



# DATASHEET

## AW3625-M-F-G-V2

**Common Name-** 2Port, 24", MIMO, Bands 42, 43 & 48, MET & GPS Small Cell Omni

|              |       |      |      |           |
|--------------|-------|------|------|-----------|
| 3300-3800MHz | 2     | MET  | 8.5  | 360°      |
| Frequency    | Ports | Tilt | Gain | Beamwidth |

### PRODUCT INFORMATION

This product was developed to offer a Tri-Sector pseudo omni solution with independent tilt control on each of the three sectors across Bands 42/43 in a small form factor canister. It has a built in GPS antenna. Operates between 3300-3800MHz covering LTE Bands B42, 43 & 48 and 5G NR Band n48 and n78.

### APPLICATION

Alpha Wireless pseudo omni antenna provides 360° coverage whilst in an ultra-compact radome design. The wide-band antenna is designed to be installed in urban environment where low visual impact is required. There are a number of mounting options available making deployments on lamp posts, utility poles, walls and other vertical structures possible. The 2 port antenna provides 2X2 MIMO for improved data throughput with electrical variable tilt for maximum optimization.



### STANDARD & CERTIFICATIONS

|               |                     |
|---------------|---------------------|
| Certification | BS EN ISO 9001:2015 |
|---------------|---------------------|



### FEATURES

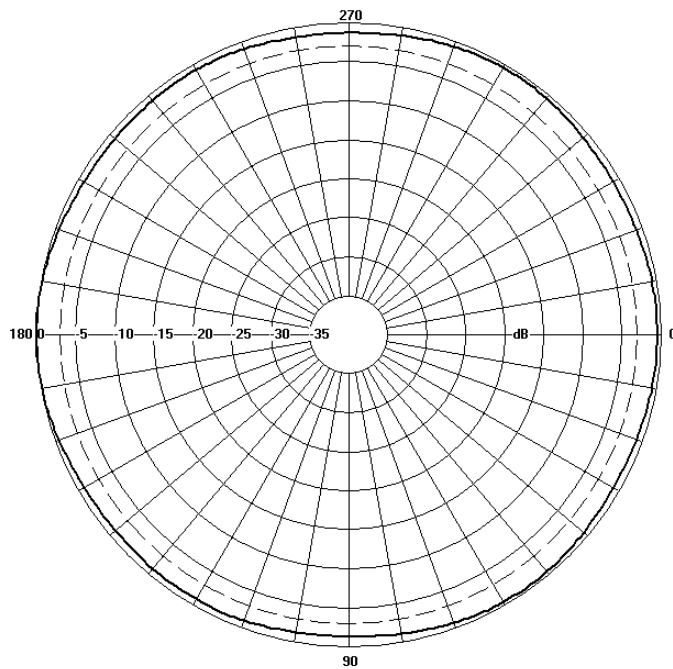
- Wide-band antenna that covers LTE Bands 42, 43 & 48 and 5G NR Band n48 and n78. Includes CBRS Band.
- Optimized Pseudo omni with reduced azimuth ripple
- Slim monopole design to reduce wind loading
- Independent RET control for each array (x3)
- Built in GPS antenna.

