

# Data-Link Antenna

500 – 1500 MHz

Product Code: OMNI-A0091

VERSION: 2.3



## SPECIFICATIONS:

<b>Electrical:</b>	
Frequency range	500 – 1500 MHz
VSWR	< 2.5:1
Nominal input impedance	50 $\Omega$
Connector	N-type female
Feed power handling	200 W
Gain (max)	8 dBi ( $\pm$ 0.5 dB)
Gain (min over the band)	5 dBi ( $\pm$ 0.5 dB)
Elevation 3 dB beamwidth	12° ( $\pm$ 5°)
Azimuth 3 dB beamwidth	360°
Polarisation	Vertical
Azimuth ripple	< 1 dB
<b>Mechanical:</b>	
Dimensions (h x d)	1400 mm x 75 mm
Weight	< 2.5 kg
Mounting method	Stainless steel brackets for up to 50 mm poles
<b>Environmental: designed to meet the following specifications</b>	
Wind survival	160 km/h
Temperature (operational)	- 31 °C - +71 °C
Shock	20 G for 10 ms
Thermal shock	- 30 °C - +70 °C: 10 cycles
Water ingress rating	MIL-STD-820F (506.4)

## FEATURES:

- High gain (8 dBi peak)
- Minimal ripple (< 1 dB)

## APPLICATIONS:

- Data link communications
- NATO LINK-16, TADIL-J

## PRODUCT DESCRIPTION:

The OMNI-A0091 is a high-gain omni-directional antenna intended for data-link communications. The performance has been optimised for the NATO LINK-16 and TADIL-J frequency band (960 to 1215 MHz), but excellent performance is obtained over the entire 500 to 1500 MHz operating range.

The high gain of this antenna will double the operating range of data links that are signal strength constrained, compared to a typical dipole antenna. The pattern is exceptionally regular, with very little ripple, ensuring excellent performance in all directions.

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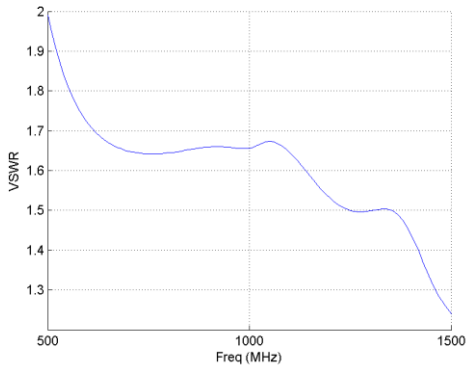
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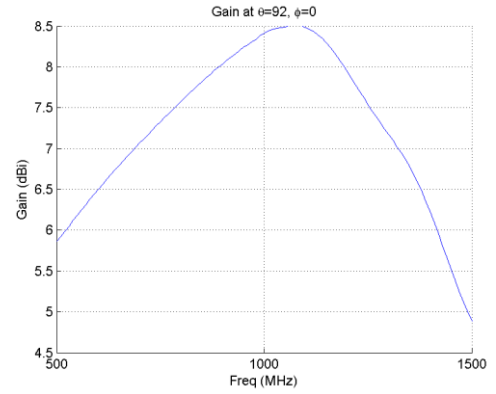
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## VSWR AND GAIN GRAPHS:

### VSWR:

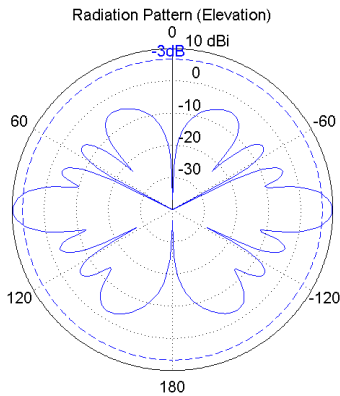


### GAIN:

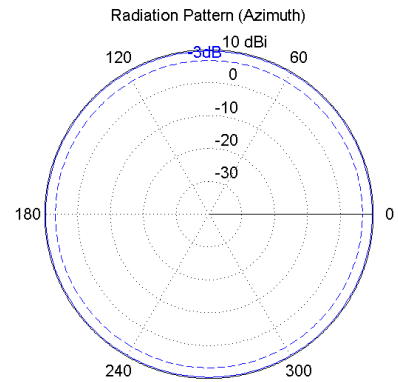


## Radiation patterns:

### E-plane:



### H-plane:



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