

# High Gain S-Band Omni

2.3 – 2.7 GHz

Product Code: OMNI-A0108

VERSION: 2.8

## SPECIFICATIONS:



|   |                         |
|---|-------------------------|
| <b>Product code:</b>  |                         |
| OMNI-A0108-01   | N-type (M) connector    |
| OMNI-A0108-02   | TNC (M) connector       |
| <b>Electrical:</b>  |                         |
| Frequency range   | 2300 – 2700 MHz         |
| VSWR  | < 2:1                   |
| Nominal input impedance   | 50 Ω                    |
| Feed power handling   | 20 W                    |
| Gain (typical)  | 4.5 – 5 dBi             |
| Gain (minimum)  | 4.5 dBi                 |
| Elevation 3 dB beamwidth  | 30° - 50°               |
| Polarisation  | Vertical                |
| Azimuth ripple  | ±1 dB                   |
| <b>Mechanical:</b>  |                         |
| Height  | 300 mm                  |
| Radome Diameter   | 22 mm                   |
| Total mass  | 100 g                   |
| Colour  | Black                   |
| Mounting method   | Direct to connector     |
| Groundplane requirement   | Groundplane independent |
| <b>Environmental: designed to meet the following specifications</b> |                         |
| Wind survival   | 100 km/h                |
| Temperature (operational)   | -31 °C to +51 °C        |
| Temperature (storage)   | -31 °C to +71 °C        |
| Vibration   | MIL-STD-167-1 type 1    |
| Shock   | 20G / 10 mS X,Y,Z axes  |
| Water and dust resistance   | MIL-STD-820F (506.4)    |

## PRODUCT FEATURES

- Collinear design gives better gain than dipole and monopole antennas
- Wideband
- Low VSWR across the band
- Rugged and lightweight

## APPLICATIONS

- Wi-Fi and data communications

## PRODUCT DESCRIPTION:

The OMNI-A0108 is a wideband, high gain omni-directional antenna for use in the 2.3 to 2.7 GHz frequency range at high-power levels up to 20 W.

The OMNI-A0108 utilizes a co-linear dipole array radiator with integrated balun, making it groundplane independent and suitable for use on any mounting platform, such as manpacks and mobile electronic devices. The radiator is mounted in the top half of the radome to mitigate radhaz. The antenna is designed and intended for use in extreme operational conditions.

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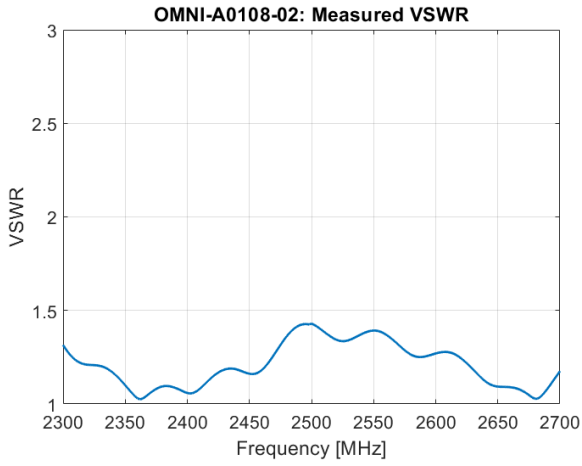
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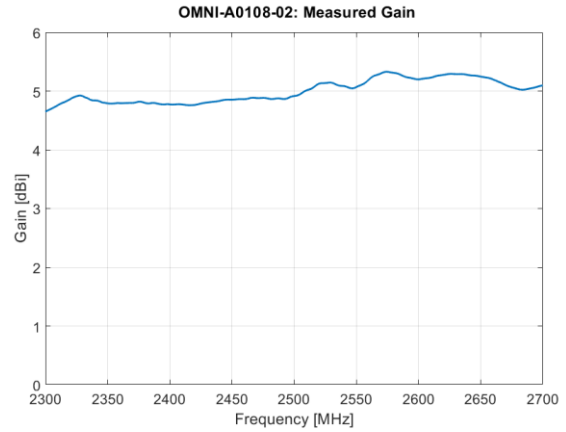
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## VSWR AND GAIN GRAPHS:

### VSWR:

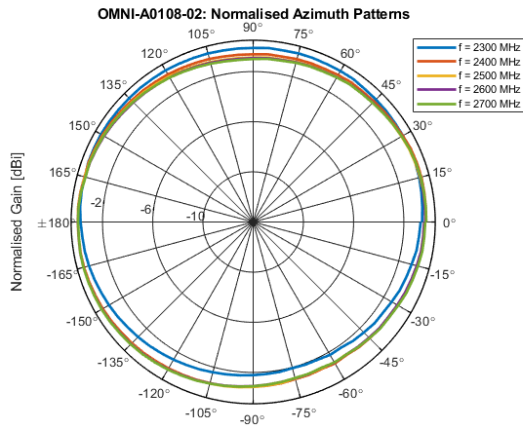


### GAIN:



## ANTENNA PATTERNS:

### Azimuth (H-plane):



### Elevation (E-plane):

