



AW3833-S

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

1695-2690MHz	6	Fixed	14	65°
3400-3800MHz	6	Fixed	11	65°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

This product offers Mid-band as well as 3.5GHz functionality in a 2 foot small cell housing. This design offers six ports on Mid Band, and six ports on 3.5GHz.

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

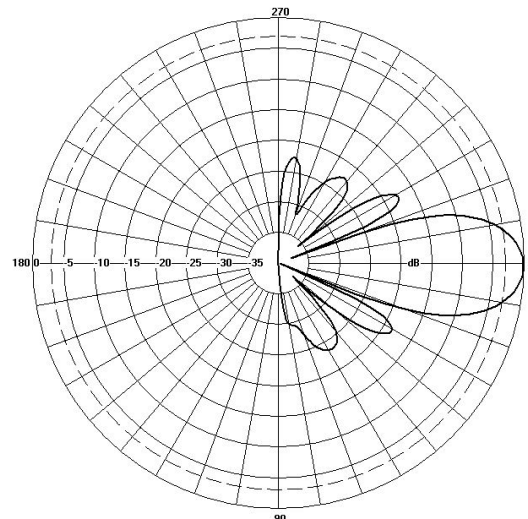
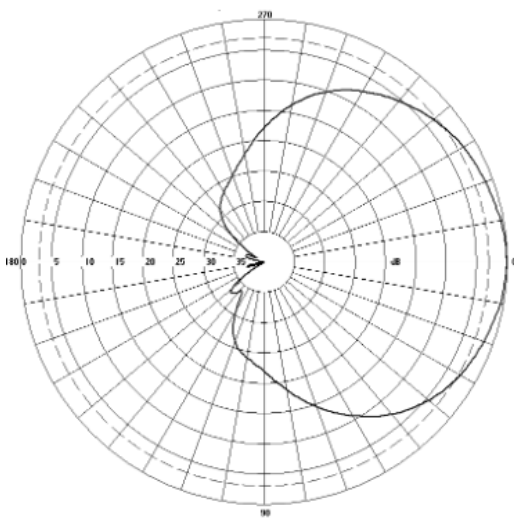
- Compact design - Low visual impact.
- Three sectors orientated at 0, 120 and 240 degrees azimuth.
- Six Mid band ports per sector and two 3.5GHz ports per sector.
- Manufactured in Ireland.

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

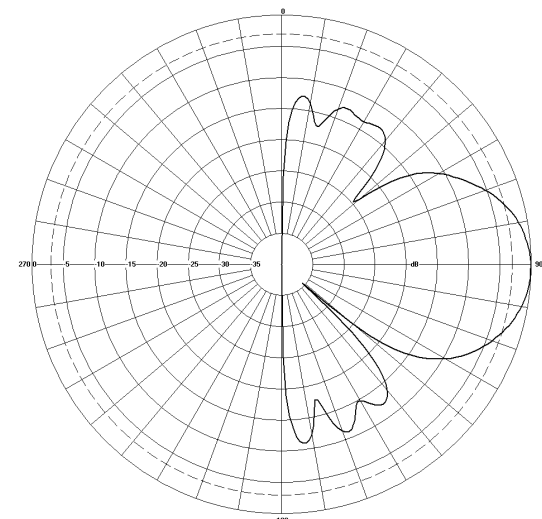
TECHNICAL SPECIFICATION

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	12.1±0.5	12.6±0.5	13.1±0.5	13.5±0.5	10.5±0.5	10.5±0.5
	Max	dBi	12.6	13.1	13.6	14.0	11.0	11.0
Azimuth Beamwidth	Degree	60°	66°	70°	60°	65°	65°	
Elevation Beamwidth	Degree	19°	17°	15°	13°	30°	30°	
Electrical Downtilt	Degree	T0°	T0°	T0°	T0°	T0°	T0°	
Electrical Downtilt Deviation	Degree<	1.5°	1.5°	1.5°	1.5°	3°	3°	
Impedance	Ohms	50						
VSWR	<	1.5						
Return Loss	dB>	14						
Intraband Isolation (same band/same array)	dB>	25	25	25	25	22	22	
Network to Network Isolation (same band different array)	dB>	25	25	25	25	25	25	
Interband Isolation (different band and array)	dB	28	28	28	28	28	28	
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	250	250	250	250	50	50	

