



DATASHEET

AW3162-M-F

Common Name- 4 Port, 30", B42, 43 & 48 - 90° - MET

3300-3800MHz	4	MET	16.0	90°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

The **AW3162** is a 2-port, 90° single band panel covering the 3300-3800 MHz frequency band and with electrical variable tilt. The antenna leverages Alpha Wireless's advanced 3.5 GHz CBRS technology with superior pattern control to suppress all upper elevation side lobes for all tilts and frequencies. The AW3162 delivers 20 dB of upper side lobe suppression and 30 dB front to back ratio to mitigate interference in LTE networks, improve cell edge performance, and enable high levels of spectral efficiency. In combination with the elevation pattern's null filling, this sector antenna provides consistent coverage no matter the terrain the network is being deployed in.

There are two variable tilt models, one offering mechanical tilt adjustment and the other offering remote electrical tilt adjustment. Remote electrical tilt adjustment enables elevation tilt adjustment without the need for site visits or tower climbs. The AW3162 provides sectorized coverage for 4G LTE and 5G private networks using the 3.5 GHz Citizens Broadband Radio Service (CBRS) and C-band spectrum (Bands n48, n78, 42, 43, and 52).

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. A horizontally spaced array provides enhance MIMO performance with full 4x4 operation or receive diversity RF functions.

STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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FEATURES

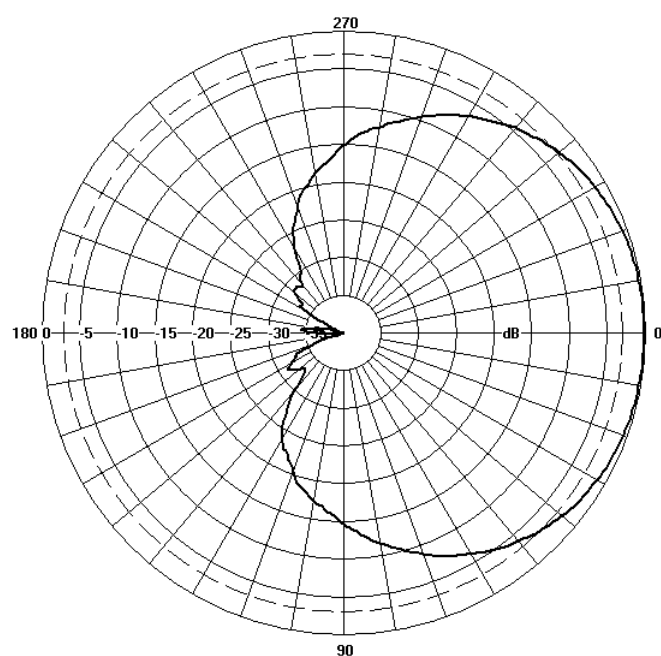
- Wide-band antenna for 3GPP bands 42, 43 & 48.
- 4x4 MIMO for maximum throughput
- Enhanced tilt range of 0 to 10 degrees
- Manufactured in Ireland

