



## 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

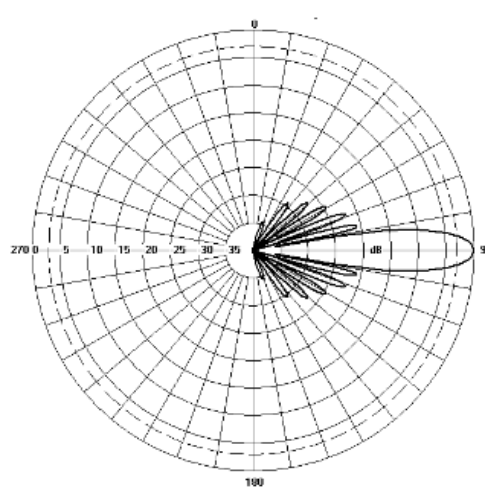
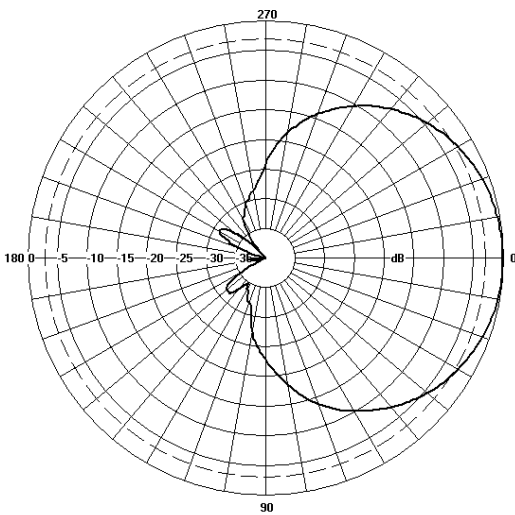
- 2 Ports Low Band 698-960MHz
- 4 Ports Midband 1695-2690MHz
- Electrical Adjustable Tilt
- Excellent upper sidelobe control

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

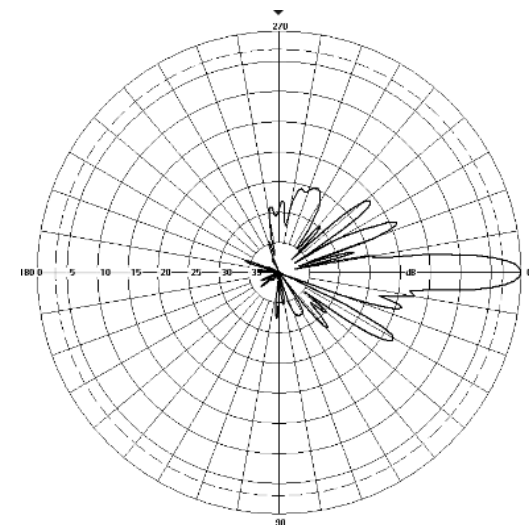
## TECHNICAL SPECIFICATION

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



Low Band



Mid Band

Azimuth

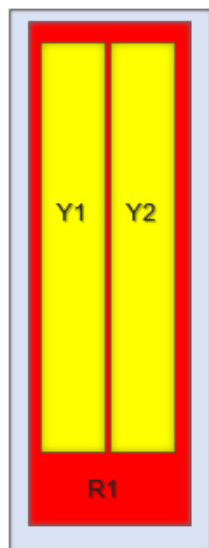
Elevation

For radiation pattern files, please login at [www.alphawireless.com](http://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.

