



DATASHEET

AW3159-M-F

Common Name- 2 Port,30", B42, 43 & 48 - 65° - MET

3300-3800MHz	2	MET	17.9	65°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

This solution was developed for fixed wireless applications requiring variable electrical tilt operates between 3300-3800MHz covering LTE Bands B42, 43 & 48 and 5G NR Band n78.

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.

STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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FEATURES

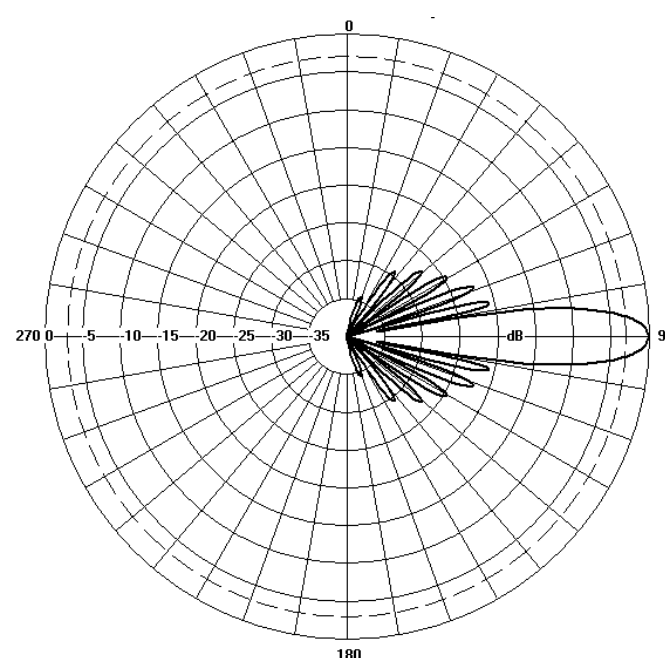
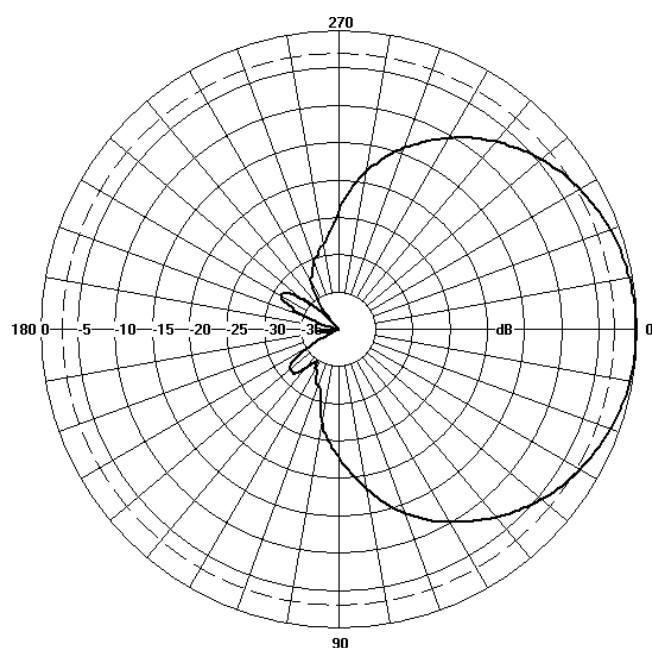
- Wide-band antenna that covers LTE Bands 42, 43 & 48 and 5G NR Band n78. Includes CBRS Band.
- Dual Cross polarization antenna +/- 45°
- Enhanced tilt range of 0 to 10 degrees
- Manufactured in Ireland

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

TECHNICAL SPECIFICATION

Electrical Specifications			
Frequency Range		MHz	3300-3800MHz
Polarisation		Degree	+/-45° Slant Linear
Gain	Basta	dBi	17.4±0.5
	Max	dBi	17.9
Azimuth Beamwidth		Degree	65°
Azimuth Beam Squint		Degree<	3°
Elevation Beamwidth		Degree	7°
Electrical Downtilt		Degree	T0° -T10°
Electrical Downtilt Deviation		Degree<	1°
Impedance		Ohms	50
VSWR		<	1.5
Return Loss		dB>	14
Isolation		dB>	28
Front to Back Ratio: Total Power +/-30°		dB>	30
Passive Intermodulation		dBc<	150
Upper Sidelobe Suppression, Peak to 20°		dB>	18
Cross-Polar Discrimination (0°)		dB>	16
Maximum Effective Power Per Port		W	150

