



# DATASHEET

## AW3647-T0-F

Common Name- 4 Port, 30", B42, 43 & 48 - 33°, Fixed

3300-3800MHz	4	Fixed	19.5	33°
Frequency	Ports	Tilt	Gain	Beamwidth

### PRODUCT INFORMATION

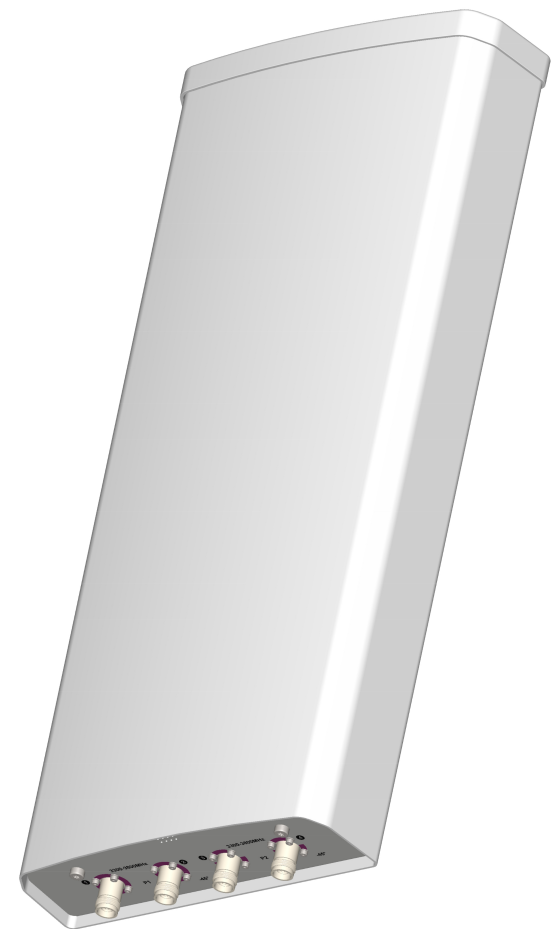
This was developed to offer narrow beam azimuth function with fixed tilt elevation operating between 3300-3800MHz covering LTE Bands B42, 43 & 48 and 5G NR Band n78.

### APPLICATION

Alpha Wireless sector antennas are the most commonly used solution for designing high quality wireless networks. The 33 degree azimuth patterns allows to increase capacity to 6 sectors without increasing the number of sites. The horizontally spaced array allows optimum MIMO performance with full 4x4 operation or receive diversity RF functions. With additional options for fixed tilt settings enables improved optimization.

### STANDARD & CERTIFICATIONS

Certification	BS EN ISO 9001:2015
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### FEATURES

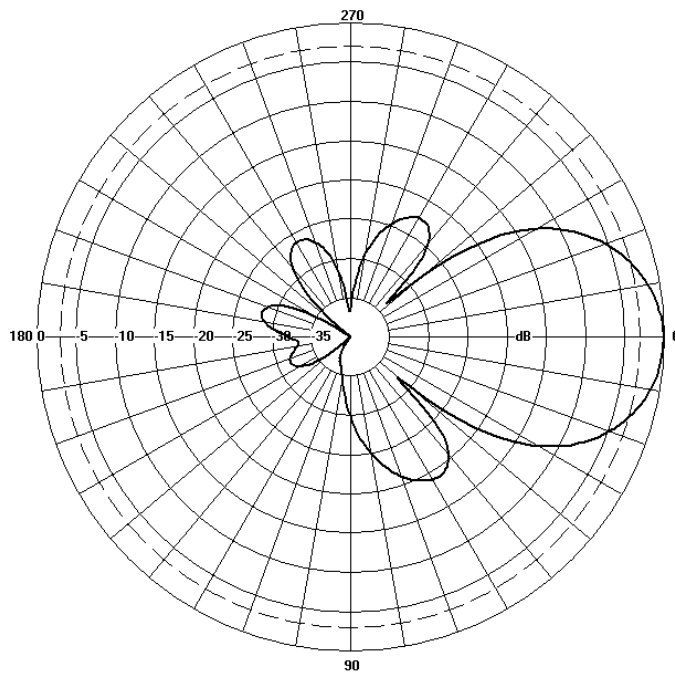
- Wide-band antenna that covers LTE Bands 42, 43 & 48 and 5G NR Band n78. Includes CBRS Band.
- 4x4 MIMO for maximum throughput
- Narrow Azimuth beam to increase site capacity
- Mounting bracket with variable tilt