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

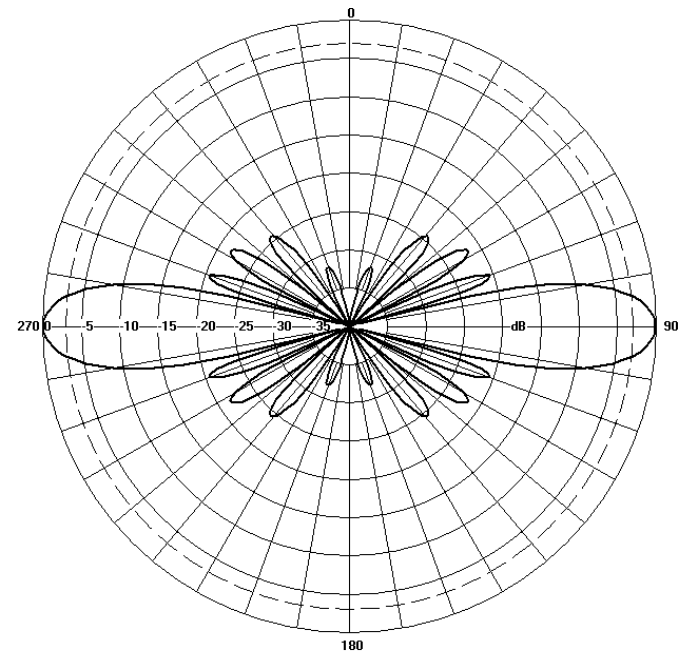
## TECHNICAL SPECIFICATION

| Electrical Specifications               |         |                      |         |
|---|---------|----------------------|---------|
| Frequency Range                         | MHz     | 3300 - 3800MHz       |         |
| Polarisation                            | Degree  | +/- 45° Slant Linear |         |
| Gain                                    | Basta   | dBi                  | 8.0±0.5 |
|   | Max     | dBi                  | 8.5     |
| Azimuth Beamwidth                       | Degree  | 360°                 |         |
| Elevation Beamwidth                     | Degree  | 12°                  |         |
| Electrical Downtilt                     | Degree  | T0° - T10°           |         |
| Electrical Downtilt Deviation           | Degree< | 1°                   |         |
| Impedance                               | Ohms    | 50                   |         |
| VSWR                                    | <       | 1.5                  |         |
| Return Loss                             | dB>     | 14                   |         |
| Isolation                               | dB>     | 25                   |         |
| Upper Sidelobe Suppression, Peak to 20° | dB>     | 16                   |         |
| Cross-Polar Discrimination              | dB>     | 12                   |         |
| Maximum Effective Power Per Port        | W       | 50                   |         |

## Representative Pattern Files



Azimuth



Elevation

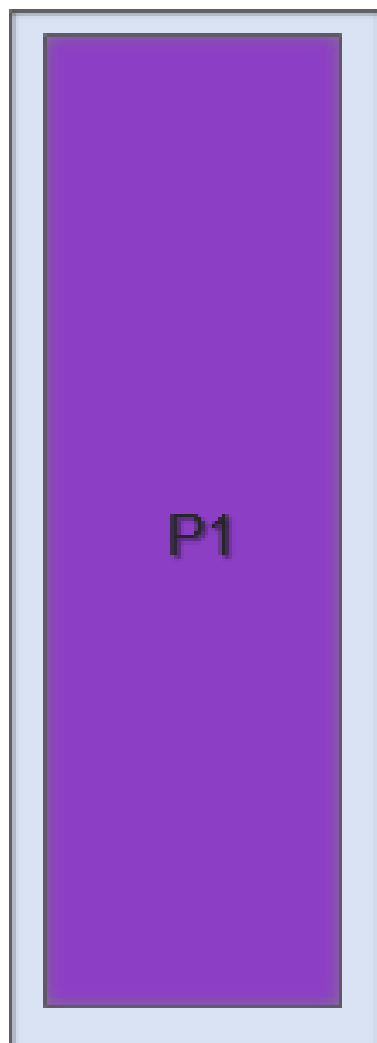
For radiation pattern files, please login at [www.alphawireless.com](http://www.alphawireless.com)

## TECHNICAL SPECIFICATION

## Mechanical Specifications

|   |            |                                    |
|---|------------|------------------------------------|
| Dimensions                                      | mm (in)    | 600 (23.6) x 125 (4.9) - (L x Ø)   |
| Packing Size (LxWxD)                            | mm (in)    | 670 (26.3) x 190 (7.4) x 250 (9.8) |
| Net Weight (antenna)                            | kg (lb)    | 3 (6.6)                            |
| Net Weight (mount)                              | kg (lb)    | 2 (4.4)                            |
| Shipping Weight                                 | kg (lb)    | 6 (13.2)                           |
| Connector Type (Female)                         | -          | 4.3-10 (GPS)                       |
| Connector Quantity                              | -          | 2 + 1                              |
| Connector Position                              | -          | Bottom                             |
| Windload Frontal (at Rated Wind Speed: 150km/h) | N (lbf)    | 80 (18)                            |
| 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                               |
| 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      |

