DATASHEET

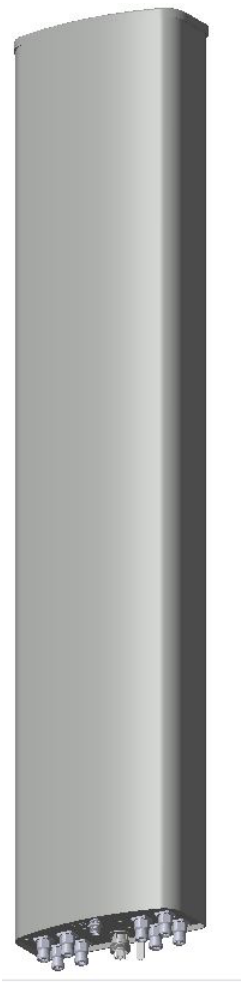
AW3378-E-F

Common Name- 8 Port,1.1M, Beamformer - B41 - 65⁰ eRET

2496 - 2690MHz	8	eRET	16.5	65⁰
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

Introduced in as a solutions to facilitate B41 network modernization program in locations with antenna height restrictions.



APPLICATION

Alpha Wireless 8T8R beamforming antennas are designed for high performance LTE networks. The beams are optimized to provide coverage directly to the user and improves data throughput at the cell edge without additional bandwidth. The 65⁰ with 0.65 lambda spacing provides the best option for coverage with high performance in the complete sector.

STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015

RoHS COMPLIANT

CE

FEATURES

- Optimised for 3GPP band 38 & 41
- Designed to work with any Radio vendor at TM8
- AISG 2.0 compatible
- MLOC - Cluster connectors for MIMO
- MLOC - Multiport connectors for 4-5 times faster installation.

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

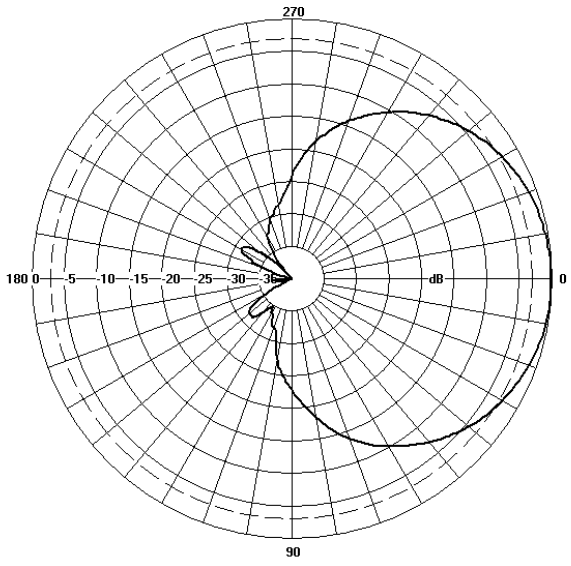
ALPHA WIRELESS

AW3378-E-F

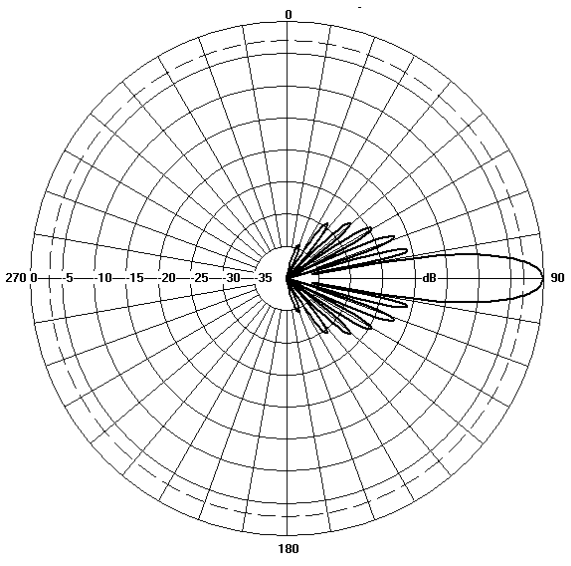
TECHNICAL SPECIFICATION

Electrical Specifications			
Frequency Range		MHz	2496 - 2690
Polarisation		Degree	+/-45° Slant Linear
Gain	Basta	dBi	16.0 +/- 0.5
	Max	dBi	16.5
	Single Column	dBi	16.5 +/- 0.5
	Broadcast Beam	dBi	17.0 +/- 0.5
	Service Beam	dBi	21.0 +/- 0.5
Calibration Network	Coupling Factor	dB	26 +/- 2
	Max amp deviation	dB <	<0.7
	Max phase deviation	Degree <	<5.0°
Azimuth Beamwidth			
	Single Column	3dB BW	65° +/- 7°
	Broadcast Beam	3dB BW	65° +/- 5°
	Service Beam	3dB BW	22° +/- 3°
Azimuth Beam Squint		Degree <	3°
Elevation Beamwidth		Degree	7°
Electrical Downtilt		Degree	T0° - T6°
Electrical Downtilt Deviation		Degree <	1°
Impedance		Ohms	50
VSWR		<	1.43
Return Loss		dB >	15
Isolation		dB >	28
Passive Intermodulation		dBc<	-153
Front to Back Ratio: Total Power +/-30°		dB >	27
Upper Sidelobe Suppression, Peak to 20°		dB >	18
Cross-Polar Discrimination		dB >	16
Maximum Effective Power Per Port		W	50