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

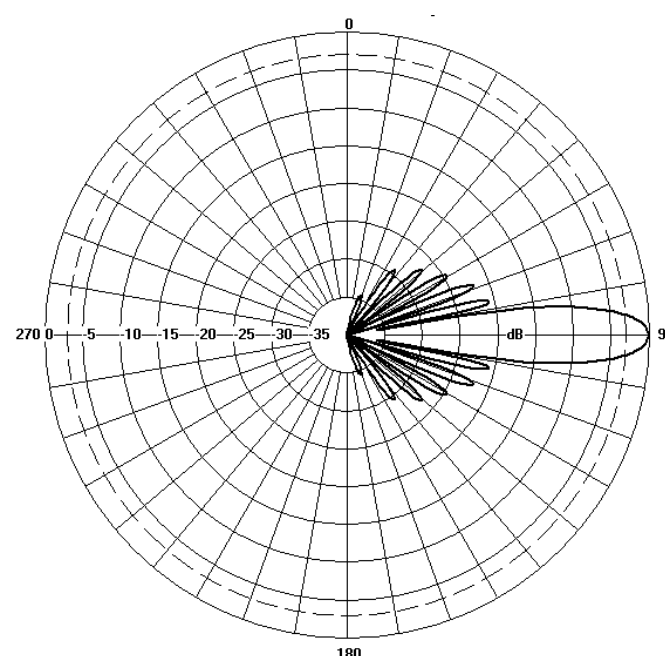
TECHNICAL SPECIFICATION

Electrical Specifications				
Frequency Range			MHz	3300-3800MHz
Polarisation			Degree	+/- 45° Slant Linear
Gain	Basta		dBi	15.8±0.5
	Max		dBi	16.3
Azimuth Beamwidth			Degree	90°
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>	25
Front to Back Ratio: Total Power +/-30°			dB>	25
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

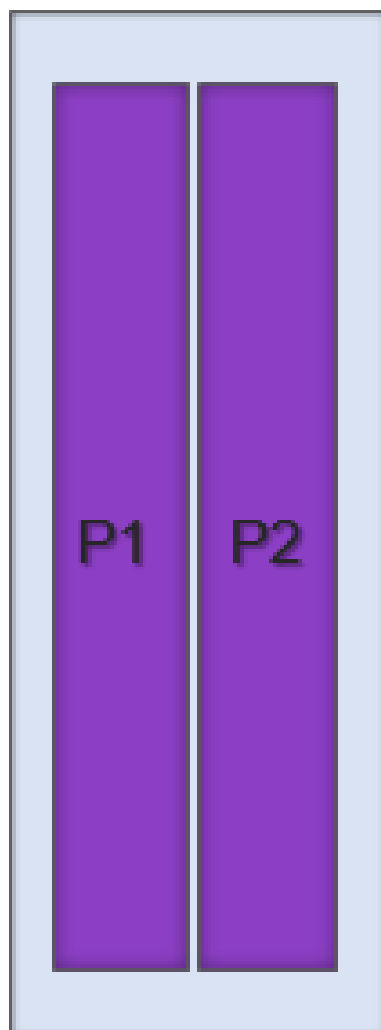
For radiation pattern files, please login at www.alphawireless.com

TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions	mm (in)	750 (29.5) x 280 (11) x 85 (3.3) - (L x W x H)
Packing Size (LxWxD)	mm (in)	823 (32.4) x 340 (13.3) x 178 (7)
Net Weight (antenna)	kg (lb)	9 (19.8)
Net Weight (mount)	kg (lb)	1.5 (3.4)
Shipping Weight	kg (lb)	10.5 (23.2)
Connector Type (Female)	-	4.3-10
Connector Quantity	-	4
Connector Position	-	Bottom
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	220 (50)
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