Representative Pattern Files



Azimuth

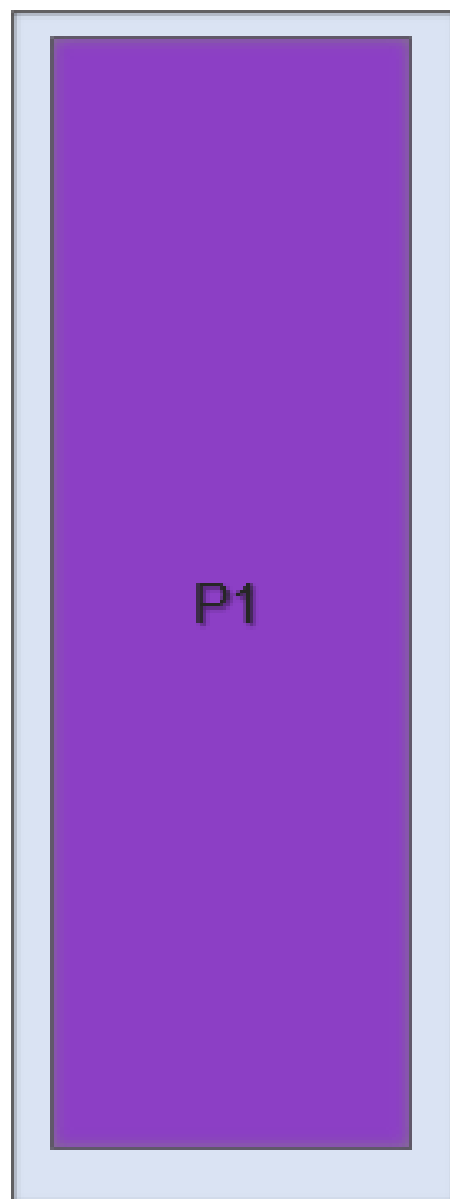
Elevation

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

TECHNICAL SPECIFICATION

Mechanical Specifications		
Dimensions	mm (in)	750 (29.5) x 160 (6.2) x 81 (3.1) - (LxWxH)
Packing Size (LxWxD)	mm (in)	823 (32.4) x 240 (9.4) x 178 (7)
Net Weight (antenna)	kg (lb)	6 (13.2)
Net Weight (mount)	kg (lb)	1.4 (3.1)
Shipping Weight	kg (lb)	7.4 (16.3)
Connector Type (Female)	-	4.3-10
Connector Quantity	-	2
Connector Position	-	Bottom
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	130 (30)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	80 (18)
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

