



DATASHEET

AW3161

Common Name- 4 Port B42, 43 & 48 - 65° - MET/eRET

3300-3800MHz	4	MET / eRET	17.0	65°
Frequency	Ports	Tilt	Gain	Beamwidth

PRODUCT INFORMATION

This solution was developed for 4x4 fixed wireless applications requiring variable electrical tilt.

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

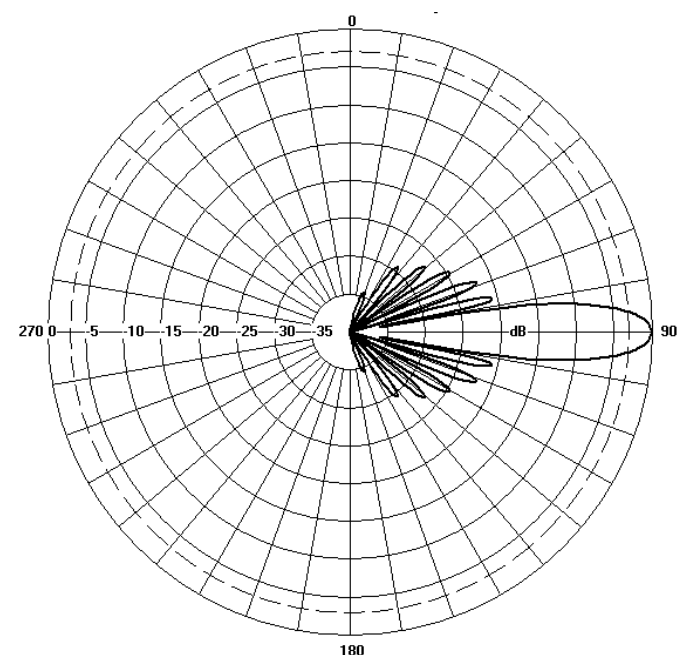
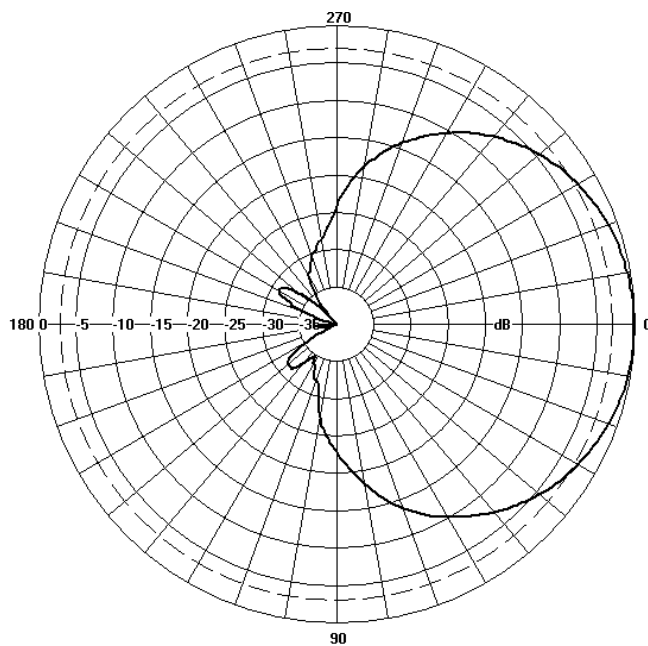
- Wide-band antenna for 3GPP bands 42, 43 & 48.
- 4x4 MIMO for maximum throughput.
- Enhanced tilt range of 0 to 10 degrees.
- Choice of Connector Types - 4.3-10 or N Type.