Representative Pattern Files



1695 - 2690MHz



3400 - 3800MHz

Azimuth

Elevation

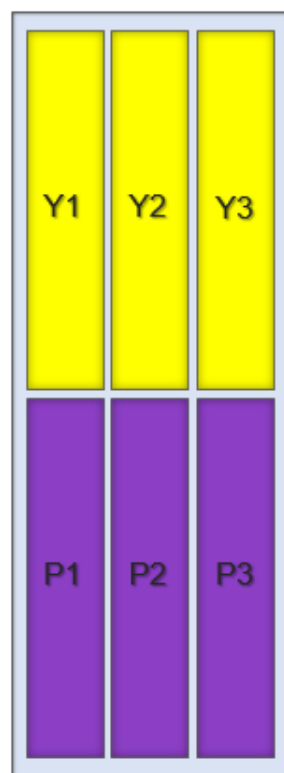
For radiation pattern files, please login at www.alphawireless.com

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)
Net Weight (mount)	kg (lb)	3 (6.6)
Shipping Weight	kg (lb)	9.5 (21)
Connector Type (Female)	-	4.3-10
Connector Position	-	Bottom
Connector Quantity	-	12 (6P Mid Band, 6P High Band)
Windload Frontal (at Rated Wind Speed: 150km/h)	N	120 (27)
Windload Lateral (at Rated Wind Speed: 150km/h)	N	120 (27)
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)