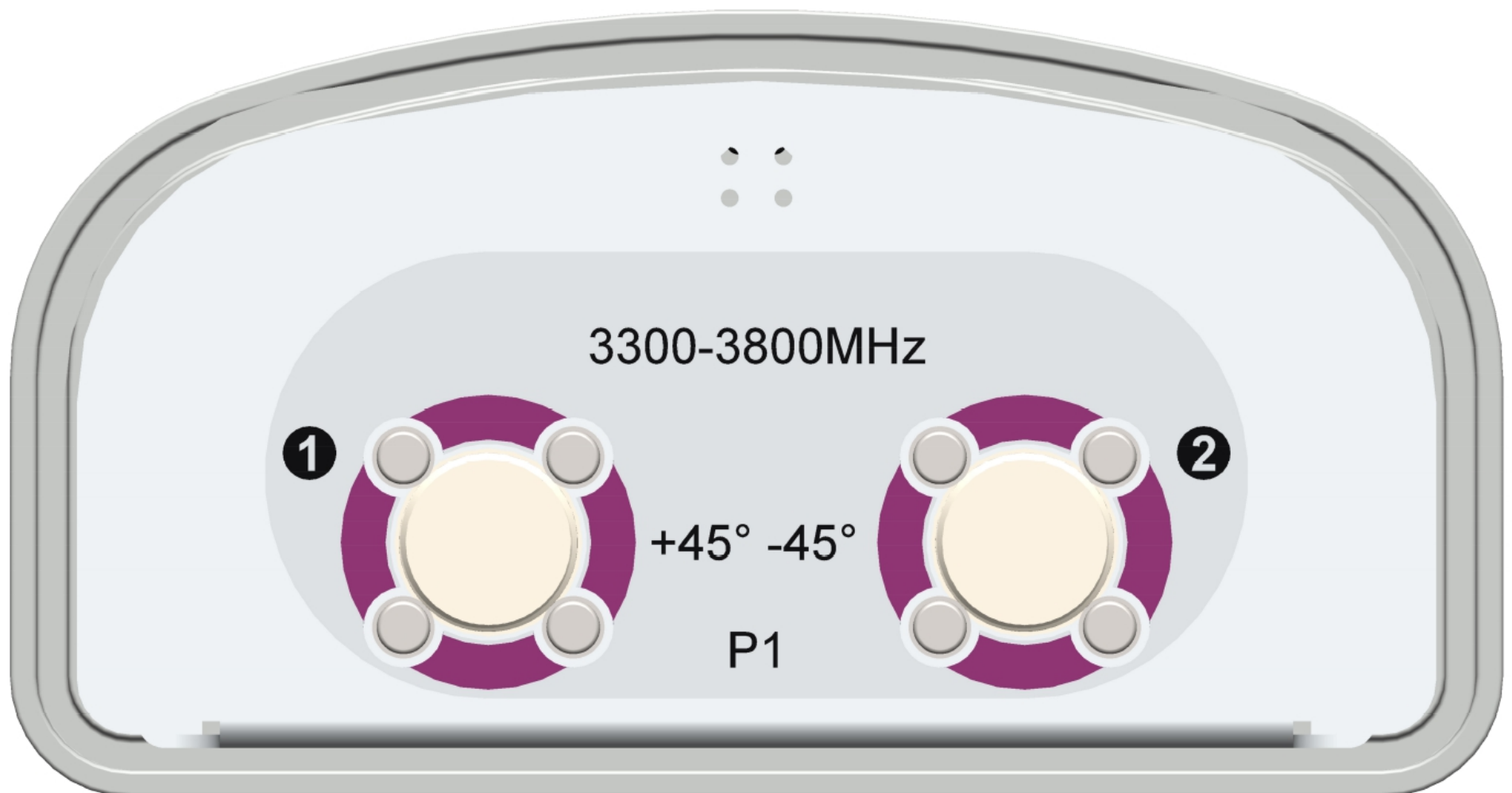
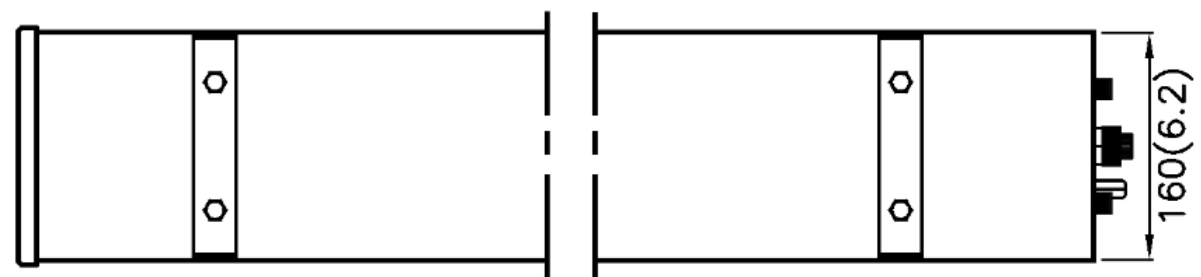
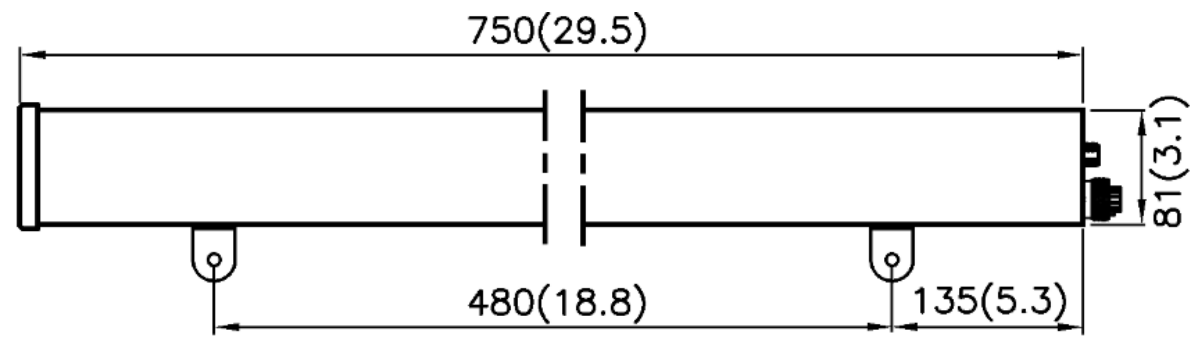
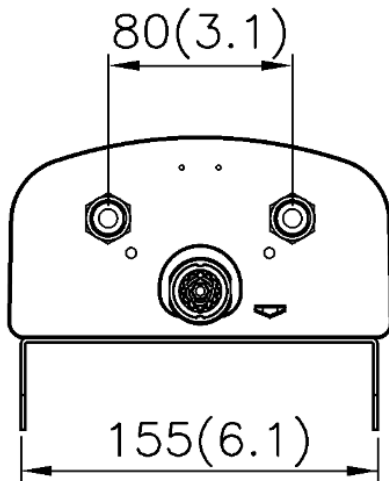


