



# DATASHEET

## AW3008-T0-F

Common Name- 4 Port, 1.1M, B38, 40 & 41 - 90°

2300-2700MHz	4	Fixed	17.0	90°
Frequency	Ports	Tilt	Gain	Beamwidth

### PRODUCT INFORMATION

The Alpha Wireless 2300 - 2700 MHz **AW3008** panel antenna has a broad 90° horizontal beamwidth. This four-port antenna features a 17 dBi gain across the band for 4x4 MIMO with maximum throughput. The AW3008 has over 30 dB front to back ratio that allows for maximum spectral efficiency. The mounting brackets allows adjustable tilt of the beam from 0° to 10°.

Panel antennas are the most used solution to provide directive coverage in a wireless network. These panel antennas offer multiple ports and frequency bands and are designed to deliver high gain across the sector. They are commonly available with 33°, 45°, 60°, 90°, and 120° beamwidths. Alpha Wireless provides a wide array of sector panel solutions that meet the needs of the most intricate deployment requirements.

### 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. Various tilt options are available to address network optimization requirements.

### STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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### FEATURES

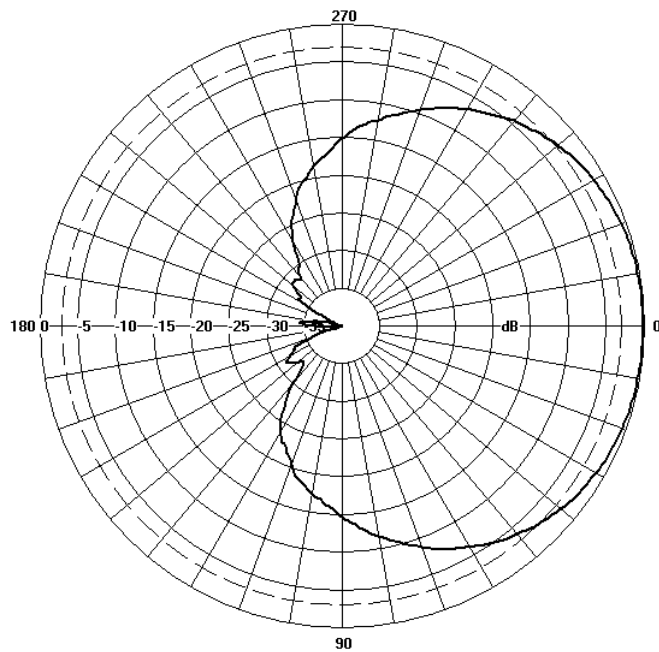
- Wide-band antenna for 3GPP bands 38, 40 & 41
- 4x4 MIMO for maximum throughput
- Mounting bracket with variable tilt (included)
- Manufactured in Ireland