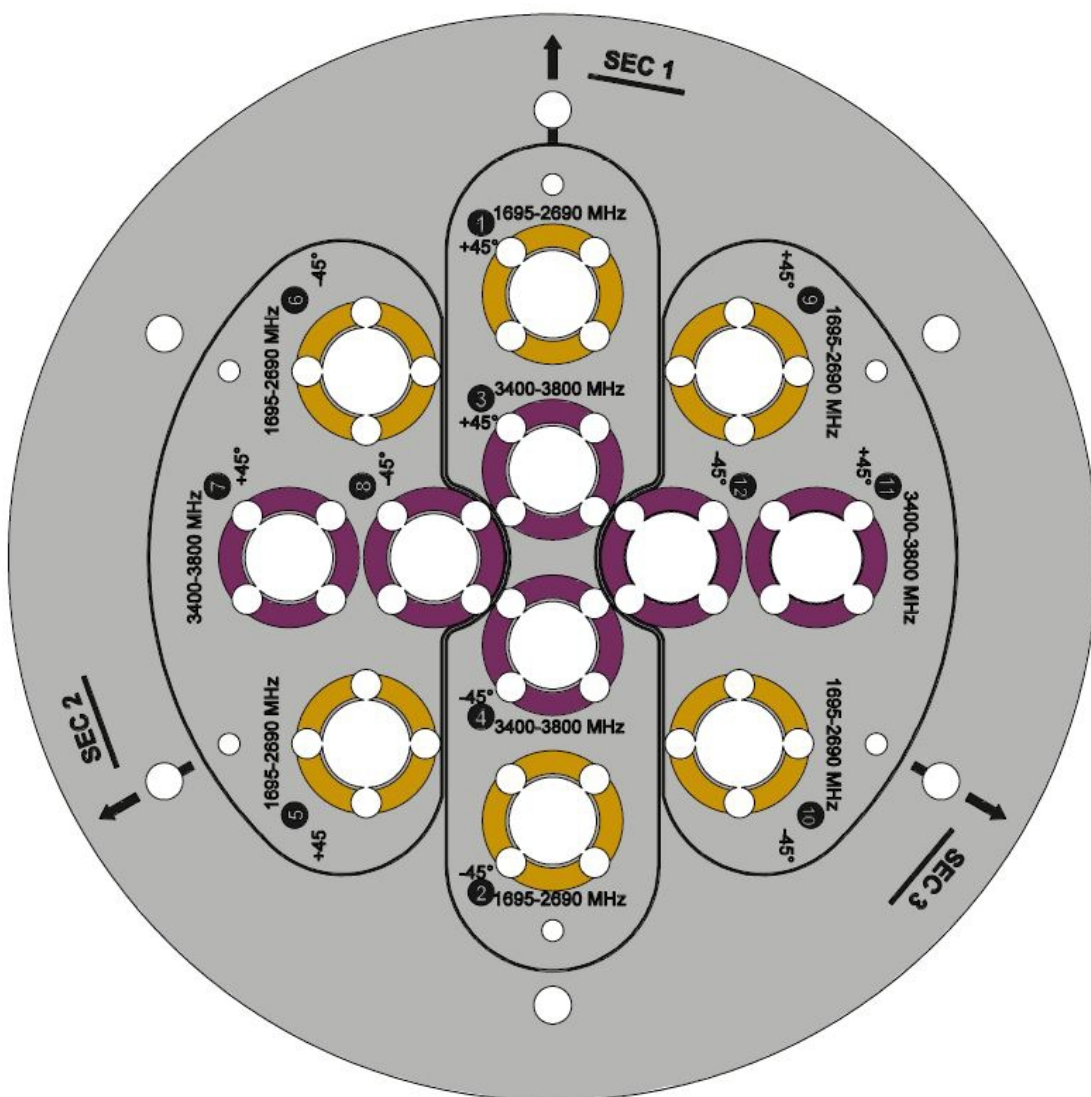
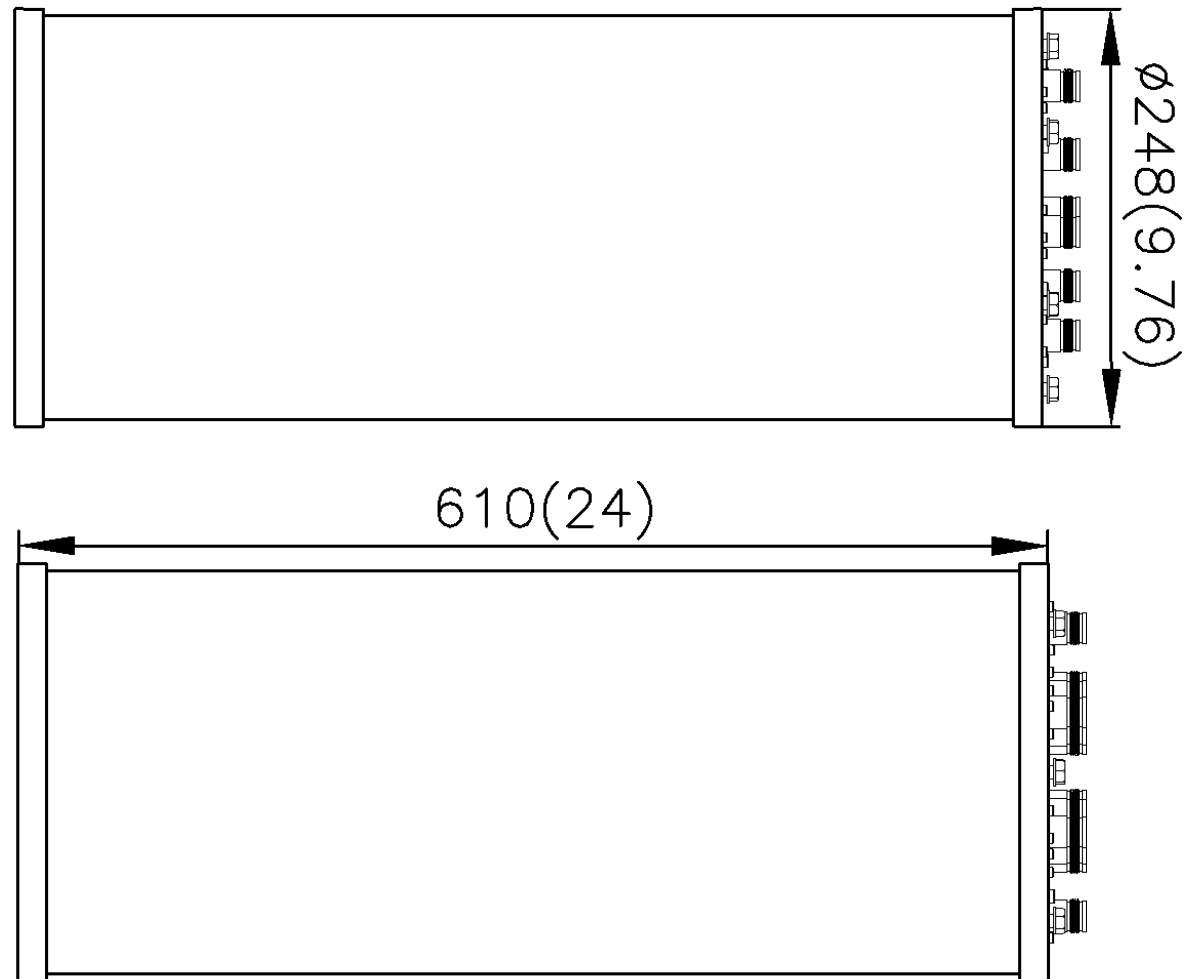
Array Layout and RET Information



Array	Frequency MHz	Ports
Y1	1695 - 2690	1 - 2
Y2	1695 - 2690	3 - 4
Y3	1695 - 2690	5 - 6
P1	3400 - 3800	7 - 8
P2	3400 - 3800	9 - 10
P3	3400 - 3800	11 - 12

Note: Coloured box sizes do not represent antenna sizes.

Mechanical Illustration



TECHNICAL SPECIFICATION

Mounting Bracket Kit

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

Ordering Info

Order Code - Antenna

AW3833-S

Description

Zero Degrees Fixed Tilt with 4.3/10 Connectors.

Order Code - Accessories

AW1012-2-FM-FM

Description

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")

Enquiries

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