Array	Frequency MHz	Ports	MET ID
P1	3300 – 3800	1 – 2	1

Note: Coloured box sizes do not represent antenna sizes.

Mechanical Illustration

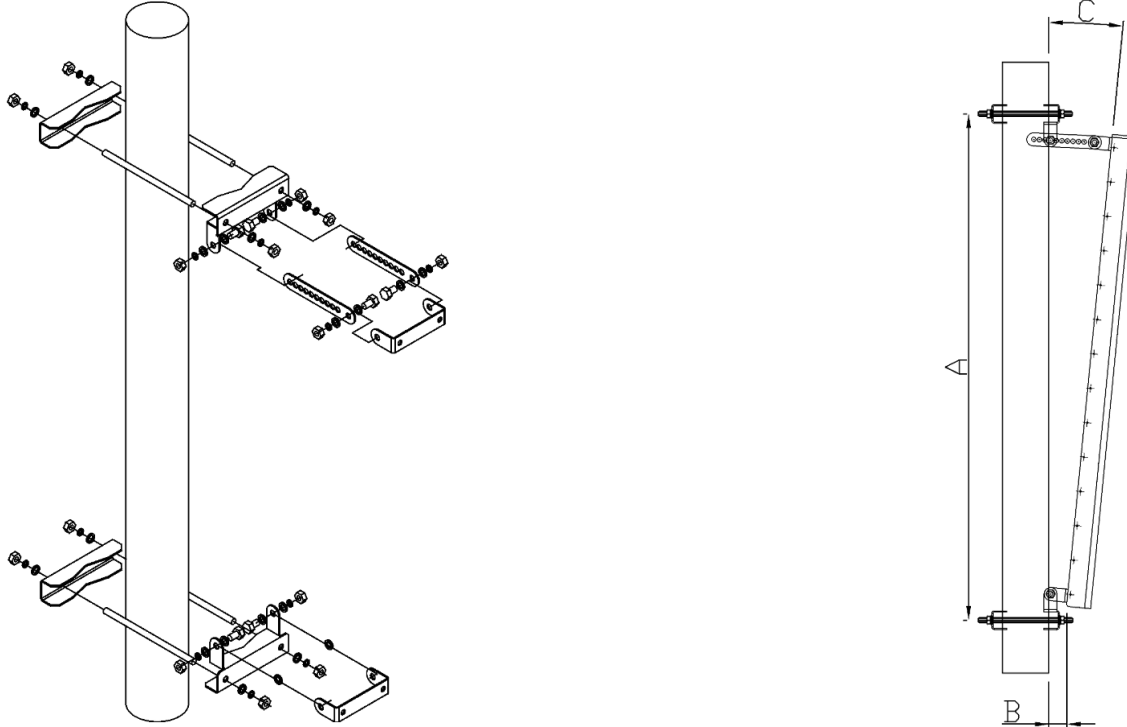
All measurements are in mm (in)



TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-102 Mount 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

AW3159-M-F

Description

Manual Electrical Tilt (MET) 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")

Enquiries

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