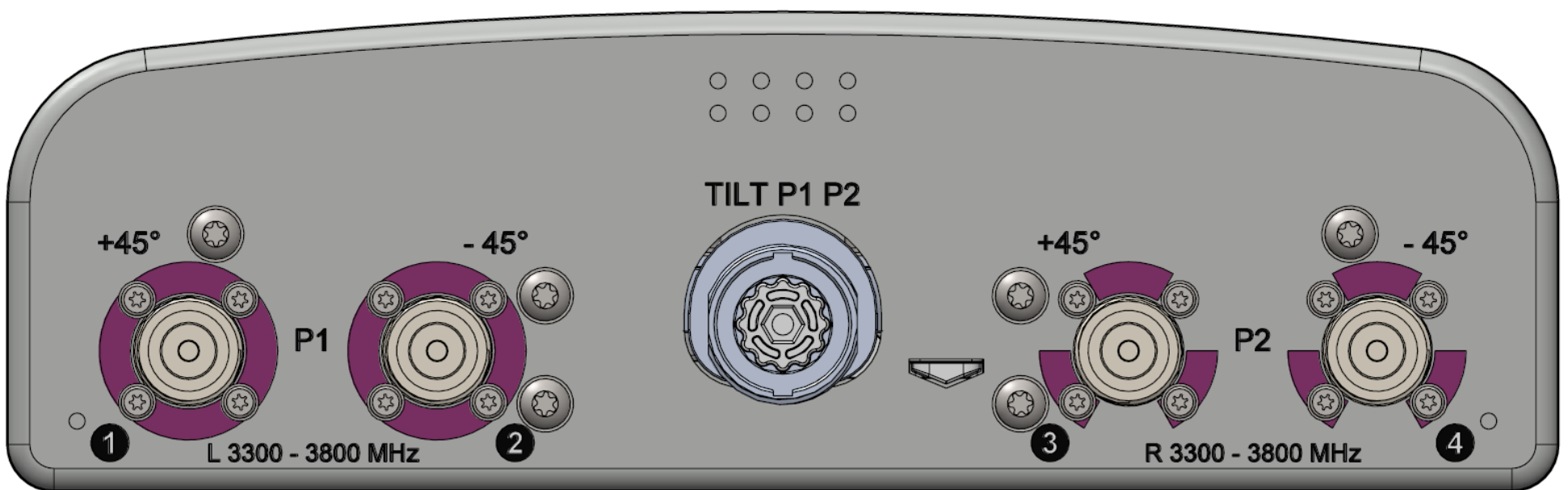
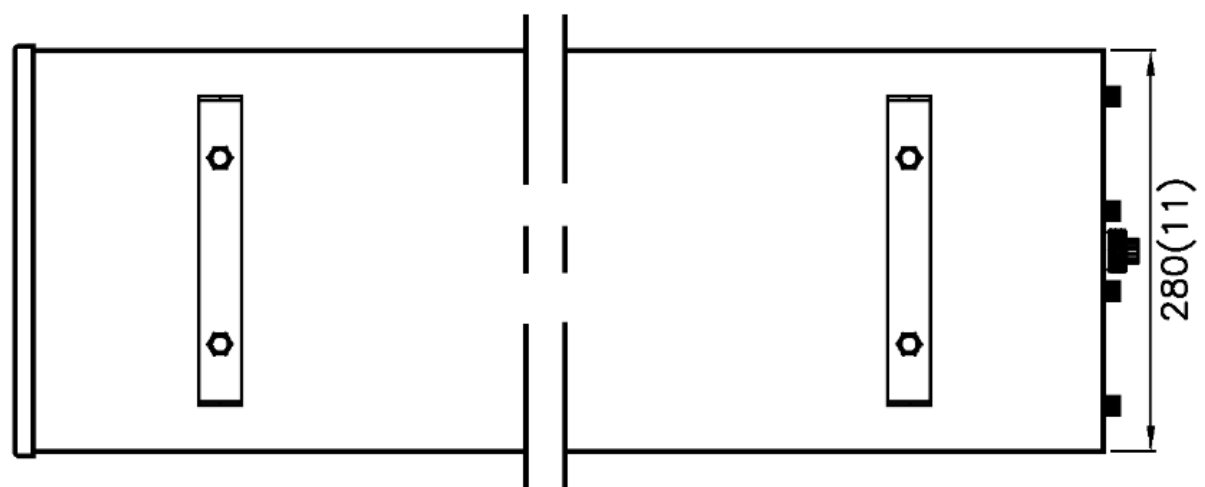
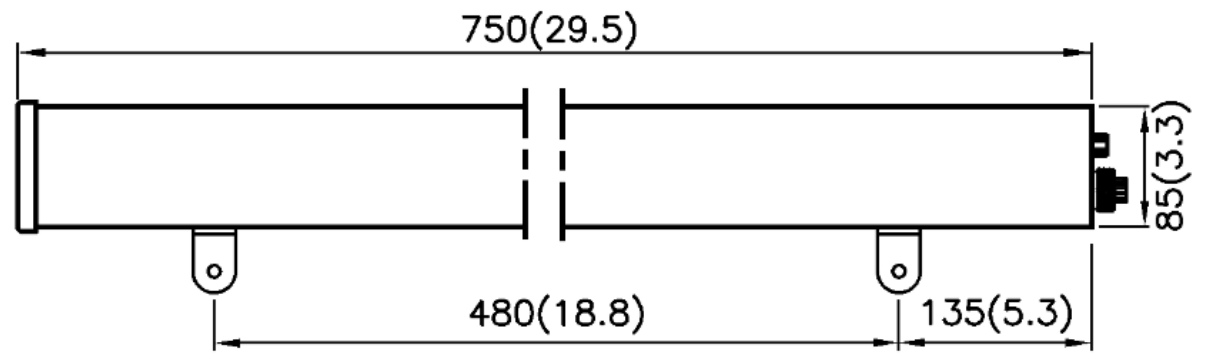
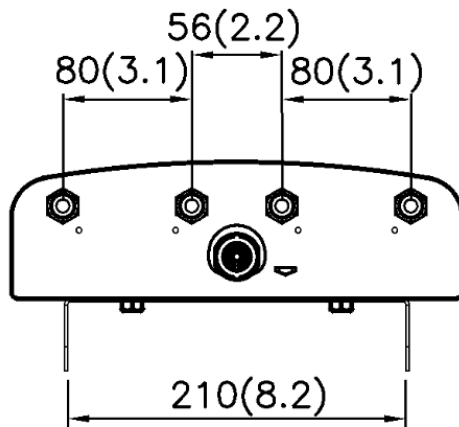


