

DATASHEET AW3625-M-N-G

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 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.











FEATURES

- Wide-band antenna that covers LTE Bands 42, 43 & 48 and 5G NR Band 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.

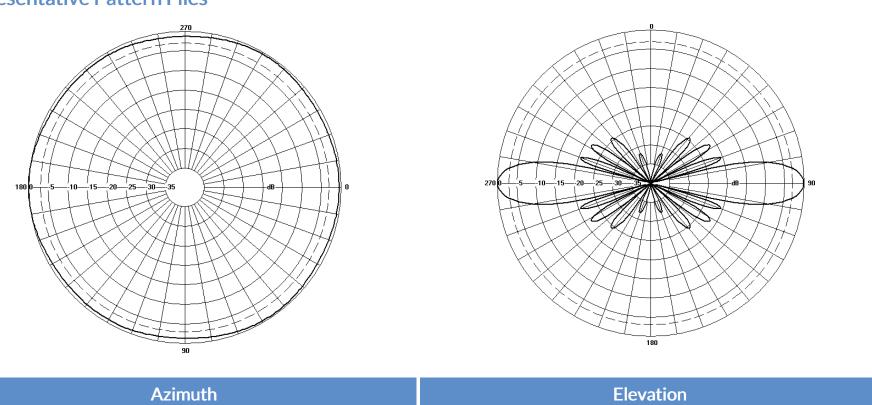
The parameters in this specification follow the definitions and recommendations per NGMN P-Basta, Release 9.6.



TECHNICAL SPECIFICATION

| Electrical Spe | ecifications | | |
|---|--------------|-------------|----------------------------------|
| Frequency Ran | ge | MHz | 3300 - 3800MHz |
| Polarisation | | Degree | +/- 45 ^o Slant Linear |
| Gain | Basta | dBi | 8.0±0.5 |
| | Max | dBi | 8.5 |
| Azimuth Beam | width | Degree 360° | |
| Elevation Beamwidth | | Degree | 120 |
| 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



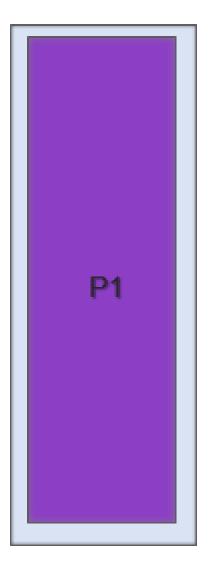
 $For \ radiation \ pattern \ files, \ please \ login \ at \ www. alphawire less. com$



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 and N Type (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

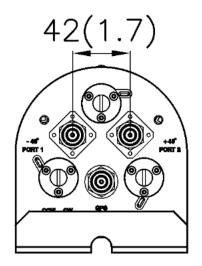
Mechanical Illustration

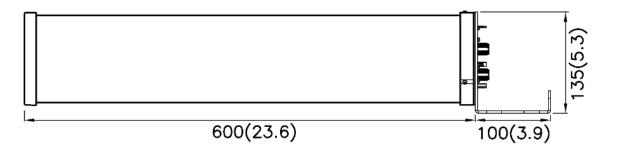
| | GPS Specifications | |
|--|---|--|
| RF Electrical Specifications | | |
| Centre Frequency | 1575.42MHz +/- 10MHz | |
| Gain | 3 dBic @ 90° | |
| | -2dBic @ 20° | |
| Polarization | Right Hand Circular | |
| Current Draw 7.5 mA @ 3.3VDC (typical) | | |
| Low Noise Amplifier Specifications | | |
|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

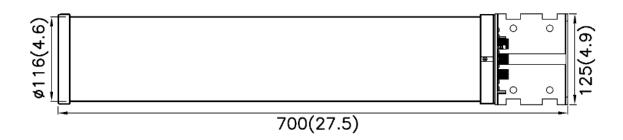


Mechanical Illustration

All measurements are in mm (in)







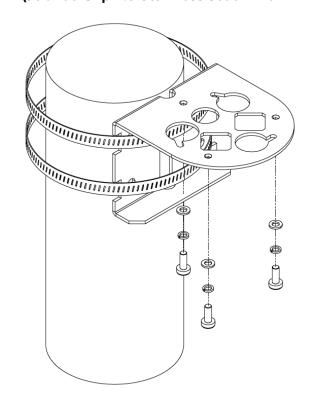


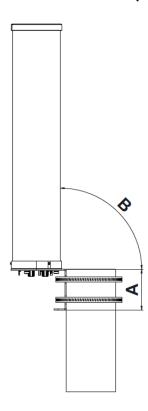


TECHNICAL SPECIFICATION

Mounting Bracket Kit

CL-V-127 (Jubilee Clip 9.5 Stainless Steel 210mm-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 | Description |
|--------------------------|--|
| AW3625-M-N-G | Manual Electrical Tilt (MET) with 4.3-10 Connectors |
| Order Code - Accessories | Description |
| | |
| AW1012-2-FM-FM | RF Jumper Cable, connector types 4.3-10 (m) / 4.3-10 (m), length 2 metres (6'6") |
| AW1012-2-FM-NM | RF Jumper Cable, connector types 4.3-10 (m) / N-Type (m), length 2 metres (6'6") |
| AW1014-2-FM-TM | RF Jumper Cable, connector types 4.3-10 (m) / Nex10 (m), length 2 metres (6'6") |
| PADC 1000 | Portable AISG Controller |
| SADC 2000 | Site AISG Controller |
| AW0326-3-PM-PF | AISG Jumper Cable Lengths 3 metres (9' 10") |
| AW0326-10-PM-PF | AISG Jumper Cable Lengths 10 metres (32' 9") |
| AW0326-25-PM-PF | AISG Jumper Cable Lengths 25 metres (82') |
| AW0326-50-PM-PF | AISG Jumper Cable Lengths 50 metres (164') |
| | |

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