



DATASHEET

AW3795-E-F

Common Name- 4 Port, 34", 33° Azimuth, Dual Sector mechanically offset by 60°

3400 - 3800 MHz	4	eRET	20.2	33°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

This product was developed to offer a narrow Azimuth Beam with two 2-port sectors. 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). Each AW3795 houses two sectors 33° Azimuth beamwidth. The two sectors are orientated mechanically so that there is a 60° angle between the Azimuth Beam directions.

APPLICATION

Integrated remote electrical tilt allows instant optimization to improve coverage and throughput. The horizontally spaced array allows optimum MIMO performance with dual 2x2 operation or receive diversity RF functions. Superior SNIR enables higher modulation schemes for maximum throughput. The AW3795 has been developed for a six-sector site application. Each AW3795 houses two 33° sectors with 60° Azimuth separation. When combined with two other AW3795 units positioned at 120° Azimuth separation, this results in 360° Azimuth coverage with sectors positioned at every 60°.

STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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FEATURES

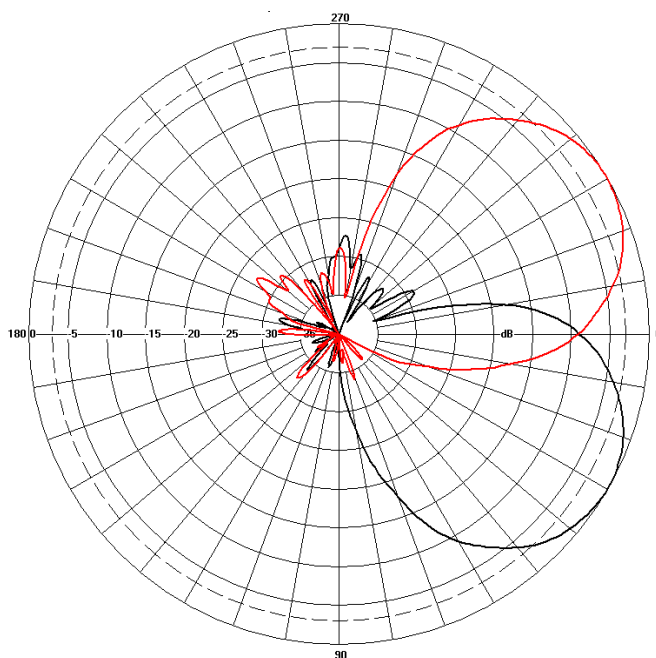
- Two 2x2 MIMO sectors - Azimuth Beam 60° separated.
- Azimuth Beamwidths of 33°.
- Azimuth Sidelobes suppression is <25dB - reducing cochannel interference from adjacent sectors.
- Narrow Azimuth beam to increase site capacity.
- Enhanced tilt range of 0 to 10 degrees.

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

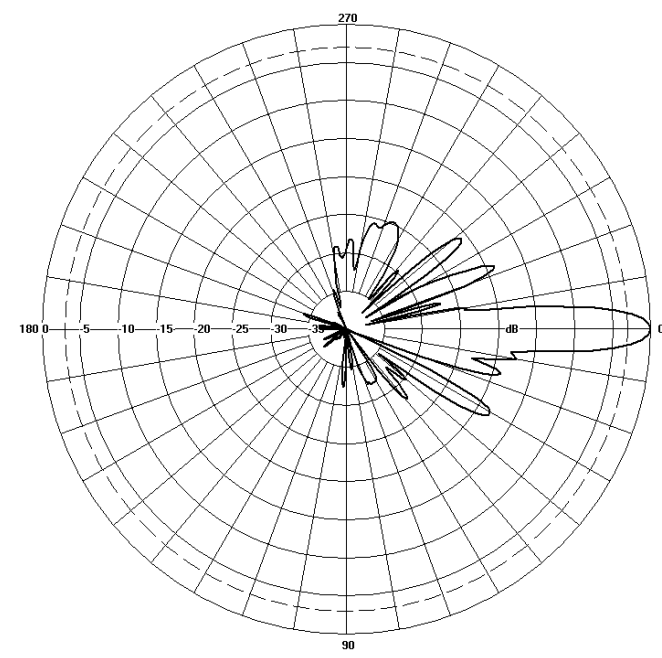
TECHNICAL SPECIFICATION

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		<	1.5
Return Loss		dB>	14
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