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



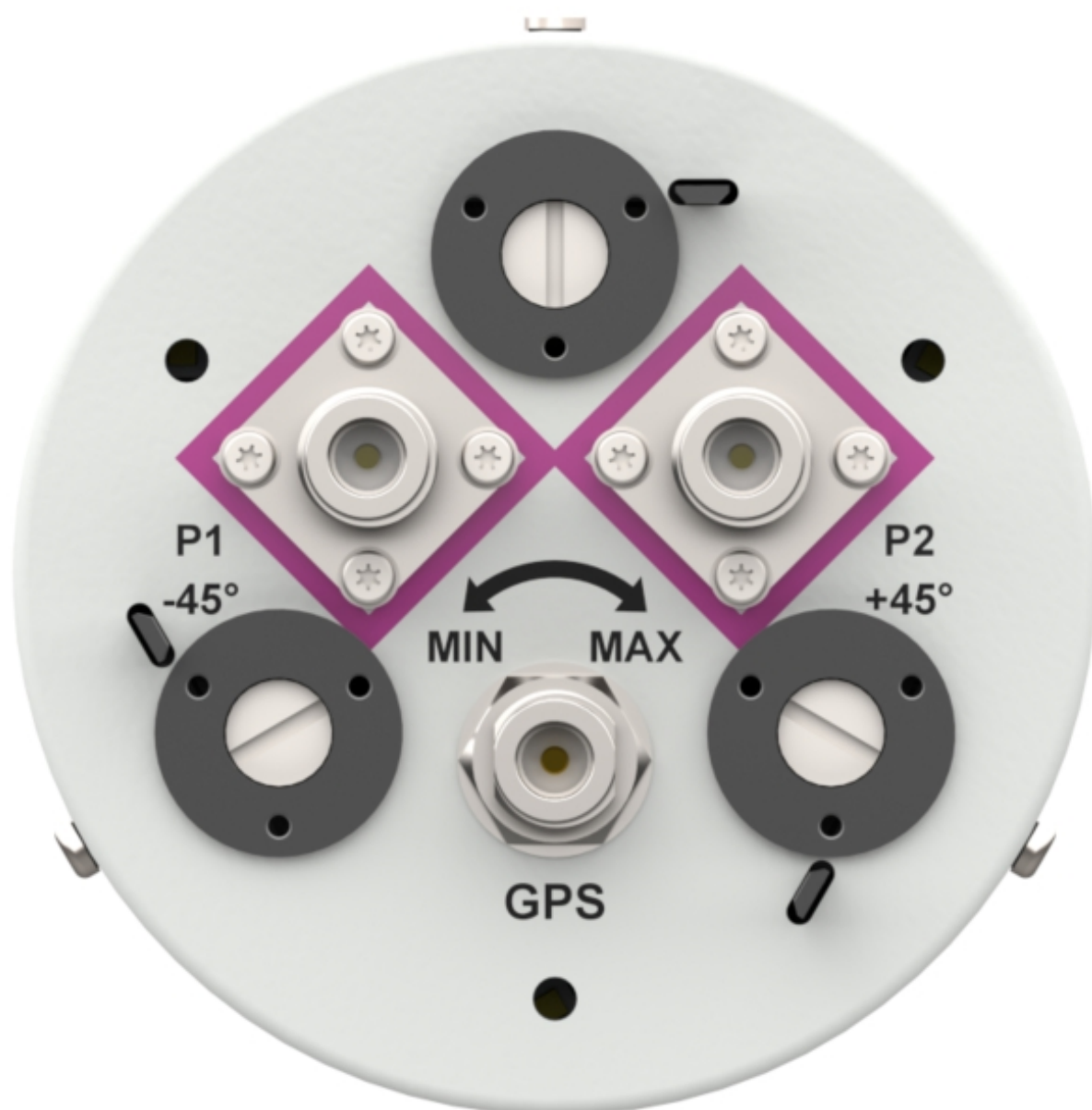
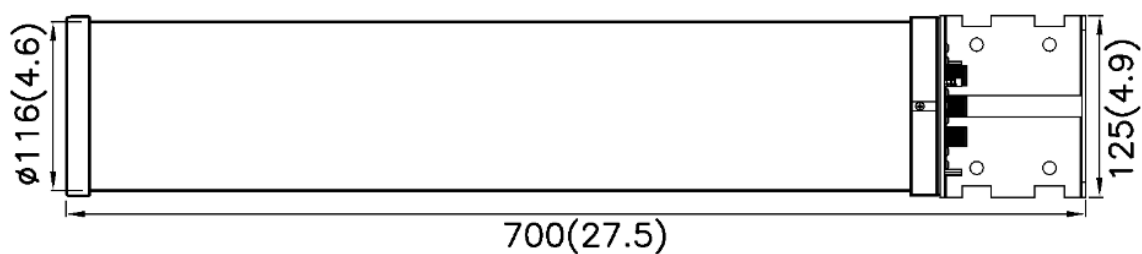
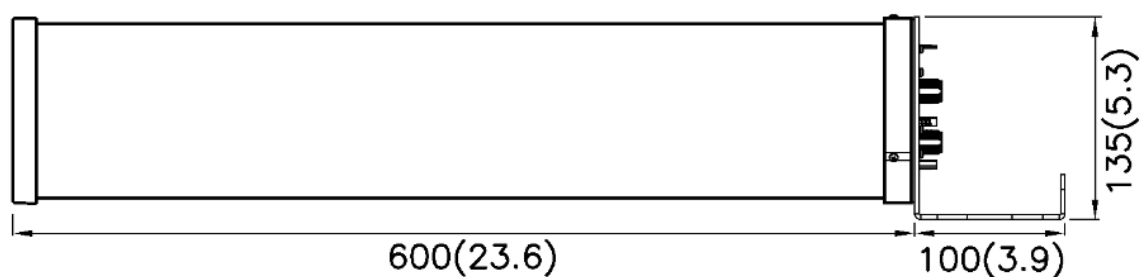
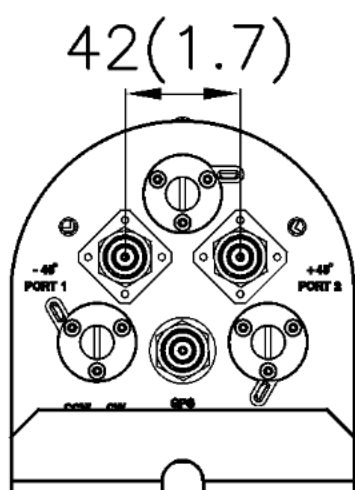
## TECHNICAL SPECIFICATION