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

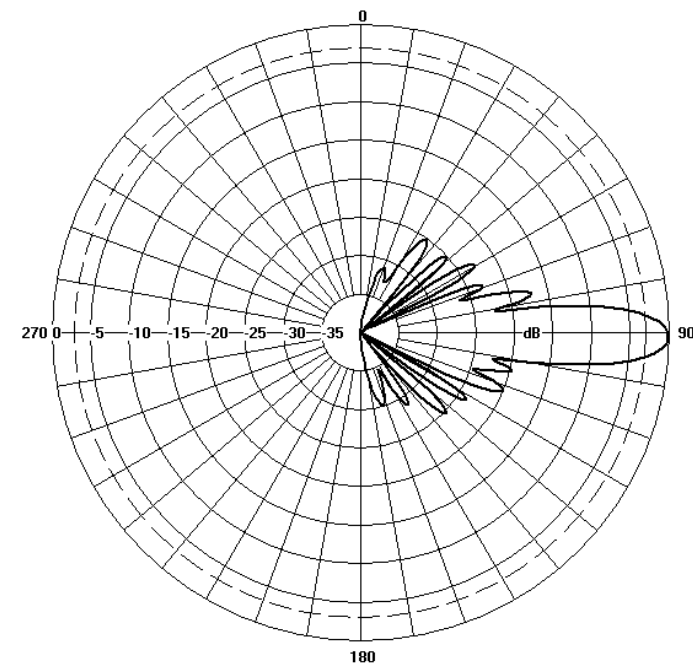
## TECHNICAL SPECIFICATION

Electrical Specifications			
Frequency Range		MHz	3300 - 3800MHz
Polarisation		Degree	+/- 45° Slant Linear
Gain	Basta	dBi	19.0±0.5
	Max	dBi	19.5
Azimuth Beamwidth		Degree	33°
Azimuth Beam Squint		Degree<	3°
Elevation Beamwidth		Degree	7°
Electrical Downtilt		Degree	T0° or T4°
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>	27
Upper Sidelobe Suppression, Peak to 20°		dB>	15
Cross-Polar Discrimination		dB>	16
Maximum Effective Power Per Port		W	100

## Representative Pattern Files



Azimuth



Elevation

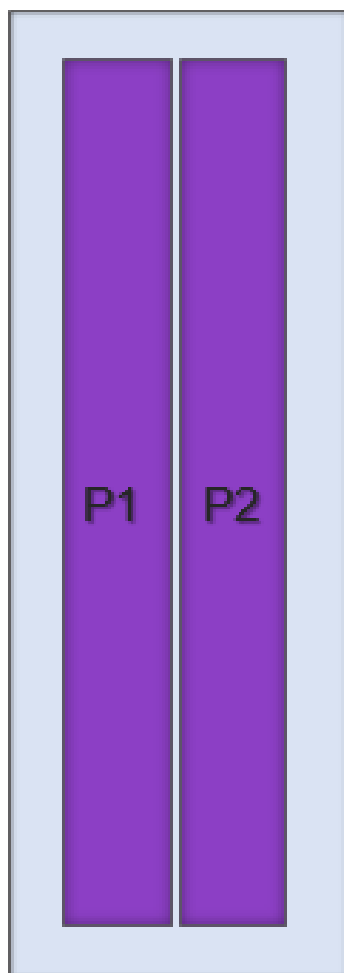
For radiation pattern files, please login at [www.alphawireless.com](http://www.alphawireless.com)