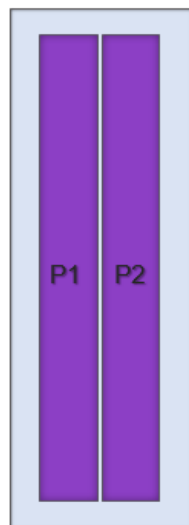
For radiation pattern files, please login at www.alphawireless.com

TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions	mm (in)	855.5 (33.7) x 322 (12.7) x 115 (4.5) - (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)	200 (125)
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



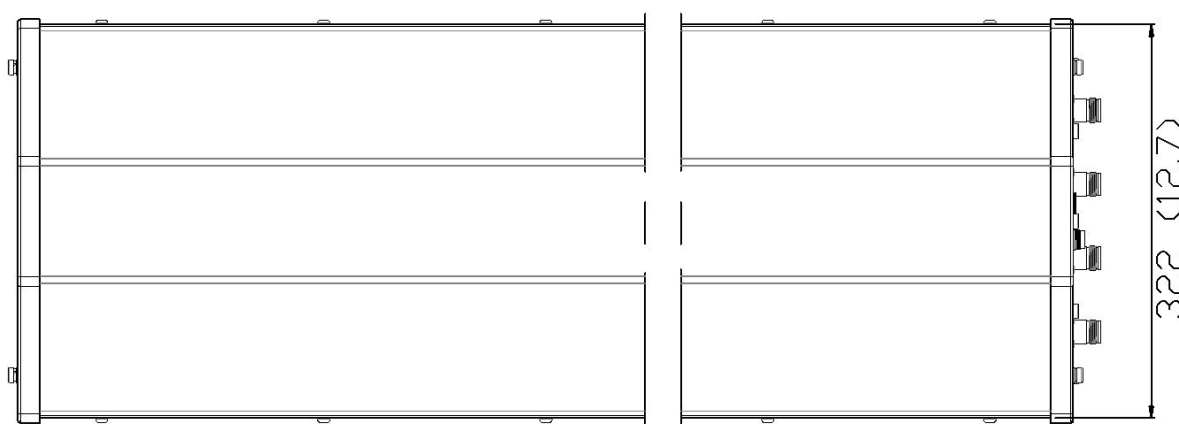
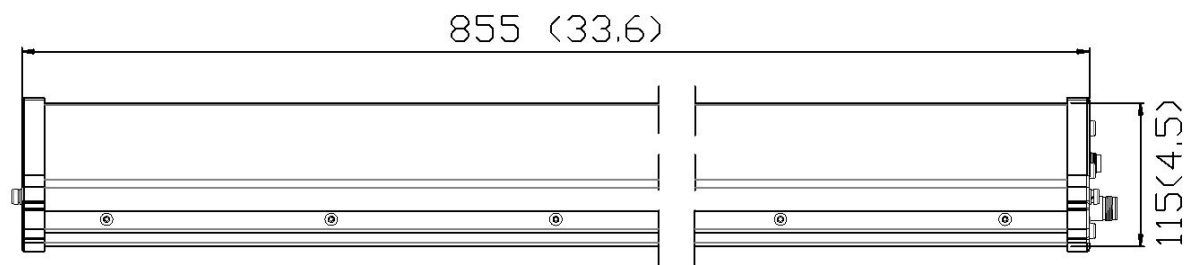
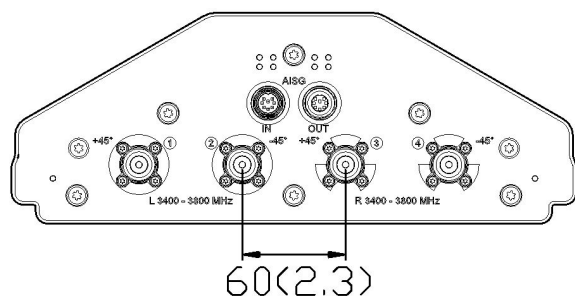
Note: Coloured box sizes do not represent antenna sizes.

