



DATASHEET

AW3647-T4-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 on LTE B42/B43 and B48 (CBRS).

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 |
|---------------|---------------------|



FEATURES

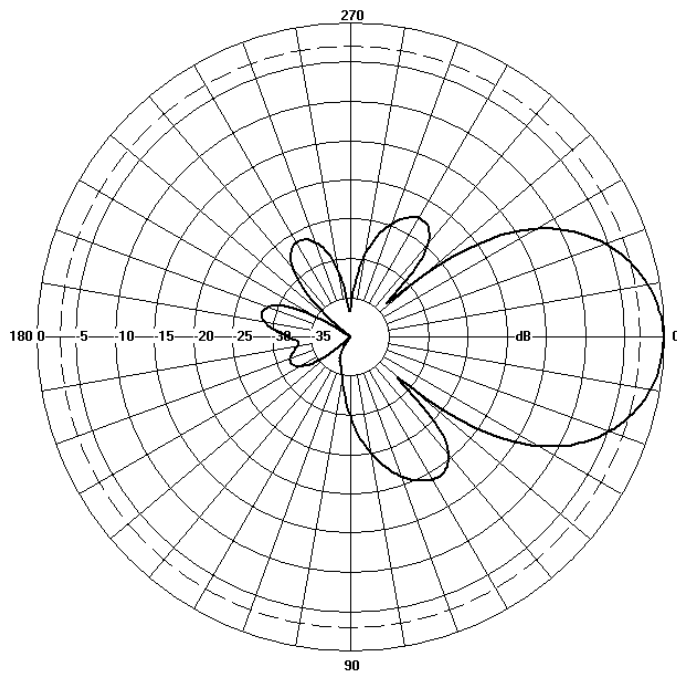
- Wide-band antenna for 3GPP bands 42, 43 & 48
- 4x4 MIMO for maximum throughput
- Narrow Azimuth beam to increase site capacity
- Mounting bracket with variable tilt