## TECHNICAL SPECIFICATION

## Mechanical Specifications

Dimensions	mm (in)	753 (29.9) x 319 (12.5) x 100 (3.9) - (LxWxH)
Packing Size (LxWxD)	mm (in)	855 (33.7) x 480 (18.9) x 210 (8.3)
Net Weight (antenna)	kg (lb)	8 (13.2)
Net Weight (mount)	kg (lb)	1.57 (3.41)
Shipping Weight	kg (lb)	9.5 (16.7)
Connector Type (Female)	-	4.3-10
Connector Quantity	-	4
Connector Position	-	Bottom
Windload Frontal (at Rated Wind Speed: 150km/h)	N (lbf)	250 (57)
Windload Lateral (at Rated Wind Speed: 150km/h)	N (lbf)	90 (21)
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

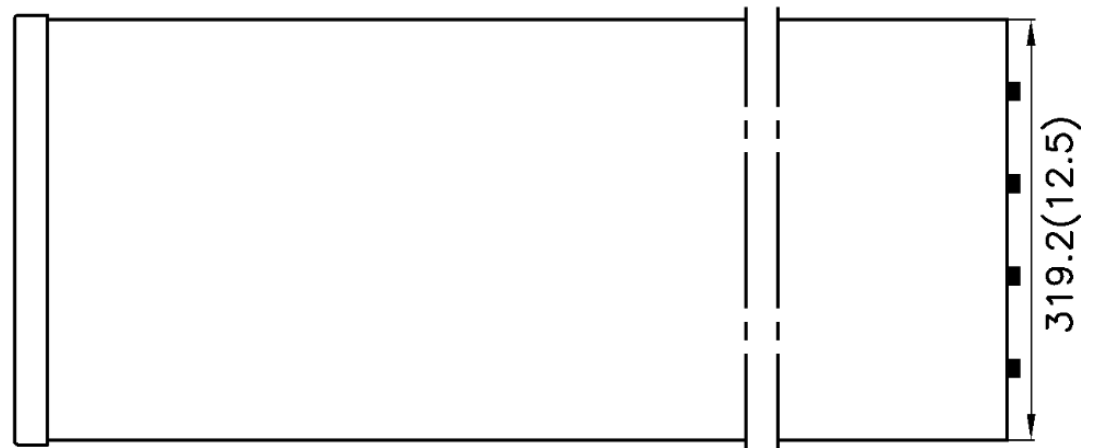
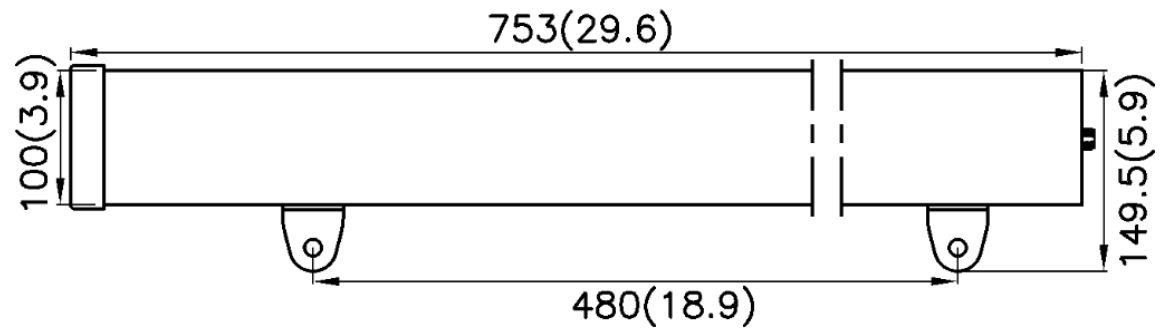
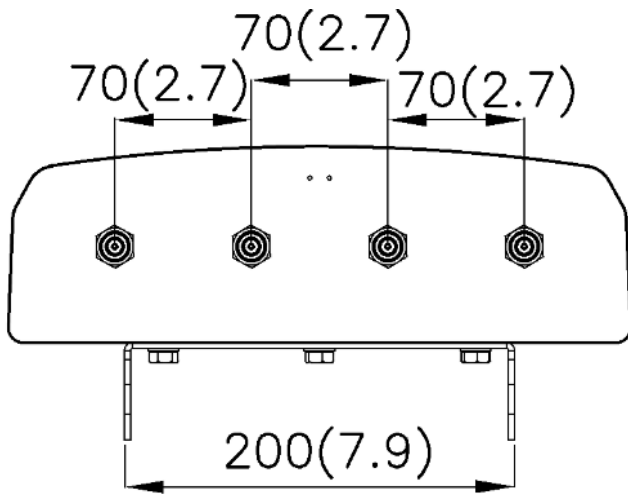


