



AWB4016-E-F

Common Name 6 Port Multiband Panel 65° eRET

Frequency	Ports	Tilt	Gain	Beamwidth
698-960 MHz	2	eRET	17.0	65°
1695-2690 MHz	4	eRET	17.5	65°

PRODUCT INFORMATION

This is an interleaved multiband panel operating across frequency bands 698-960MHz and 1695-2690MHz.

APPLICATION

This 6 port antenna has been developed to be used as a panel antenna covering 698-960MHz and 1695-2690MHz.

STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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FEATURES

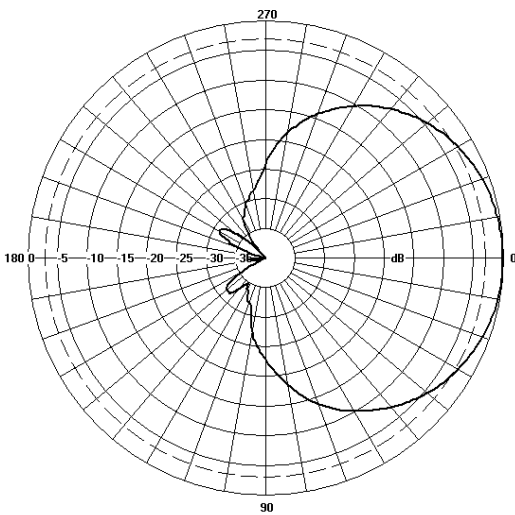
- 2 Ports Low Band 698-960MHz
- 4 Ports Midband 1695-2690MHz
- Electrical Adjustable Tilt
- Excellent upper sidelobe control

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

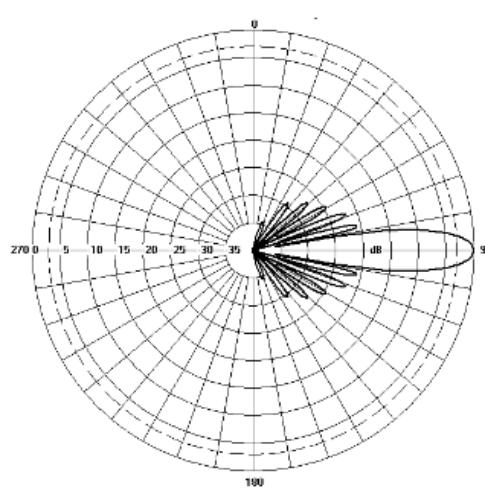
TECHNICAL SPECIFICATION

Electrical Specifications									
Frequency Range	MHz	698-803	790-890	880-960	1695-1920	1920-2170	2170-2500	2500-2690	
Polarisation	Degree	+/- 45° Slant Linear							
Gain	Basta	dBi	16.0 ±0.5	17.0 ±0.5	17.2 ±0.5	16.8 ±0.5	17.2 ±0.5	17.3 ±0.5	17.5 ±0.5
	Max	dBi	16.5	17.5	17.7	17.3	17.7	17.8	18.0
Azimuth Beamwidth	Degree	65° +/- 5°	65° +/- 5°	65° +/- 5°	63° +/- 5°	65° +/- 5°	65° +/- 5°	66° +/- 5°	
Elevation Beamwidth	Degree	9.3° +/- 0.8°	8.2° +/- 0.8°	7.4° +/- 0.8°	7.8° +/- 0.5°	7.0° +/- 0.5°	6° +/- 0.5°	5.5° +/- 0.5°	
Electrical Downtilt	Degree	T0° - T10°	T0° - T10°	T0° - T10°	T0° - T10°	T0° - T10°	T0° - T10°	T0° - T10°	
Electrical Downtilt Deviation	Degree<	1°	1°	1°	1°	1°	1°	1°	
Impedance	Ohms	50							
VSWR	<	1.5							
Return Loss	dB>	14							
Isolation	dB>	28	28	28	28	28	28	28	
Front to Back Ratio: Total Power +/-30°	dB>	23	25	25	25	25	25	25	
Passive Intermodulation	dBc<	-150	-150	-150	-150	-150	-150	-150	
Upper Sidelobe Suppression, Peak to 20°	dB>	16	16	16	18	18	18	18	
Cross-Polar Discrimination	dB>	15	15	15	15	15	15	15	
Maximum Effective Power Per Port	W	300	300	300	250	250	250	250	