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

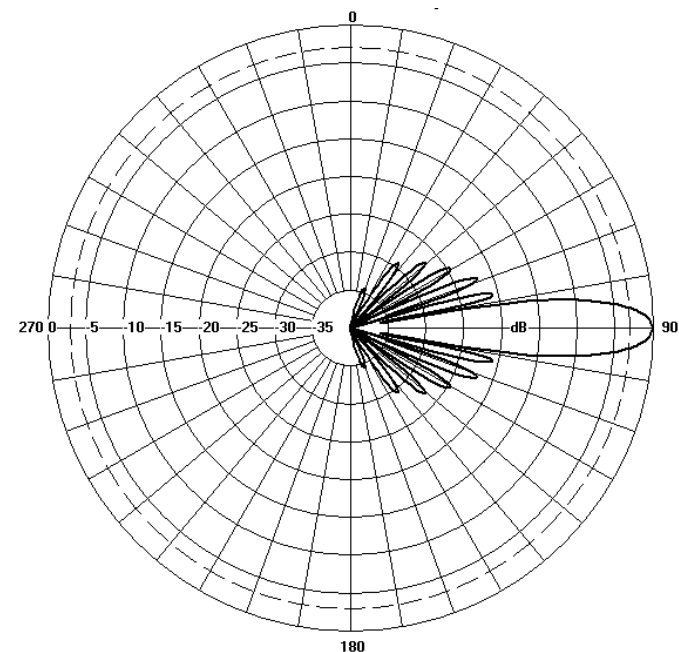
## TECHNICAL SPECIFICATION

Electrical Specifications			
Frequency Range		MHz	2300-2700MHz
Polarisation		Degree	+/-45° Slant Linear
Gain	Basta	dBi	16.5±0.5
	Max	dBi	17.0
Azimuth Beamwidth		Degree	90°
Azimuth Beam Squint		Degree<	3°
Elevation Beamwidth		Degree	7°
Electrical Downtilt		Degree	T0°
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

## Representative Pattern Files



Azimuth



Elevation

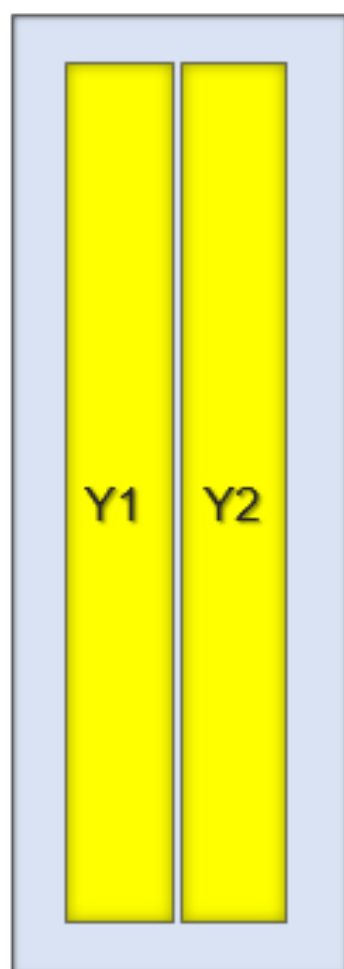
For radiation pattern files, please login at [www.alphawireless.com](http://www.alphawireless.com)

## TECHNICAL SPECIFICATION

## Mechanical Specifications

Dimensions	mm (in)	1053 (41.4) x 280 (11) x 85 (3.3) - (L x W x H)
Packing Size (LxWxD)	mm (in)	1123(44.2) 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 (23.1)
Connector Type (Female)	-	4.3-10
Connector Quantity	-	4
Connector Position	-	Bottom
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	320 (72)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	120 (27)
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