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

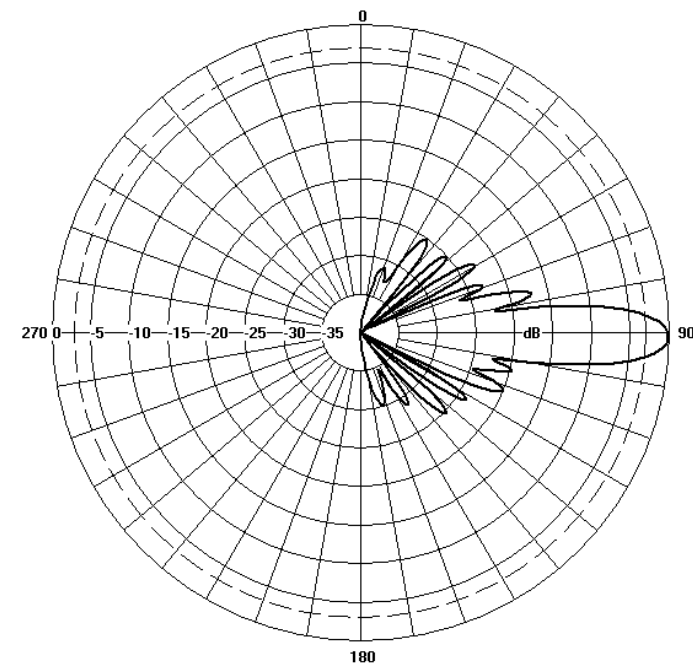
TECHNICAL SPECIFICATION

| 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



TECHNICAL SPECIFICATION

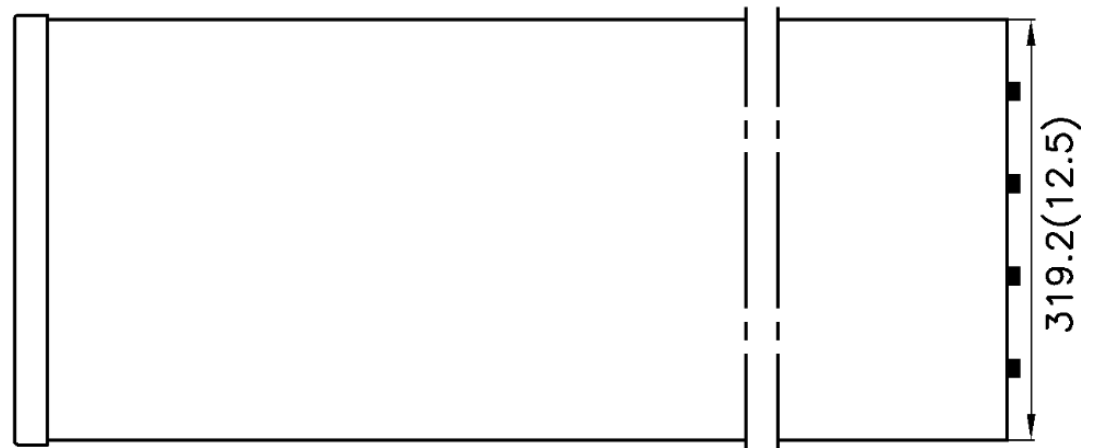
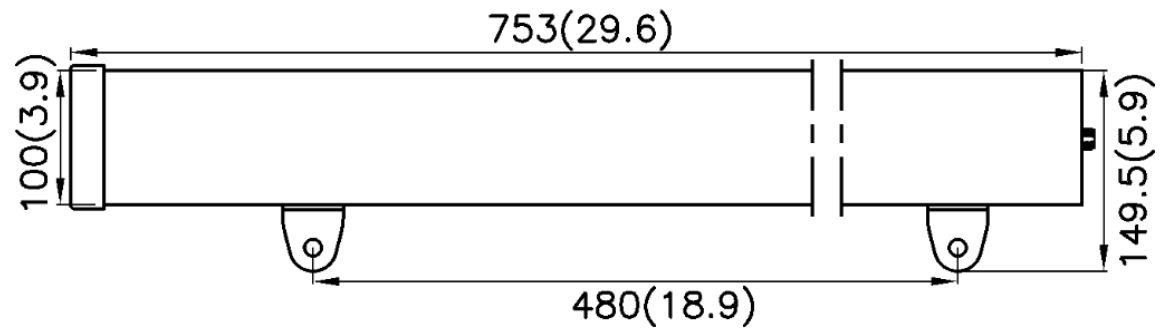
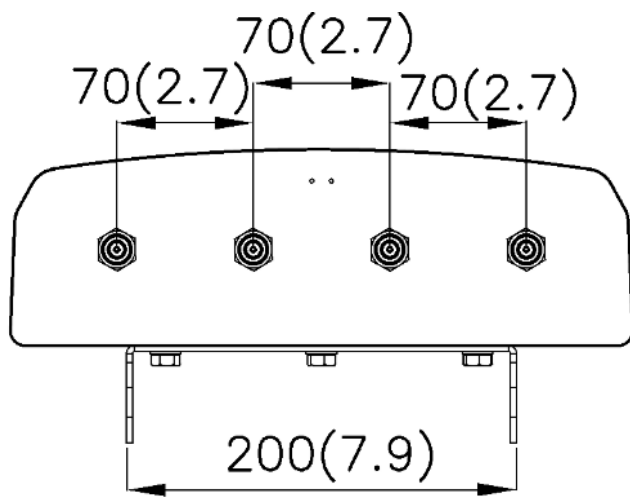
| Mechanical Specifications | | |
|---|------------|---|
| Dimensions | mm (in) | 753 (29.9) x 319 (12.5) x 100 (3.9) - (LxWxH) |
| Packing Size (LxWxD) | mm (in) | 855 (33.7) x 480 (18.9) x 210 (8.3) |
| Net Weight (antenna) | kg (lb) | 8 (13.2) |
| Net Weight (mount) | kg (lb) | 1.57 (3.41) |
| Shipping Weight | kg (lb) | 9.5 (16.7) |
| Connector Type (Female) | - | N Type |
| 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 |
| Product Compliance Environmental | - | RoHS |
| Lightning Protection | - | DC Grounded |
| Cold Temperature Survival | °C (°F) | -40 (-40) |
| Hot Temperature Survival | °C (°F) | 70 (158) |



