

Wideband Omni-Directional Antenna

20 – 500 MHz

Product Code: OMNI-A0046-01

VERSION: 1.2

SPECIFICATIONS

| Electrical: | |
|---|---|
| Frequency range | 20 – 500 MHz |
| VSWR | 2.5:1 over the band |
| Feed power handling | 1.2 kW CW |
| Nominal input impedance | 50 Ω |
| Connector | 7/16 female |
| Gain | See graph |
| Polarisation | Vertical |
| Mechanical: | |
| Dimensions (h x d) | 2307 mm x 2450 mm |
| Weight | 18 kg |
| Material | Aluminium, brass, fibreglass and stainless steel |
| Environmental: designed to meet the following specifications | |
| Wind survival | 160 km/h calculated |
| Salt fog | Designed to MIL-STD-810F method 509.4 |
| Mechanical shock | Designed to MIL-STD-810F method 516.5 table 516.5-1 procedure 1, 40 G for 15 – 23 ms. |
| Operational vibration | Designed to MIL-STD-810F method 514.5 table 514.5-1 (Operational ground vehicles) figure 514.5C-1 (Highway truck vibration) |
| Operating temperature | -31 °C to +49 °C |
| Storage temperature | -33 °C to +71 °C |



ELECTRICAL FEATURES:

- Wideband
- Omni-directional azimuth pattern
- High-power handling
- Optimised distributed loading is used to prevent elevation radiation pattern break up

MECHANICAL FEATURES:

- Spring loaded elements
- Waterproof
- Quick assembly
- Vehicle or shelter mountable

PRODUCT DESCRIPTION:

The OMNI-A0046-01 is an upgraded version of the well-known PA-OMNI-20500B high-power omni-directional antenna. The frequency range covered is 20 MHz to 500 MHz with a VSWR of less than 2.5:1 with the whips attached. The whips improve the performance in the 20 MHz to 50 MHz band. The antenna's profile can be reduced by removing the tactical whips where required.

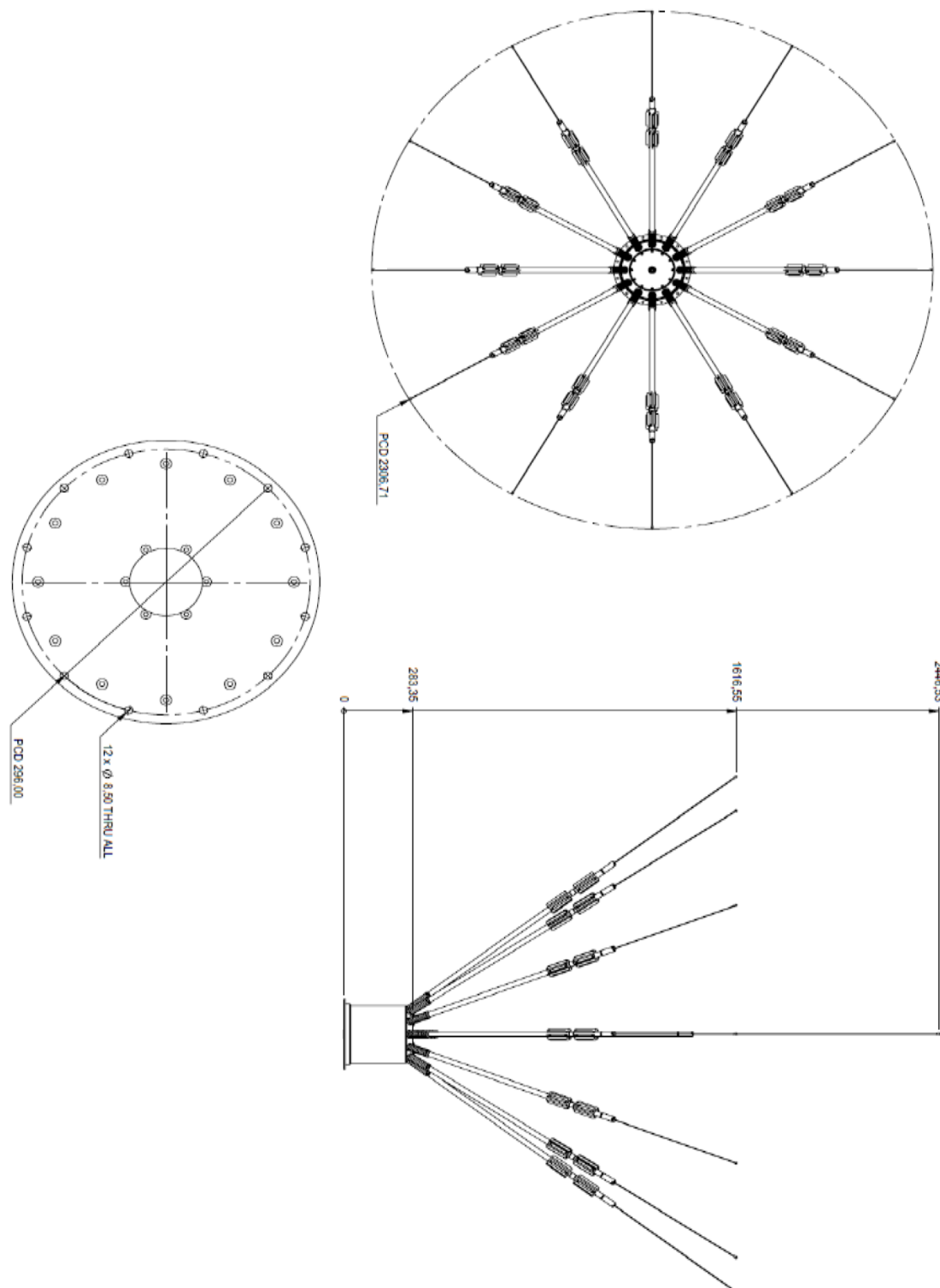
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Dimensions of the OMNI-A0046-01 Antenna