Representative Pattern Files



Azimuth



Elevation

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

ALPHA WIRELESS

AW3378-E-F

TECHNICAL SPECIFICATION

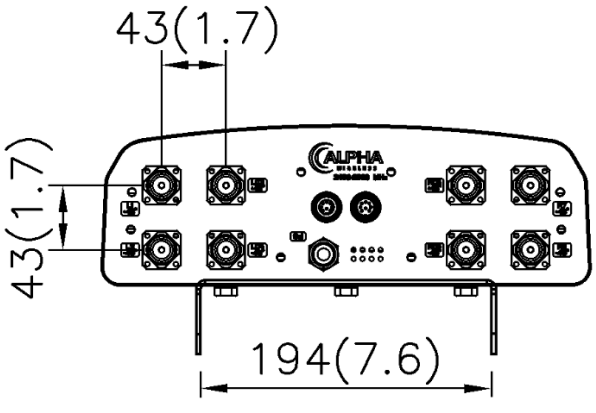
Mechanical Specifications		
Dimensions	mm (in)	1117.5 (43.9) x 320 (12.6) x 100 (3.9) - (LxWxH)
Packing Size (LxWxD)	mm (in)	1180 (46.5) x 395 (15.5) x 220 (8.6)
Net Weight (antenna)	kg (lb)	18 (39.6)
Net Weight (mount)	kg (lb)	1.4 (3)
Shipping Weight	kg (lb)	19.4 (42.6)
Connector Quantity	-	8 / 1
Connector Position	-	Bottom
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	390 (88)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	150 (34)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	UV-Stabilised PVC
Radome Colour	RAL	7035
Product Compliance Environmental	-	RoHS
Lightning Protection	-	DC Grounded
Cold Temperature Survival	°C (°F)	-40 (-40)
Hot Temperature Survival	°C (°F)	70 (158)

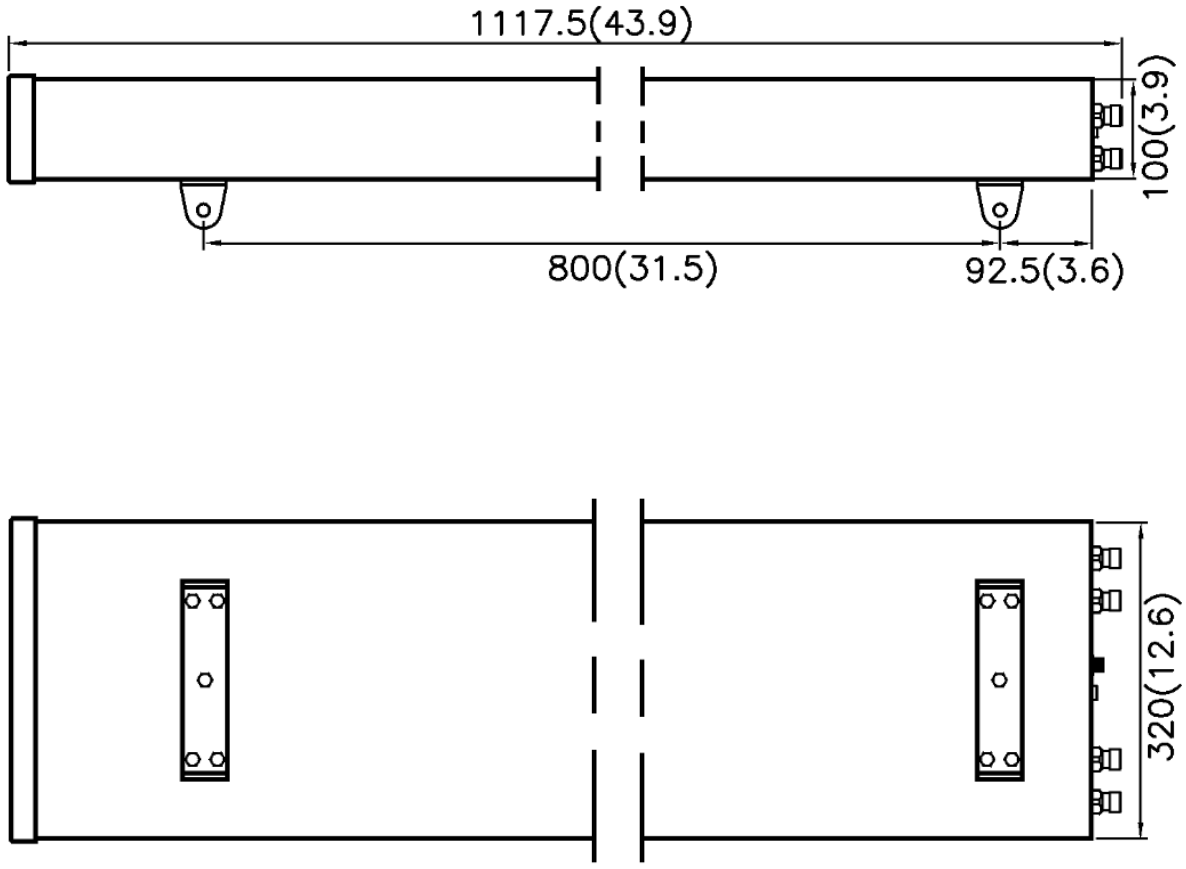
Remote Electrical Tilt (RET) Information	
Enclosed Remote Electrical Tilt (eRET) Information	
Configuration	
2496-2690MHz	One RET Motor Controller
Total Quantity	One RET Motor Controller
Location and Interface	
RET Controller Location	Inside antenna Radome housing.
RET Interface	Pair of AISG 8 Pin DIN 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 Consumption idle	<1W
Power Consumption active	<10W
Protocol	3GPP / AISG 2.0