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		
Min Tilt	dBi	17.3 (T0)
Mid Tilt	dBi	17.0 (T5)
Max Tilt	dBi	16.7 (T10)
Overall Tilts	dBi	17.0
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>	25
Front to Back Ratio: Total Power +/-30°	dB>	30
Upper Sidelobe Suppression, Peak to 20°	dB>	18
Cross-Polar Discrimination	dB>	16
Maximum Effective Power Per Port	W	150

Radiation Pattern Files



Azimuth

Elevation

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

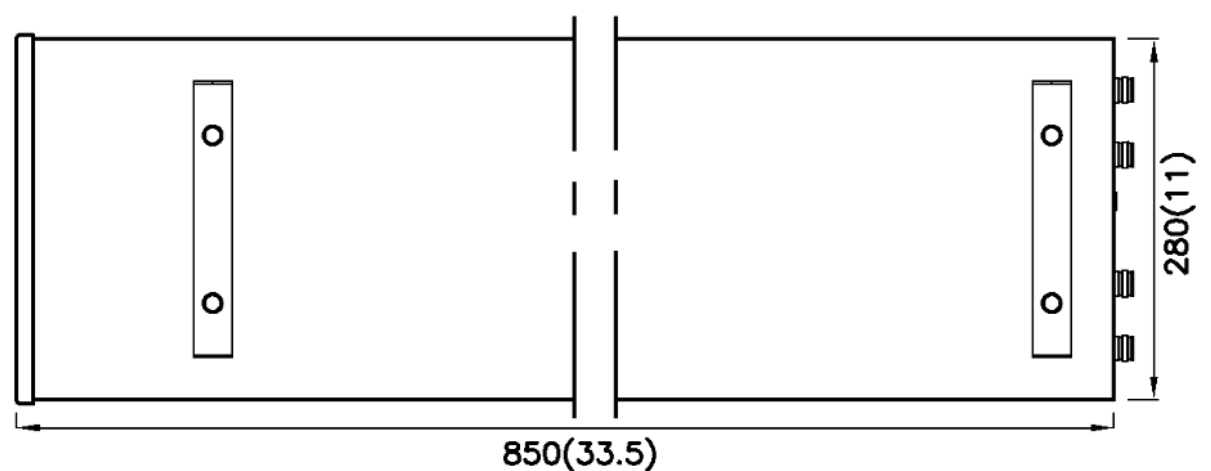
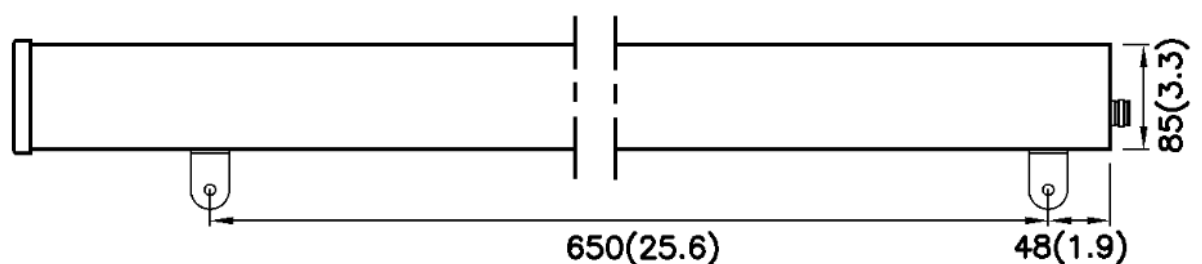
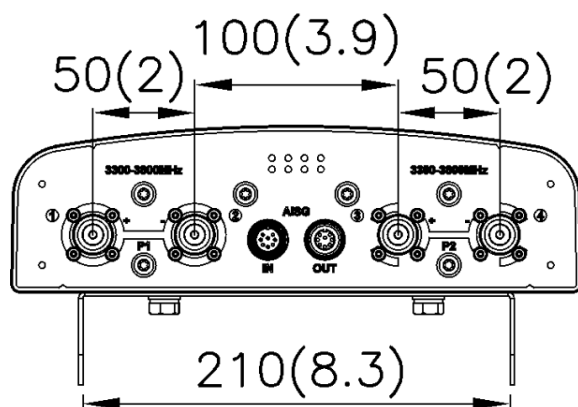
TECHNICAL SPECIFICATION

