DATASHEET



AW3834-T0-F

Common Name 16 Port, (4Px2/4Px2), Back to Back 65°, Low Band & Mid Band Small Cell Dual Sector

698-960MHz	8	Fixed	8.2	65°	
1695-2690MHz	8	Fixed	14.2	65°	
Frequency	Ports	Tilt	Gain	Beamwidth	

PRODUCT INFORMATION

This antenna solution is designed to offer Low Band and Mid Band functionality in a compact 2 foot high housing. This design is intended to offer 4 ports on Low Band and 4 ports on Mid Band for each antenna sector.

APPLICATION

Alpha Wireless Low and Mid Band small cell Dual-sectors provide 65 degree coverage whilst in an ultra compact radome design. 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







FEATURES

- Multi-band Small Cell Dual-sector antenna 698-960 / 1695-2690MHz.
- Compact design for low visual impact.
- Manufactured in Ireland.

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

Page 1/5

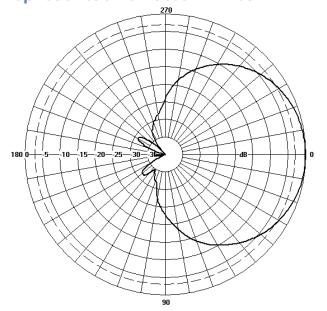


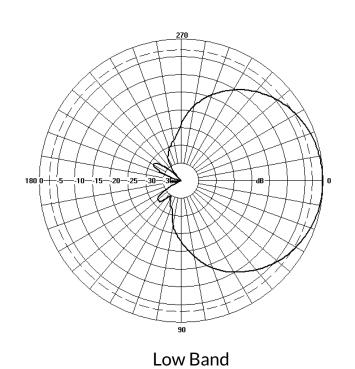
AW3834-T0-F

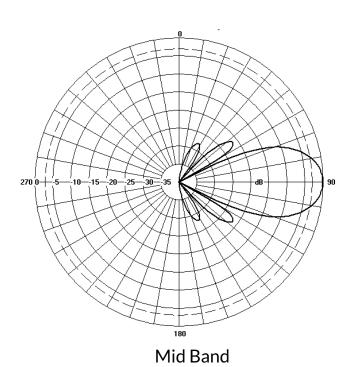
TECHNICAL SPECIFICATION

Electrical Specifications		Low Band			Mid Band				
Frequency Range per Input	MHz	698-755	755-820	820-890	890-960	1695-1995	1920-2170	2170-2500	2500-2690
Polarisation		+/- 45° Slant Linear							
Gain Basta	dBi	6.7±0.5	7.1±0.5	7.4±0.5	7.7±0.5	12.3±0.5	12.8±0.5	13.3±0.5	13.7±0.5
Gain Max	dBi	7.2	7.6	7.9	8.2	12.8	13.3	13.8	14.2
Azimuth Beamwidth	Degree	75°	72°	70°	66°	68°	66°	62°	58°
Azimuth Beam Squint	Degree <	5°	5°	5°	5°	5°	5°	5°	5°
Elevation Beamwidth	Degree	88° +/- 9°	72° +/- 8°	66° +/- 7°	64° +/- 8°	19° +/- 2°	17° +/- 2°	15° +/- 2°	13° +/- 2°
Electrical Downtilt	Degree	T0°	T0°	T0°	T0°	T0°	T0°	T0°	T0°
Electrical Downtilt Deviation	Degree <	5°	5°	5°	5°	1.5°	1.5°	1.5°	1.5°
Impedance	Ohms	50	50	50	50	50	50	50	50
VSWR	NA <	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Return Loss	dB >	14	14	14	14	14	14	14	14
Isolation	dB >	20	20	20	20	20	20	20	20
Passive Intermodulation	dBc <	-150	-150	-150	-150	-150	-150	-150	-150
Cross Polar Discrimination	dB >	16	16	16	16	16	16	16	16
Maximum Effective Power Per Port	W	100	100	100	100	250	250	250	250

Representative Pattern Files







Azimuth Elevation



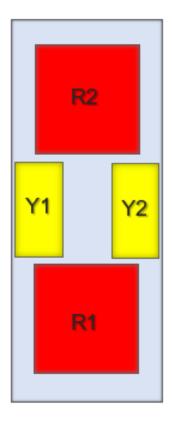


TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions	mm (in)	610 (24) x 365 (14.3) - (LxD)
Packing Size (LxWxD)	mm (in)	685 (27) x 448 (17.6) x 448 (17.6)
Net Weight (antenna)	kg (lb)	7.7 (17)
Net Weight (mount)	kg (lb)	5.9 (13)
Shipping Weight	kg (lb)	15.6 (34.4)
Connector Type (Female)	-	4.3-10
Connector Position	-	Bottom
Connector Quantity	-	16 (8P Low Band, 8P Mid Band)
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	180 (40)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	180 (40)
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
R1	617-894	1 - 2
R2	617-894	3 – 4
Y1	1695-2690	5 - 6
Y2	1695-2690	7 - 8