Array	Frequency MHz	Ports	MET ID
P1	3300 – 3800	1 – 2	1
P2	3300 – 3800	3 – 4	1

Note: Coloured box sizes do not represent antenna sizes.

Mechanical Illustration

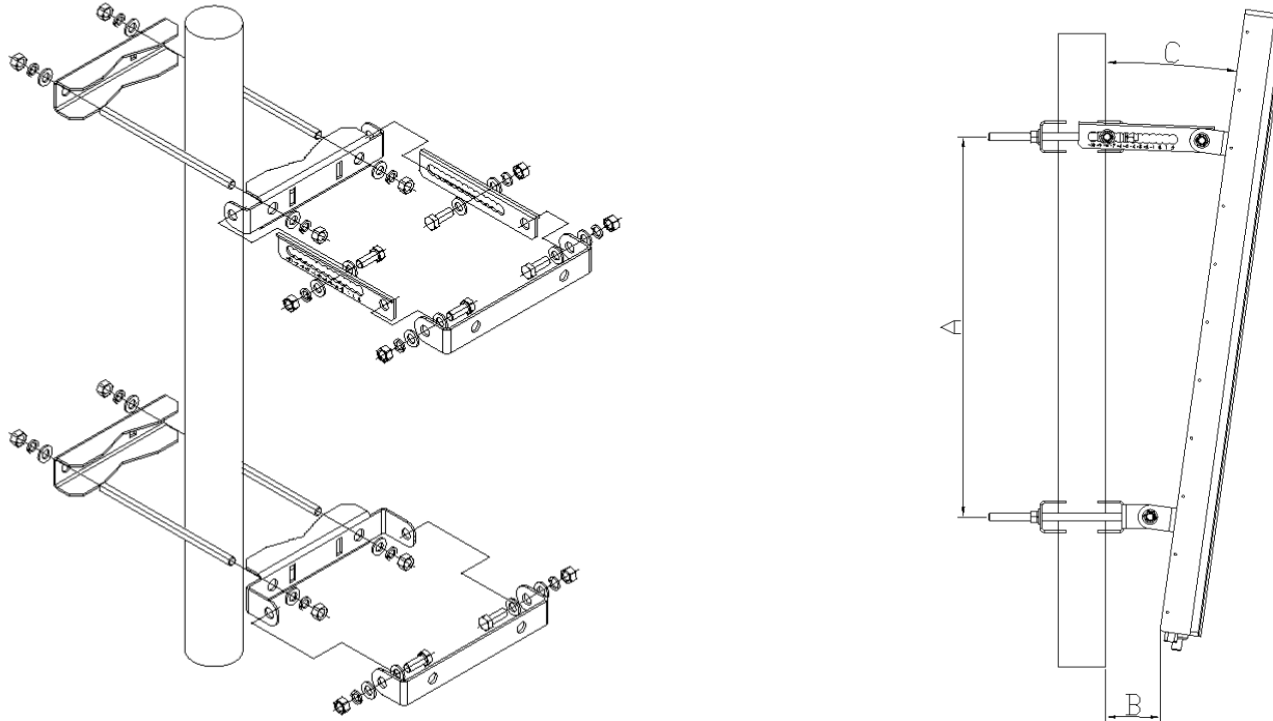
All measurements are in mm (in)



TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-186 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

AW3162-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")

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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