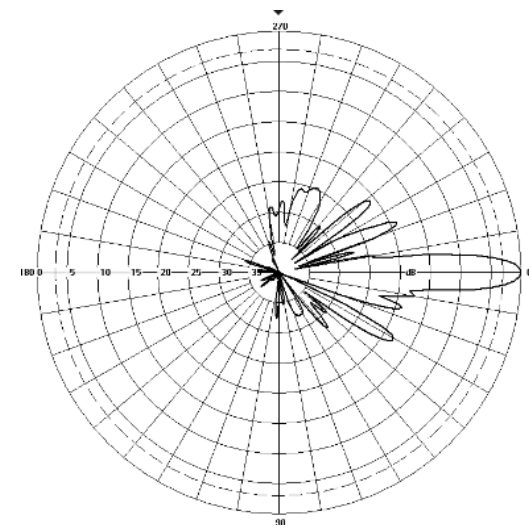
Representative Pattern Files



Azimuth



Low Band



Mid Band

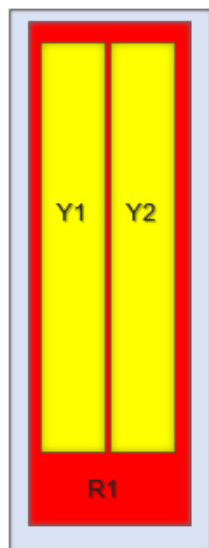
Elevation

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

TECHNICAL SPECIFICATION

Mechanical Specifications		
Dimensions	mm (in)	2600(102.4) x 350(13.8) x 200(7.9) (LxWxH)
Packing Size (LxWxD)	mm (in)	2780(109.4) x 440(17.3) x 300(11.8) (LxWxH)
Net Weight (antenna)	kg (lb)	28.0
Shipping Weight	kg (lb)	38.0
Connector Type (Female)	-	4.3-10
Connector Position	-	Bottom
Connector Quantity	-	6 (2 Ports Low Band , 4 Ports Mid Band)
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	775 (174.2)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	410 (92.2)
Survival Wind Speed	km/h (mph)	241 (150)
Radome Material	-	RFP
Radome Colour	-	9010
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



Note: Coloured box sizes do not represent antenna sizes.

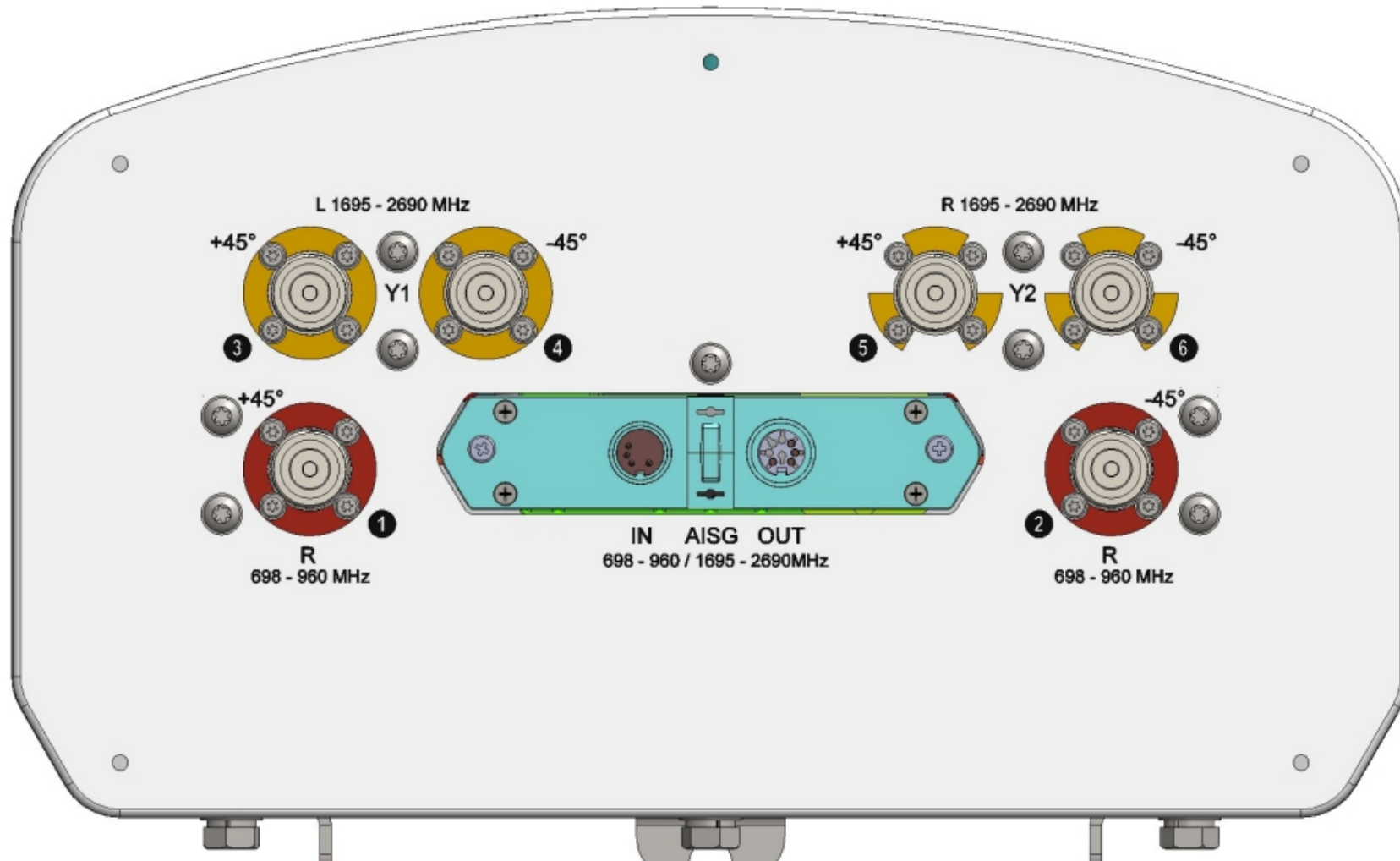
Array	Frequency MHz	Ports	RET
R1	612 - 896	1 - 2	1
Y1	1695 - 2690	3 - 4	2
Y2		5 - 6	3

