



# DATASHEET

## AW3916-E-F

Common Name- 2 Port, Low Band, 65° Panel with eRET

380 -470MHz	2	eRET	12	65°
Frequency	Ports	Tilt	Gain	Beamwidth

### PRODUCT INFORMATION

This dual port antenna is developed to cover low band 380-470MHz.

### APPLICATION

Alpha Wireless panel antennas provide wireless network operators the highest performance and quality. Panel antennas are generally used in sectorized applications. These antennas are designed for optimal radiation patterns improving overall network performance.

There are a number of mounting options available making deployments on towers, utility poles, walls and other vertical structures possible. The 2 port antenna provides 2x2 MIMO for improved data throughput.



### STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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### FEATURES

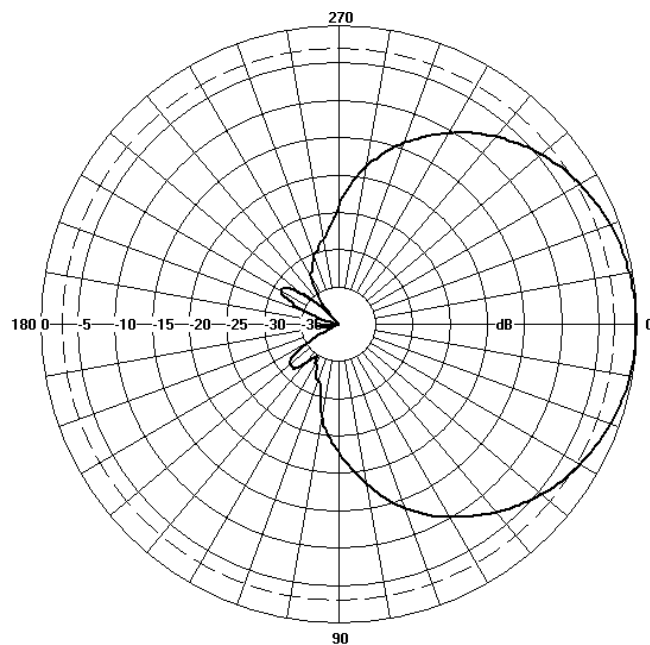
- Low band antenna 380-470MHz.
- 2x2 MIMO for maximum throughput.
- Dual Cross polarization antenna +/-45°
- Enhanced tilt range of 6 to 12 degrees.

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

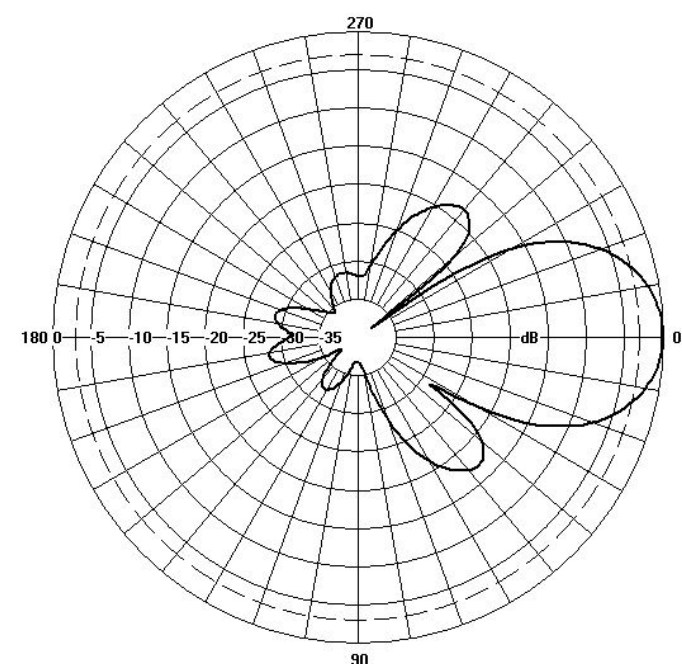
## TECHNICAL SPECIFICATION

Electrical Specifications				
Frequency Range			MHz	380 - 470
Polarisation			Degree	+/- 45° Slant Linear
Gain	Basta		dBi	12.0±0.5
	Max		dBi	12.5
Azimuth Beamwidth			Degree	65°
Elevation Beamwidth			Degree	25°
Electrical Downtilt			Degree	T6° - T12°
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>	23
Passive Intermodulation			dBc<	150
Cross-Polar Discrimination (0°)			dB>	15
Maximum Effective Power Per Port			W	300