AW3378-E-F

Mechanical Illustration

All measurements are in mm (in)



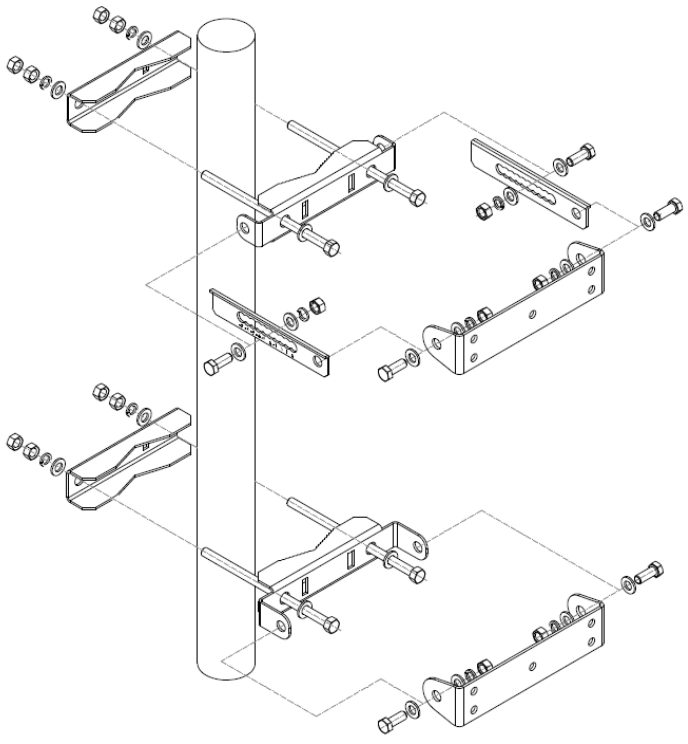


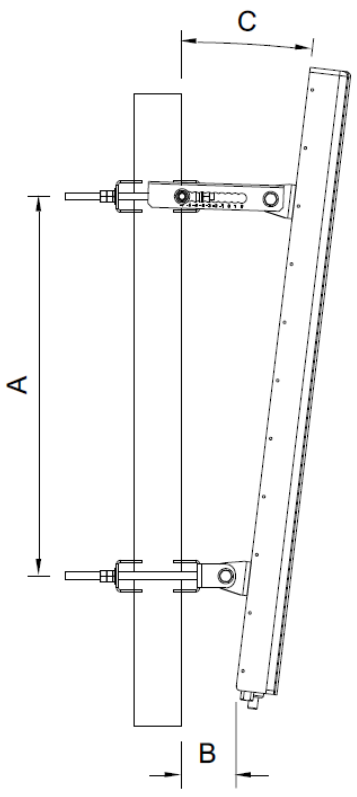
AW3378-E-F

TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-110 M12 Mount Kit (Mount Kit included with antenna)





Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
+1° to -7°	Stainless Steel	50mm-115mm (2" to 4.5")

Ordering Info

Order Code - Antenna	Description
AW3378-E-F	Enclosed Remote Electrical Tilt (eRET) with Mini DIN Connectors
Order Code - Accessories	**Description**
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")
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, Ireland
Post code: R32 DT0A
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

Alpha Wireless