



DATASHEET

AW3711-E-F

Common Name- 4 Port, 33", eRET, Internally cascaded Panel

3400 - 3800 MHz	4	eRET	20.1	33°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

This product was developed to offer a narrow Azimuth Beam with four port functionality and RET control operating between 3300-3800MHz covering LTE Bands B42, 43 & 48 and 5G NR Band n48 and n78. This antenna is Internally cascaded which means the 2 x RCU's are controlled by a single AISG 2.0 M/F Interface. The antenna has reduced Azimuth Sidelobes (<25dB) making it the ideal antenna for 6 sectored high capacity sites.

APPLICATION

Integrated remote electrical tilt allows instant optimization to improve coverage and throughput. The horizontally spaced array allows optimum MIMO performance with full 4x4 operation or receive diversity RF functions. Superior SNIR enables higher modulation schemes for maximum throughput.

STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
---------------	---------------------



FEATURES

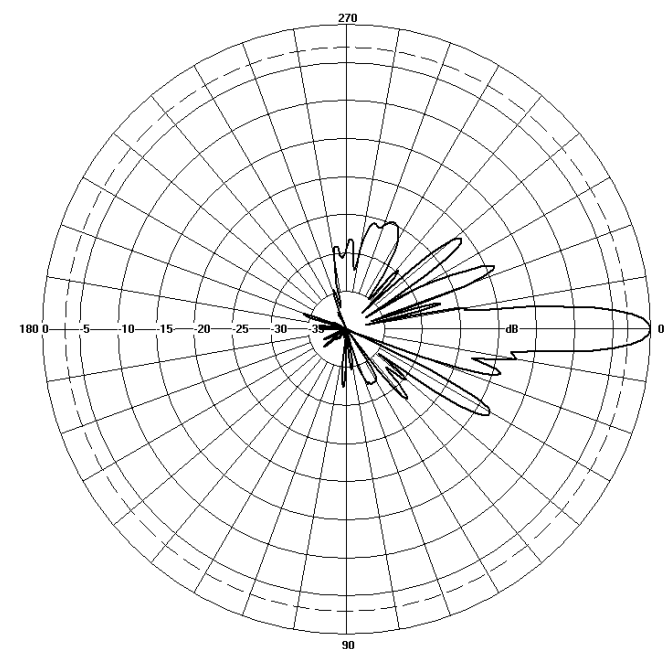
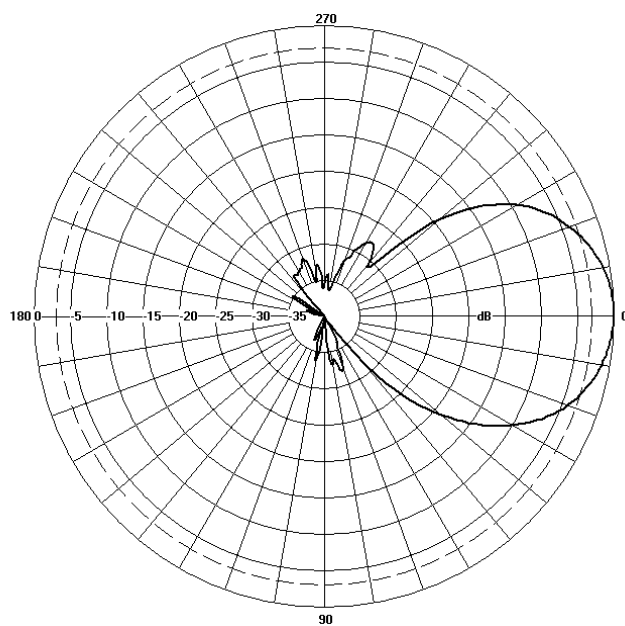
- Wide-band antenna that covers LTE Bands 42, 43 & 48 and 5G NR Band n48 and n78. Includes CBRS Band.
- 4x4 MIMO for maximum throughput.
- Azimuth Sidelobes suppression is <25dB - reducing cochannel interference from adjacent sectors.
- Narrow Azimuth beam to increase site capacity.
- Enhanced tilt range of 0 to 10 degrees.

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

TECHNICAL SPECIFICATION

Electrical Specifications			
Frequency Range		MHz	3400 - 3800
Polarisation		Degree	+/- 45° Slant Linear
Gain	Basta	dBi	19.7±0.5
	Max	dBi	20.2
Azimuth Beamwidth		Degree	33° (+/- 3°)
Azimuth Beam Squint		Degree<	3°
Elevation Beamwidth		Degree	6.5 (+/- 0.5°)
Electrical Downtilt		Degree	T0° - T10°
Electrical Downtilt Deviation		Degree<	1°
Impedance		Ohms	50
VSWR		<	1.43
Return Loss		dB>	15
Isolation		dB>	25
Front to Back Ratio: Total Power +/-30°		dB>	30
Upper Sidelobe Suppression, Peak to 20°		dB>	18
Cross-Polar Discrimination (0°)		dB>	16
Maximum Effective Power Per Port		W	100
Azimuth Sidelobes, Peak to 80°		dB>	25