AW3647-T4-F

Mechanical Illustration

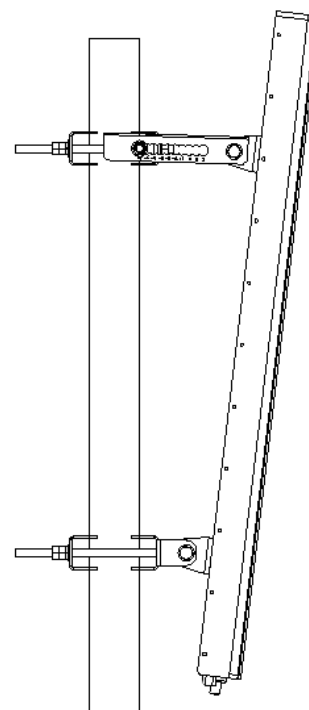
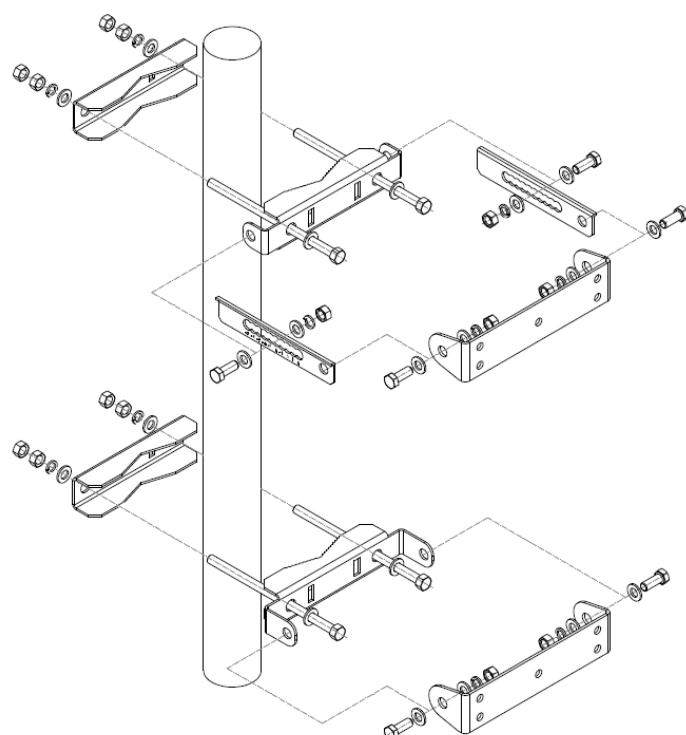
All measurements are in mm (in)



TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-111 M12 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-T4-F

Description

Zero Degrees Fixed Tilt with N Type Connectors

Enquiries

Global Headquarters

Ashgrove Business Centre,
Ballybrittas, Portlaoise, Ireland
Post code: R32 DT0A
sales@alphawireless.com
+353 57 86 33847

North America

7301 W. 129th Street, Suite 150
Overland Park,
KS 66213, USA
sales@alphawireless.com
+1 913 279 0008

Australia

3/76 Regentville Rd,
Jamisontown
NSW 2750 AUSTRALIA
sales@alphawireless.com
+ 61 2 4504 8212

Alpha Wireless

DISCLAIMER

The information in this document is provided solely regarding Alpha Wireless products. The information is not a guarantee of performance or characteristics. Alpha Wireless reserves the right to modify, change, amend, improve or make corrections to this document and its products, at any time and its sole discretion without prior written consent or notice. No license to any intellectual property rights is granted or implied under this document. Alpha Wireless disclaims warranties and liabilities of any kind including non-infringement of intellectual property rights of any third party.