## Representative Pattern Files



Azimuth



Elevation

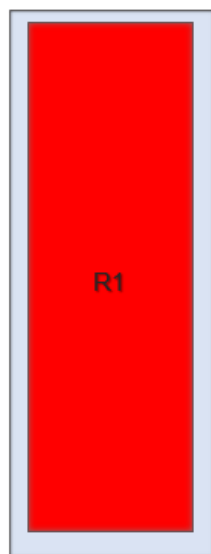
For radiation pattern files, please login at [www.alphawireless.com](http://www.alphawireless.com)

## TECHNICAL SPECIFICATION

## Mechanical Specifications

Dimensions	mm (in)	1509 (59.4) x 499 (19.6) x 164 (6.5) - (LxWxD)
Packing Size (LxWxD)	mm (in)	1725 (67.9) x 569 (22.4) x 244 (9.6)
Net Weight (antenna)	kg (lb)	21 (46.3)
Net Weight (mount)	kg (lb)	5.5 (12.1)
Shipping Weight	kg (lb)	31 (68.3)
Connector Type (Female)	-	4.3-10
Connector Quantity	-	2
Connector Position	-	Bottom
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	950 (213)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	295 (66)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	UV-Stabilised PVC
Radome Colour	RAL	Light Gray
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



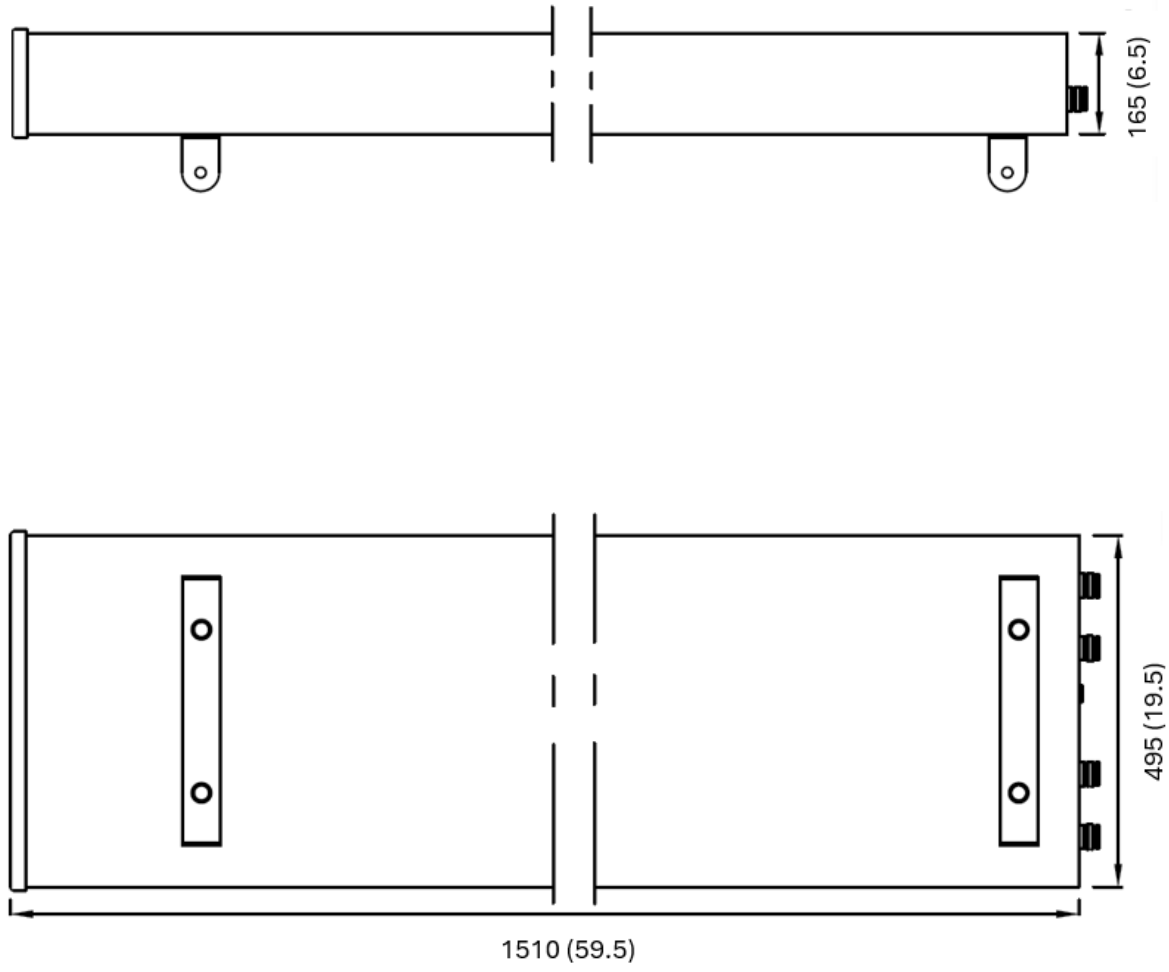
Note: Coloured box sizes do not represent antenna sizes.

