2-FM-FM

AW1012-2-FM-NM

AW1014-2-FM-TM

Description

Three 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")

Enquiries

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