Mechanical Specifications

Dimensions	mm (in)	850 (33.5) x 280 (11) x 85 (3.3) - (LxWxD)
Packing Size (LxWxD)	mm (in)	970 (38.2) x 335 (13.2) x 175 (6.9)
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 or N Type
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
Product Compliance Environmental	-	RoHS
Lightening Protection	-	DC Grounded
Cold Temperature Survival	°C (°F)	-40 (-40)
Hot Temperature Survival	°C (°F)	70 (158)

Mechanical Illustration

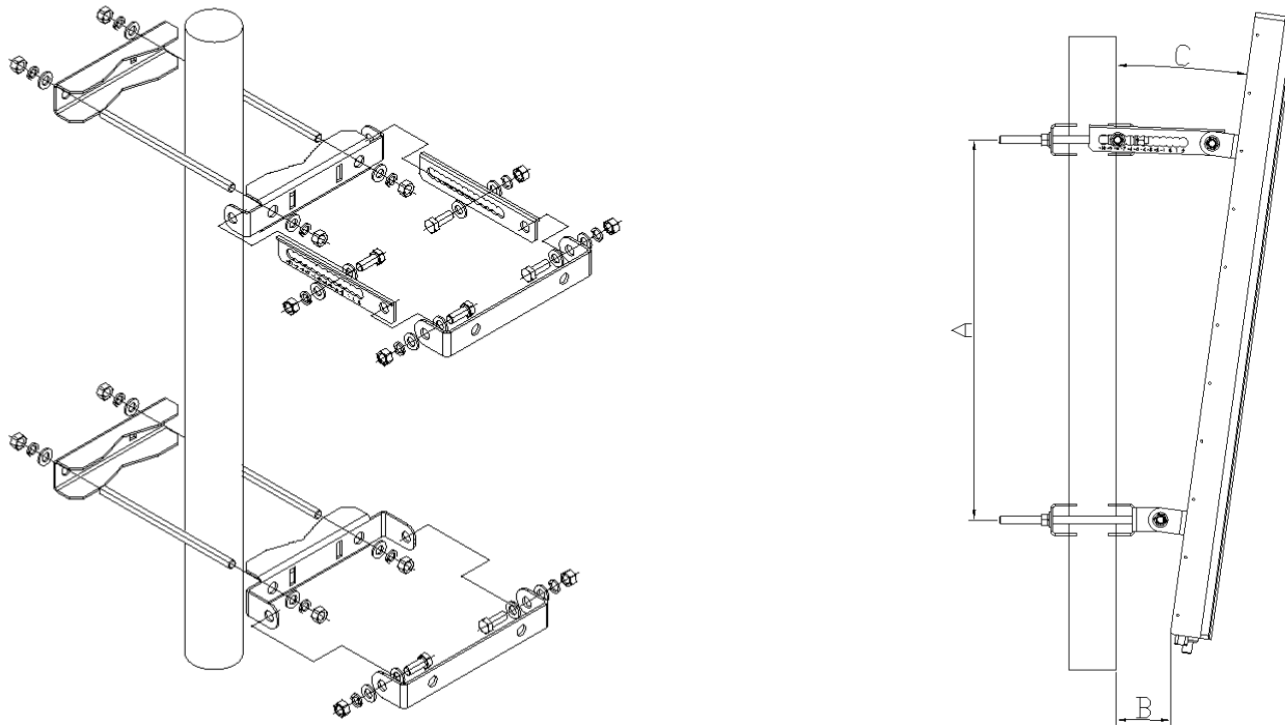
All measurements are in mm (in)



TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-104 Mount Kit M8 2mm (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

AW3161-E-F	Enclosed Remote Electrical Tilt (eRET) with 4.3-10 Connectors.
AW3161-M-F	Manual Electrical Tilt (MET) with 4.3-10 Connectors
AW3161-E-N	Enclosed Remote Electrical Tilt (eRET) with N Type Connectors.
AW3161-M-N	Manual Electrical Tilt (MET) with N Type Connectors

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