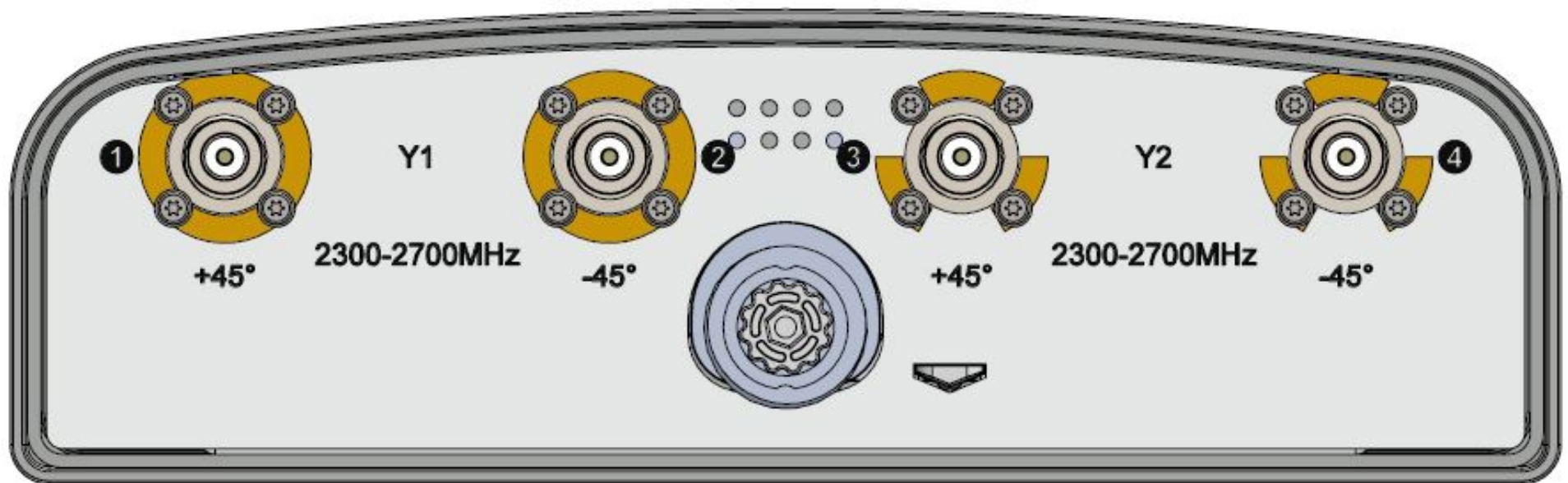
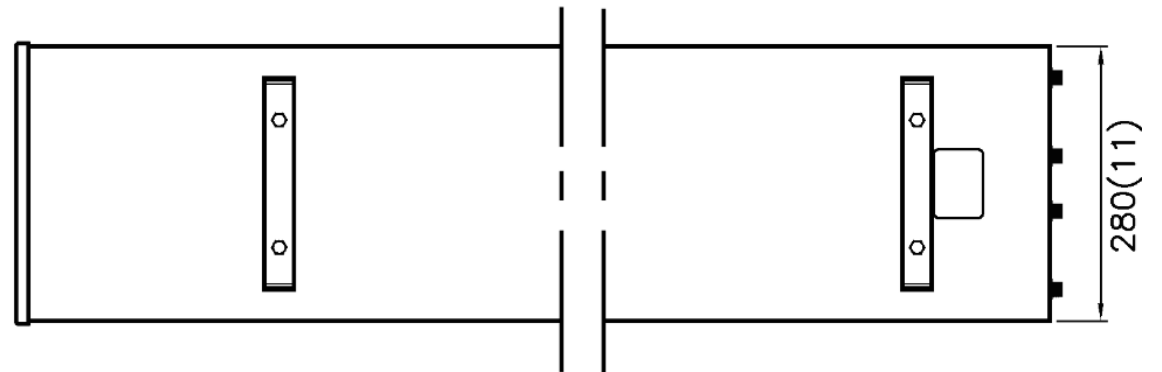
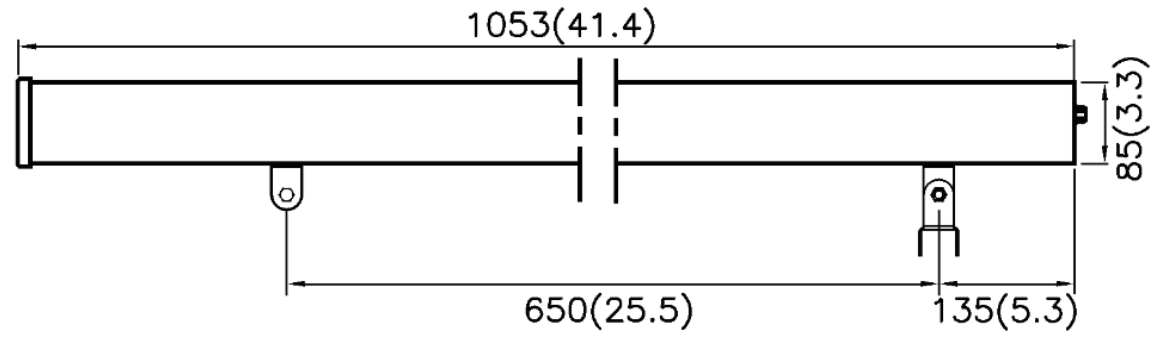
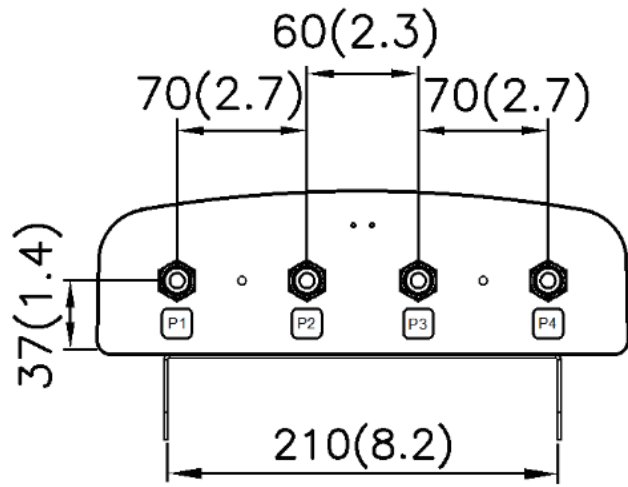