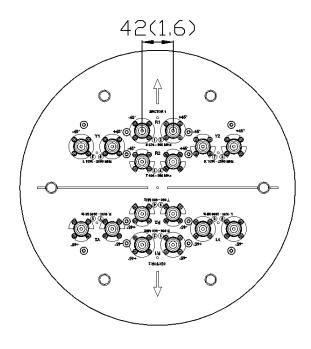
Note: Coloured box sizes do not represent antenna sizes.

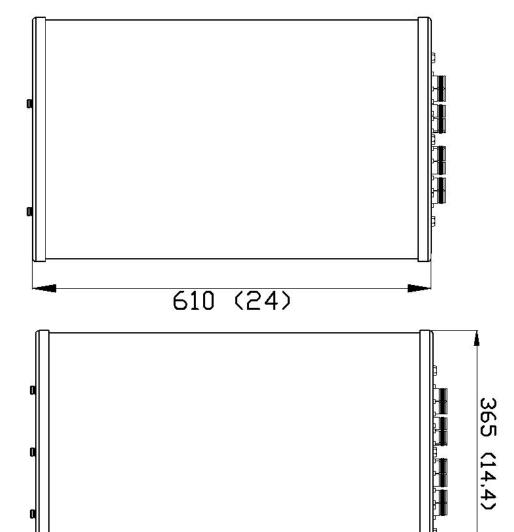


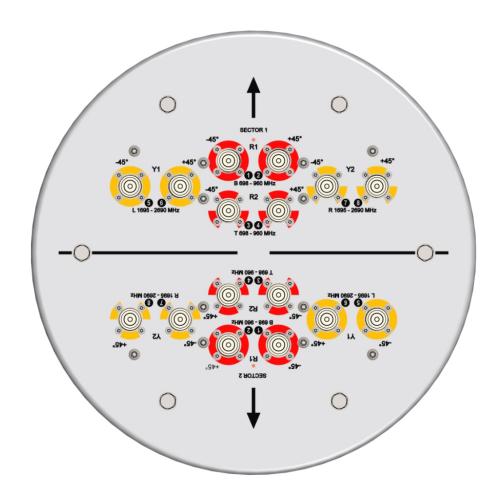


TECHNICAL SPECIFICATION

Mechanical Illustration







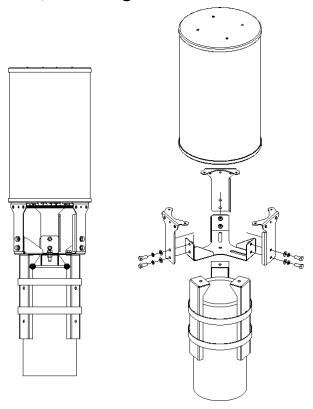


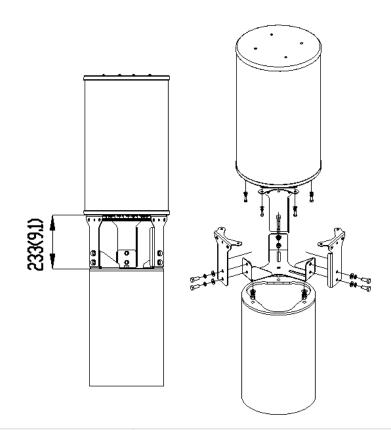


TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-169 (Mounting Kit Included with Antenna)





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

AW3834-T0-F Zero degrees Fixed Tilt with 4.3-10 Connectors.

Order Code - Accessories Order Code - Accessories

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")

Enquiries

Global Headquarters
Ashgrove Business Centre,
Ballybrittas, Portlaoise, Ireland
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

DISCLAIMER

The information in this document is provided solely regarding Alpha Wireless products. The information is not a guarantee of performance or characteristics. Alpha Wireless reserves the right to modify, change, amend, improve or make corrections to this document and its products, at any time and its sole discretion without prior written consent or notice. No license to any intellectual property rights is granted or implied under this document. Alpha Wireless disclaims warranties and liabilities of any kind including non-infringement of intellectual property rights of any third party.

© Alpha Wireless Limited 2022