Array	Frequency MHz	Ports
P1	3300 – 3800	1 – 2
P2	3300 – 3800	3 – 4

*Note: Coloured box sizes do not represent antenna sizes.*

Mechanical Illustration

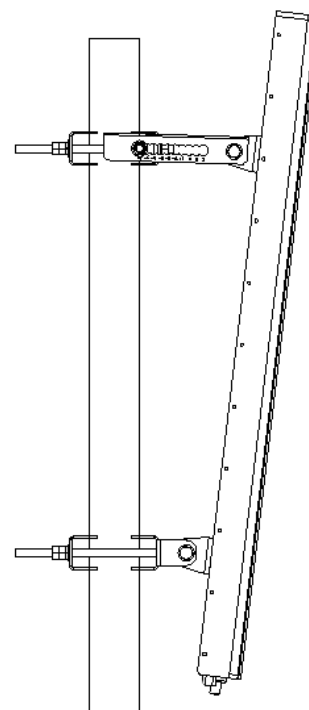
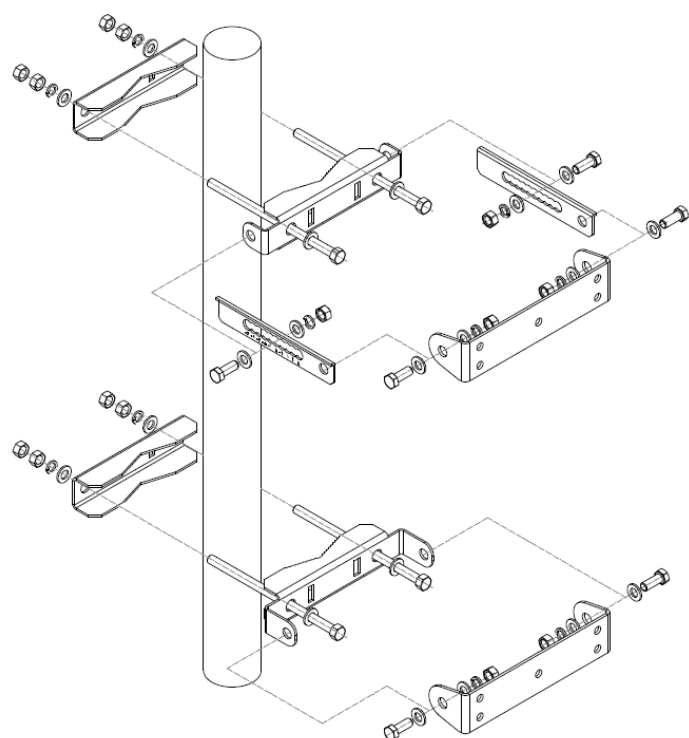
All measurements are in mm (in)



## TECHNICAL SPECIFICATION

### Mounting Bracket Kit

CL-V-111 Mount Kit (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

AW3647-T0-F

#### Description

Zero Degrees Fixed Tilt with 4.3-10 Connectors

### Enquiries

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