Array	Frequency MHz	Ports
Y1	2300 - 2700	1 - 2
Y2	2300 - 2700	3 - 4

*Note: Box sizes do not represent antenna sizes.*

Mechanical Illustration

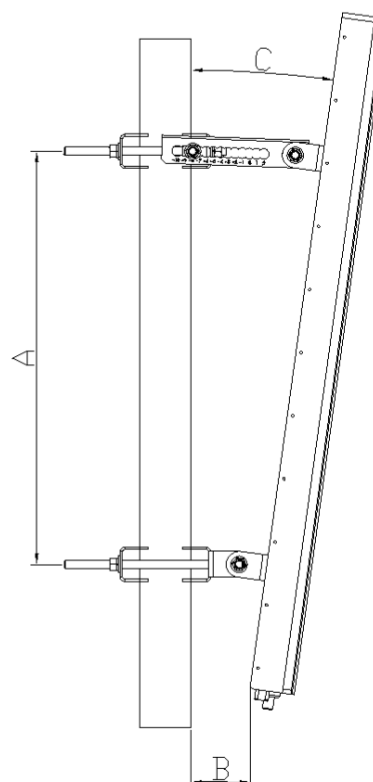
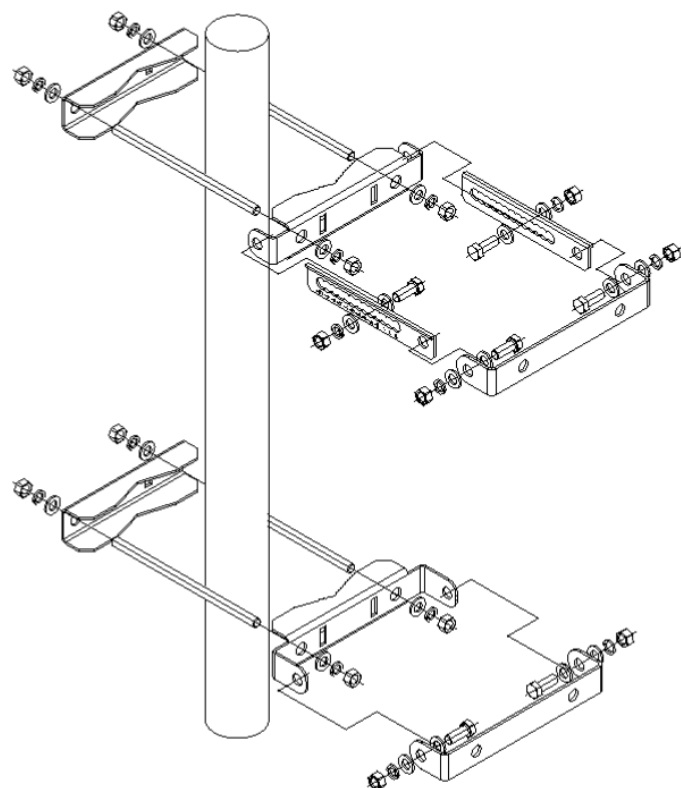
All measurements are in mm (in)



## TECHNICAL SPECIFICATION

### Mounting Bracket Kit

CL-V-105 M12 Dual Port Mounting Kit (Mount Kit included with antenna)



### Ordering Info

#### Order Code - Antenna

AW3008-T0-F

#### Order Code - Accessories

AW1012-2-FM-FM

AW1012-2-FM-NM

AW1014-2-FM-TM

#### Description

Zero Degrees Fixed Tilt 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")

## Enquiries

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