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

Configuration	
3400-3800 MHz	One RET for both arrays : P1, P2
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 Idle Mode	< 1W
Power Active Mode	< 10W
Protocol	3GPP / AISG 2.0

Mechanical Illustration

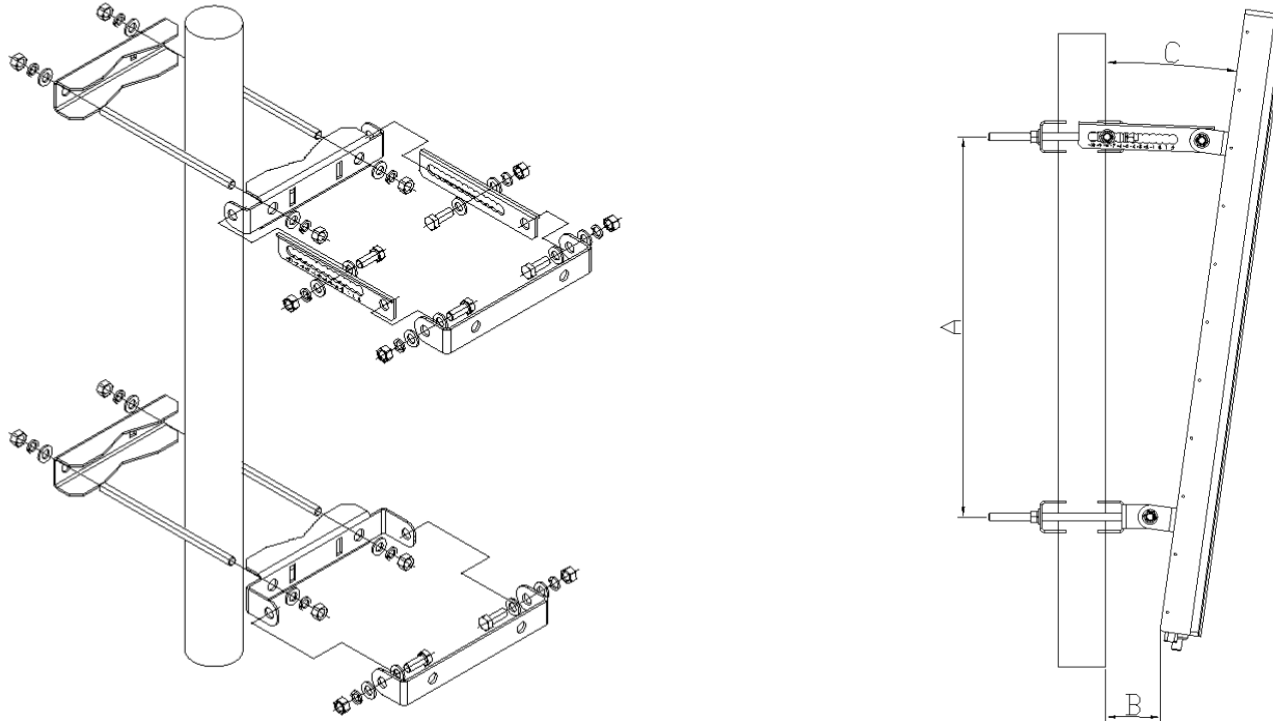
All measurements are in mm (in)



TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-105 Dual Port Mounting 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

AW3795-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

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