Configuration	
612 - 896MHz	One RET for array R1
1695 - 2690MHz	One RET for each array: Y1, Y2
Total Quantity	Three 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

TECHNICAL SPECIFICATION

Mechanical Illustration

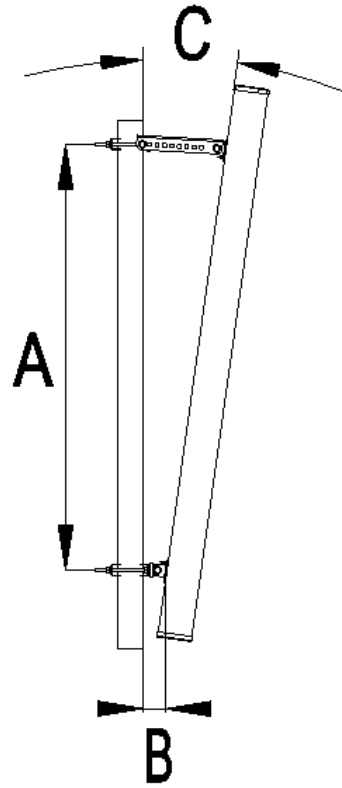
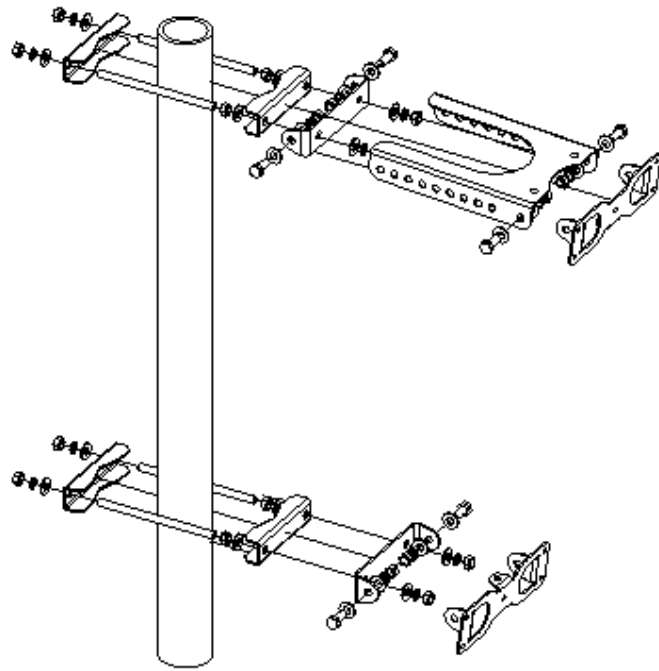
All measurements are in mm (in)



TECHNICAL SPECIFICATION

Mounting Bracket Kit

3 inch Bracket description



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
0	Galvanized Steel	50mm-115mm (2" to 4.5")

TECHNICAL SPECIFICATION**Ordering Info****Order Code - Antenna**

AWB4016-E-F

Order Code - Accessories

AW1012-2-FM-FM

AW1012-2-FM-NM

AW1014-2-FM-TM

PADC 1000

AW0326-3-PM-PF

AW0326-10-PM-PF

AW0326-25-PM-PF

AW0326-50-PM-PF

Description

Enclosed Remote Electrical Tilt (eRET) with 4.3-10 Connectors

Description

RF Jumper Cable, connector types 4.3-10 (m) / 4.3-10 (m), length 2 metres (6'6")

RF Jumper Cable, connector types 4.3-10 (m) / N-Type (m), length 2 metres (6'6")

RF Jumper Cable, connector types 4.3-10 (m) / Nex10 (m), length 2 metres (6'6")

Portable AISG Controller

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

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

AISG Jumper Cable Lengths 25 metres (82')

AISG Jumper Cable Lengths 50 metres (164')

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