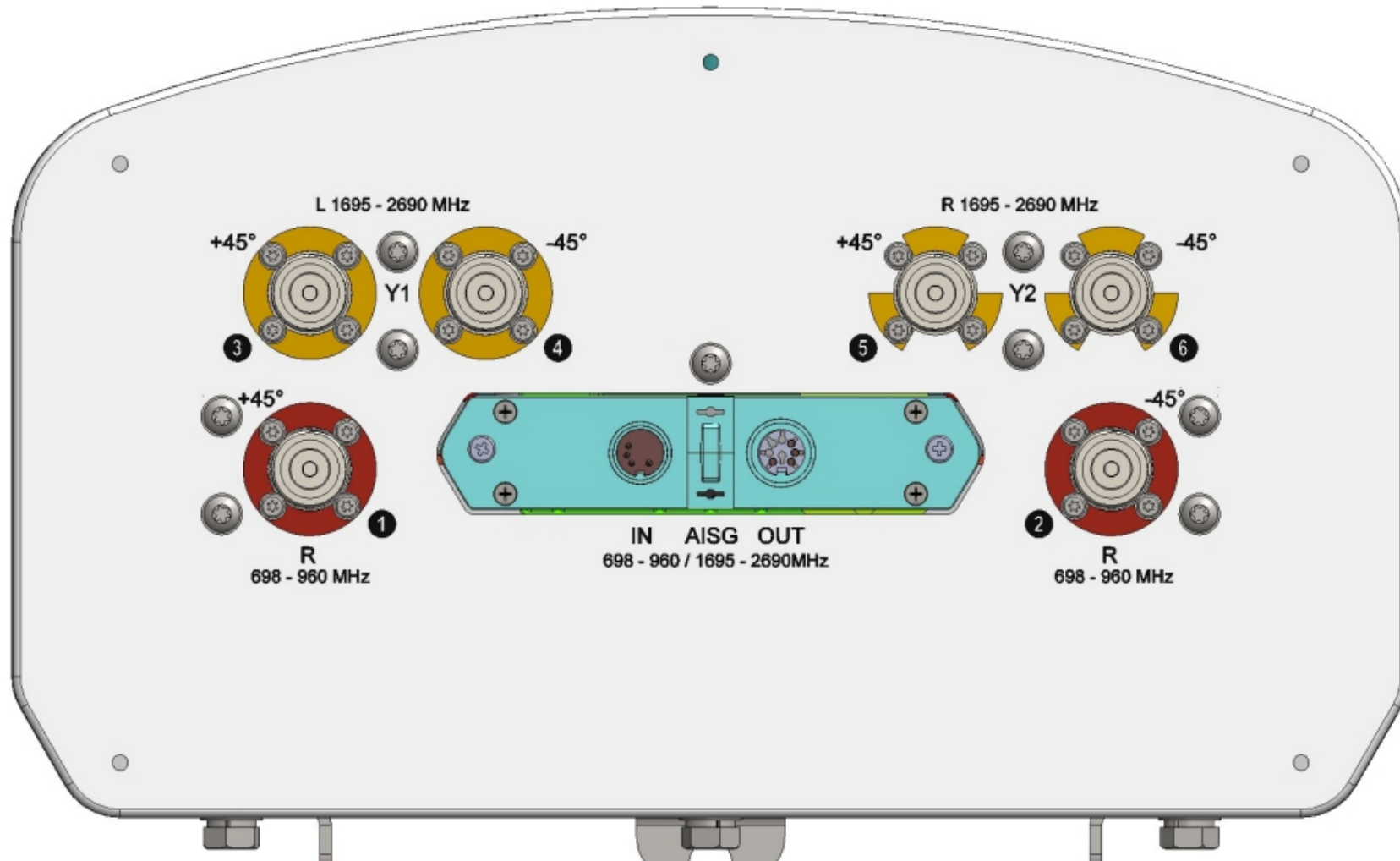
Array	Frequency MHz	Ports	RET
R1	612 - 896	1 - 2	1
Y1	1695 - 2690	3 - 4	2
Y2		5 - 6	3

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

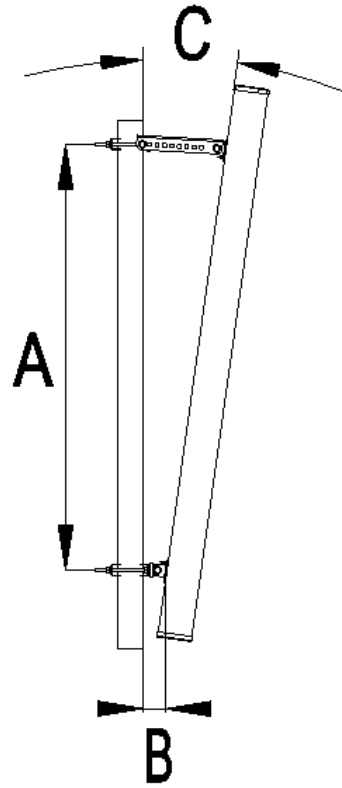
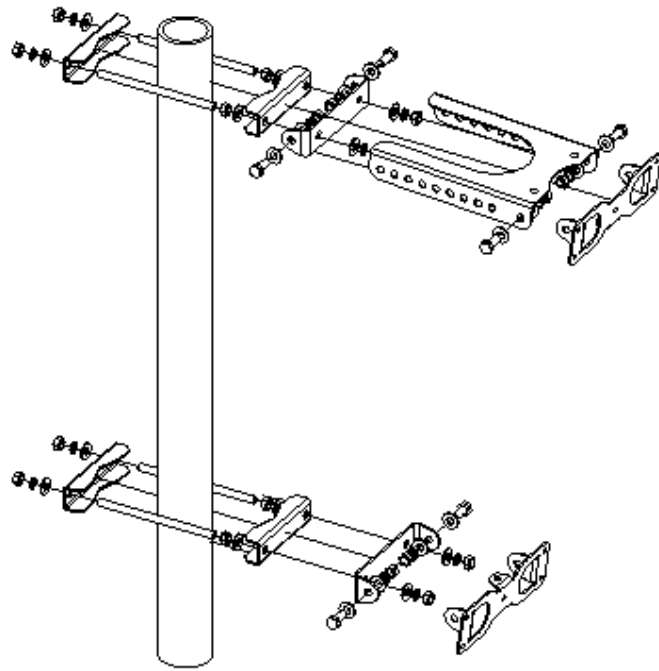
All measurements are in mm (in)



## TECHNICAL SPECIFICATION

### Mounting Bracket Kit

CL-V-219



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
0° to -8°	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')

**Enquiries**

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