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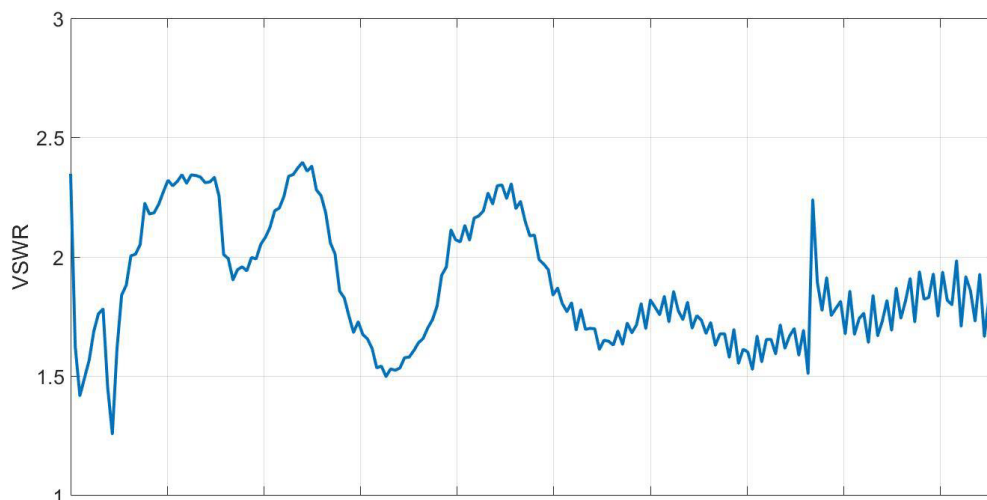
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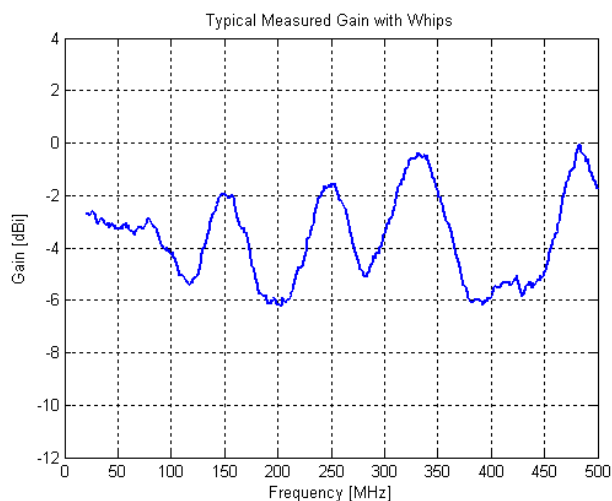
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VSWR AND GAIN GRAPHS:

VSWR:



GAIN:



VSWR and gain measured with the antenna mounted on a 5 m x 2.5 m groundplane