Array	Frequency MHz	Ports	RET ID
R1	380 – 470	1 – 2	1

Configuration	
380-470 MHz	One RET for array: R1
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

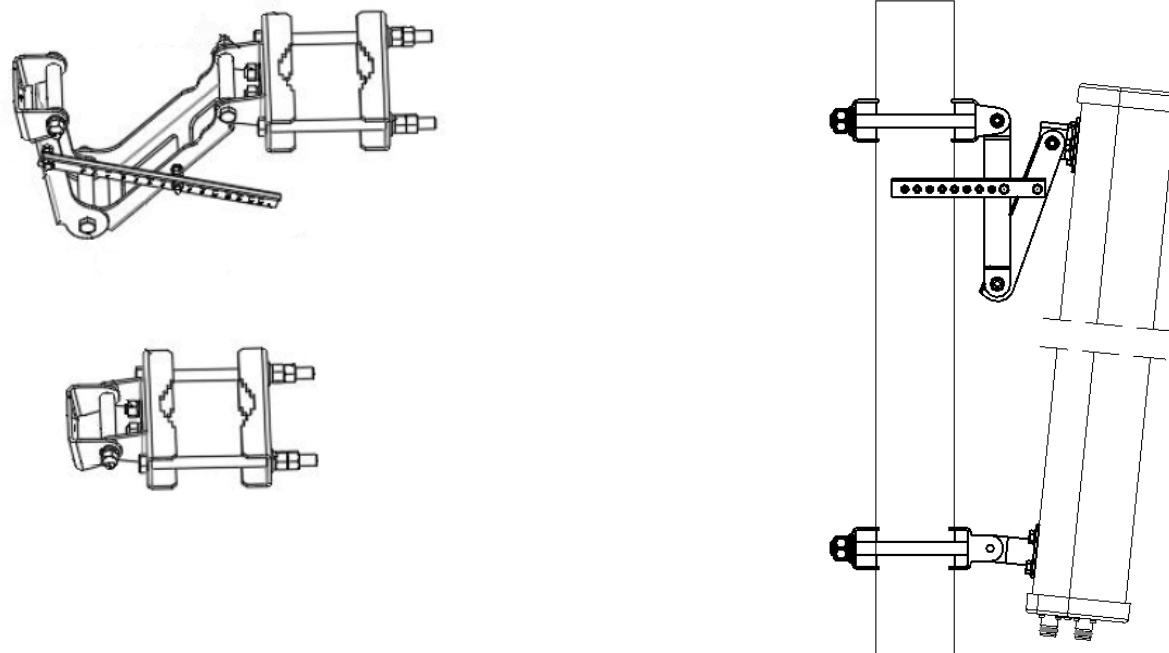
All measurements are in mm (in)



## TECHNICAL SPECIFICATION

### Mounting Bracket Kit

CL-V-218 Adjustable Mount Kit (Mount Kit included with antenna)



Mounting Kit Tilt Range	Mounting Kit Material	Mounting Kit Pole Diameter
0° to 10°	Galvanised Steel	50mm-115mm (2" to 4.5")

### Ordering Info

#### Order Code - Antenna

AW3916-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')

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