Representative Pattern Files



Azimuth

Elevation

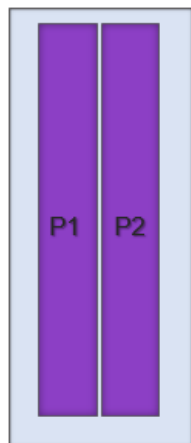
For radiation pattern files, please login at www.alphawireless.com

TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions	mm (in)	840 (32.7) x 322 (12.7) x 107 (4.2) - (LxWxD)
Packing Size (LxWxD)	mm (in)	980 (38.6) x 380 (15) x 220 (8.7)
Net Weight (antenna)	kg (lb)	9.5 (21)
Net Weight (mount)	kg (lb)	3.1 (6.8)
Shipping Weight	kg (lb)	12.6 (27.8)
Connector Type (Female)	-	4.3-10
Connector Quantity	-	4
Connector Position	-	Bottom
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	278 (62)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	116 (26)
Survival Wind Speed	km/h (mph)	241 (150)
Radome Material	-	UV-Stabilised PVC
Radome Colour	RAL	7035 (light grey)
Product Compliance Environmental	-	RoHS
Lightning Protection	-	DC Grounded
Cold Temperature Survival	°C (°F)	-40 (-40)
Hot Temperature Survival	°C (°F)	70 (158)

Array Layout and RET Information



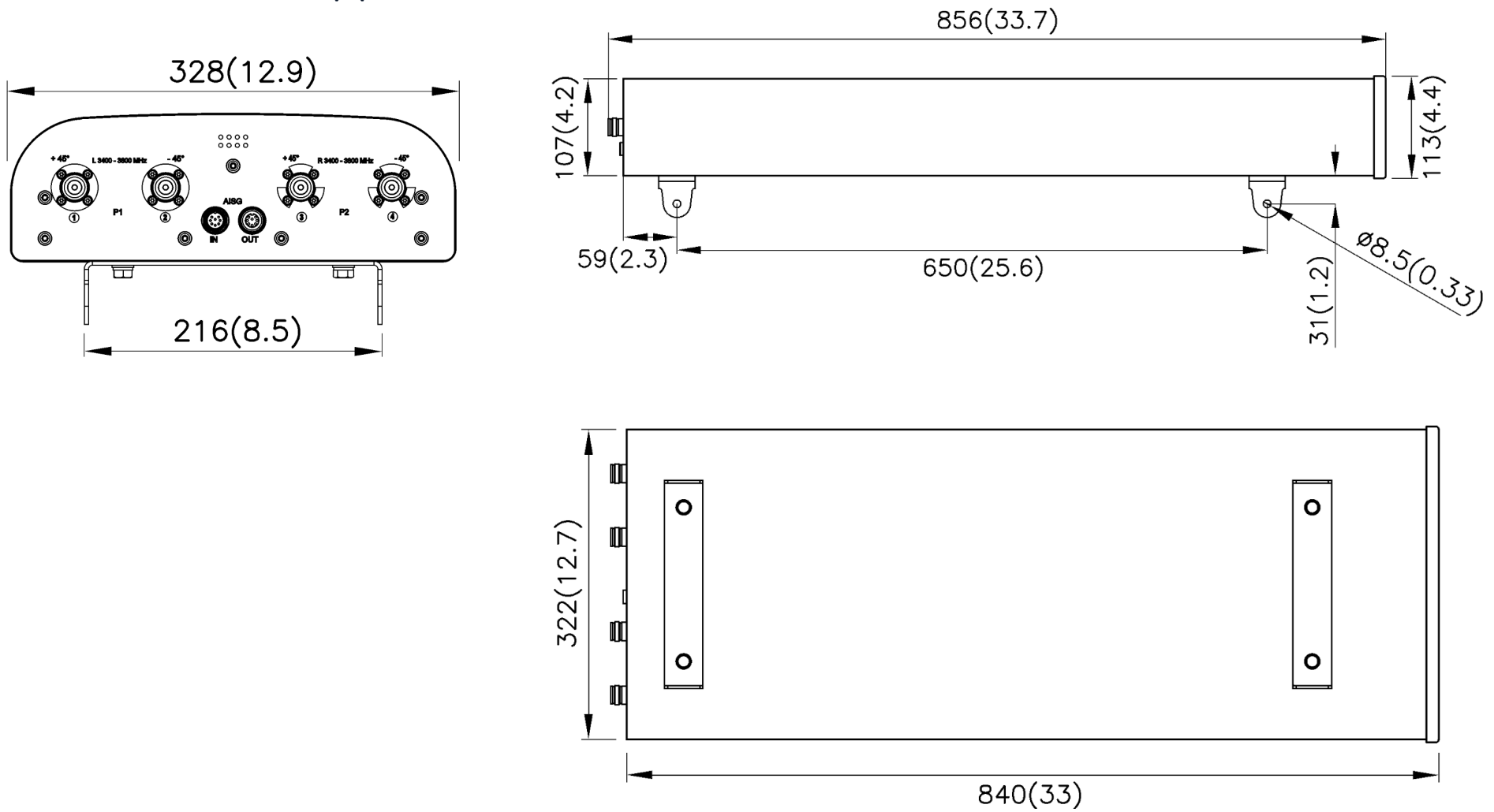
Note: Coloured box sizes do not represent antenna sizes.