## Mechanical Illustration

| GPS Specifications                        |   |
|---|---|
| <b>RF Electrical Specifications</b>       |   |
| Centre Frequency                          | 1575.42MHz +/- 10MHz                            |
| Gain                                      | 3 dBic @ 90°<br>-2dBic @ 20°                    |
| Polarization                              | Right Hand Circular                             |
| Current Draw                              | 7.5 mA @ 3.3VDC (typical)                       |
| <b>Low Noise Amplifier Specifications</b> |   |
| Nominal Impedance                         | 50 Ohm  |
| VSWR                                      | 1.5:1 (typical) @ 5.0V , 1.8:1 (typical) @ 3.3V |
| Nominal Gain                              | @ 3.3VDC: 25dB<br>@ 5VDC: 25.5dB                |
| Voltage                                   | -5 VDC  |
| <b>Mechanical Specifications</b>          |   |
| Connector                                 | 1 x N Type                                      |
| <b>Environmental Specifications</b>       |   |
| Temperature Range                         | -40°C to +85°C operating                        |
| Humidity                                  | 95% max (non condensing)                        |

## Mechanical Illustration

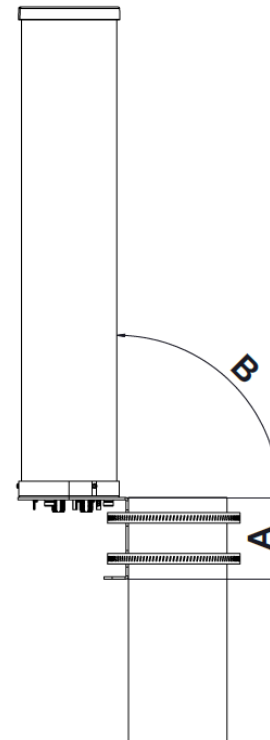
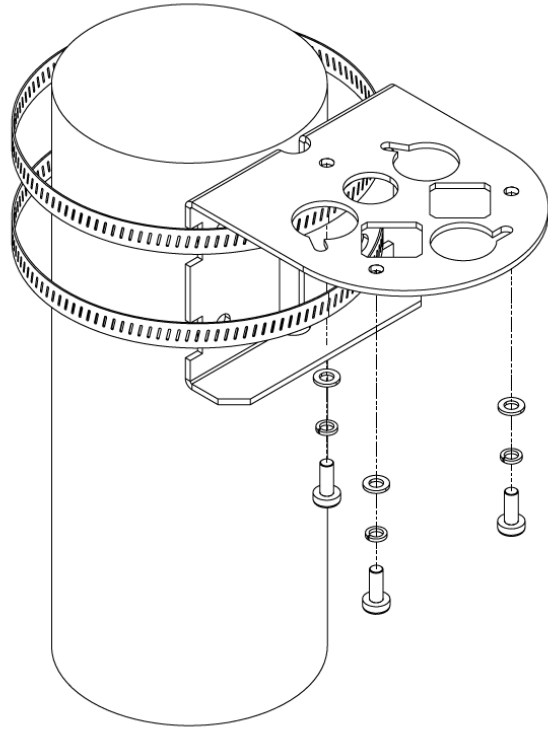
All measurements are in mm (in)



## TECHNICAL SPECIFICATION

### Mounting Bracket Kit

CL-V-127 (Jubilee Clip 9.5 Stainless Steel 210-242mm & Mounting Kit included with Antenna)



| Mounting Kit Tilt Range | Mounting Kit Material | Mounting Kit Pole Diameter |
|-------------------------|-----------------------|----------------------------|
| 0°                      | Galvanised Steel      | N/A                        |

### Ordering Info

#### Order Code - Antenna

AW3625-M-F-G-V2

#### Order Code - Accessories

AW1012-2-FM-FM

AW1012-2-FM-NM

AW1014-2-FM-TM

#### Description

Manual Electrical Tilt (MET) 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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