Array	Frequency MHz	Ports	RET ID
P1	3400 - 3800	1 - 2	1
P2	3400 - 3800	3 - 4	2

Configuration	
3400-3800 MHz	One RET per array : P1, P2
Total Quantity	Two RET Motor Controllers
Location and Interface	
RET Controller Location	Inside antenna radome housing
RET Interface	Pair of AISG 8 Pin DIN connectors, one male, one female
RET Interface Quantity	One pair of AISG 8 Pin DIN connectors
RET Interface Location	On connector plate located at bottom of antenna
Electrical	
Input Voltage	10 - 30V
Power Idle Mode	< 1W
Power Active Mode	< 10W
Protocol	3GPP / AISG 2.0

Mechanical Illustration

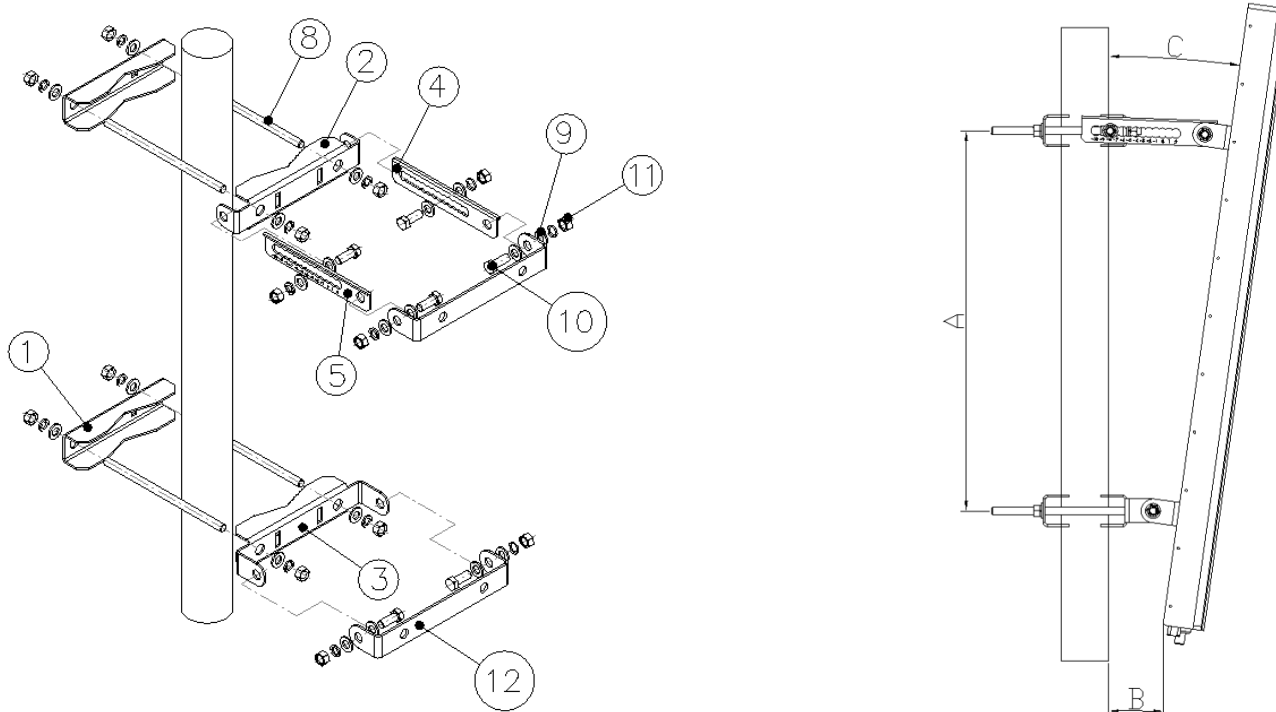
All measurements are in mm (in)



TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-105 Mount Kit for Panel (Mount Kit included with antenna)



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
+2° to -10°	Stainless Steel	50mm-115mm (2" to 4.5")

Ordering Info

Order Code - Antenna

AW3711-E-F

Description

Enclosed Remote Electrical Tilt (eRET) 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")

PADC 1000

Portable AISG Controller

SADC 2000

Site AISG Controller

AW0326-3-PM-PF

AISG Jumper Cable Lengths 3 metres (9' 10")

AW0326-10-PM-PF

AISG Jumper Cable Lengths 10 metres (32' 9")

AW0326-25-PM-PF

AISG Jumper Cable Lengths 25 metres (82')

AW0326-50-PM-PF

AISG Jumper Cable Lengths 50 metres (164')

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

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