

Wideband VHF/UHF Vehicle Antenna

100 – 520 MHz

Product Code: OMNI-A0081

VERSION: 5.2

SPECIFICATIONS:



Electrical:	
Frequency range	100 – 520 MHz
VSWR	< 2.5:1
Nominal input impedance	50 Ω
Feed power handling	200 W
Connector	N-type female
Gain:	0 dBi (±2 dB) typical
(on horizon over large groundplane):	See graph
E-plane 3 dB beamwidth	40° (± 10°)
Polarisation	Vertical
Groundplane	Required (3000 mm x 3000 mm recommended)
Mechanical:	
Height	500 mm
Diameter	Base 135 mm, radiator 25 mm
Weight	4 kg
Mounting base	NATO flange, 6 holes
Environmental: designed to meet the following specifications	
Wind survival	160 km/h
Temperature (operational)	- 30 °C to + 51 °C
Temperature (storage)	- 30 °C to + 71 °C
Vibration (ground transportation)	MIL-STD-810E, method 514.5, cat 1
Vibration (operational)	MIL-STD-617-1, type 1
Water ingress rating	MIL-STD-820F (506.4) IP64

PRODUCT FEATURES:

- Wide frequency coverage (100 to 520 MHz)
- High-power, 200 W at 100% duty cycle
- Excellent VSWR (2.5 maximum)
- Omni-directional azimuth pattern
- Rugged and hard-wearing
- Suited to low-profile applications

APPLICATIONS:

- RCIED suppression (force protection)
- Communications interception

PRODUCT DESCRIPTION:

The OMNI-A0081 is a high-power wideband antenna designed for high-power applications in the 100 to 520 MHz frequency band and recently upgraded for high-power handling and improved gain.

This omni-directional antenna has an excellent radiation pattern, no pattern break-up, and a consistently low VSWR across the entire frequency band. It can handle full rated power continuously at all frequencies, making it ideal for all 100% duty-cycle applications. The anodised aluminium radiator is equipped with spring mounting to allow whip-action and resistance to impacts and obstructions.

The antenna may be used at frequencies as low as 80 MHz if a higher VSWR and lower gain can be tolerated.

The antenna is designed for direct mounting to ground platform with aid of grounding strap provided.

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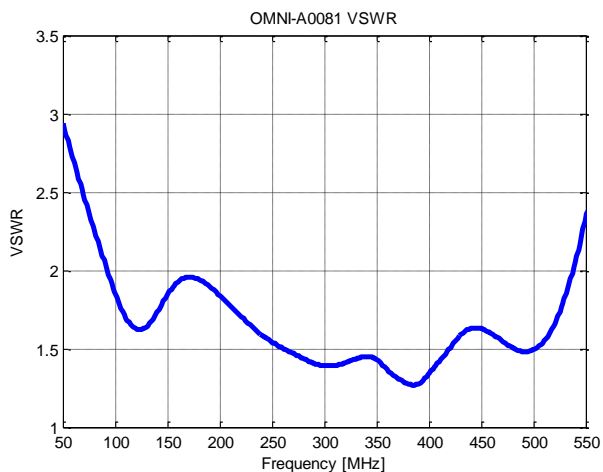
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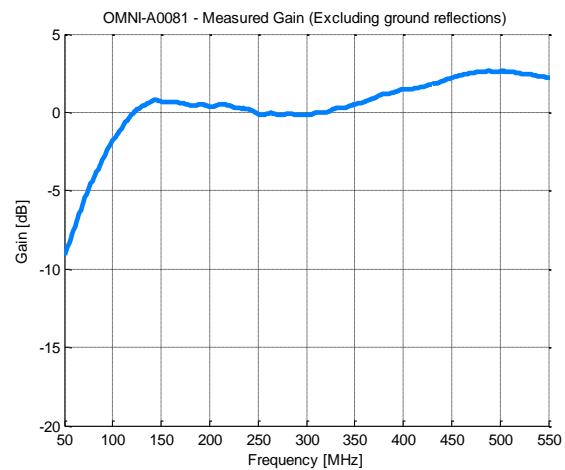
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VSWR AND GAIN GRAPHS:

VSWR*

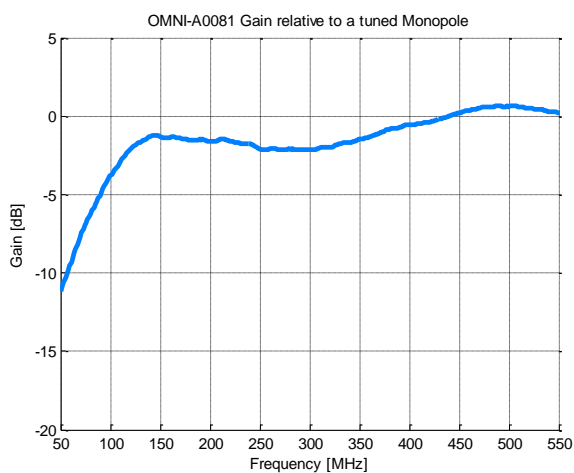


Gain*



*Measured on groundplane 5000 mm x 2500 mm

Gain**



**Relative to a tuned monopole, measured on a groundplane 5000 mm x 2500 mm



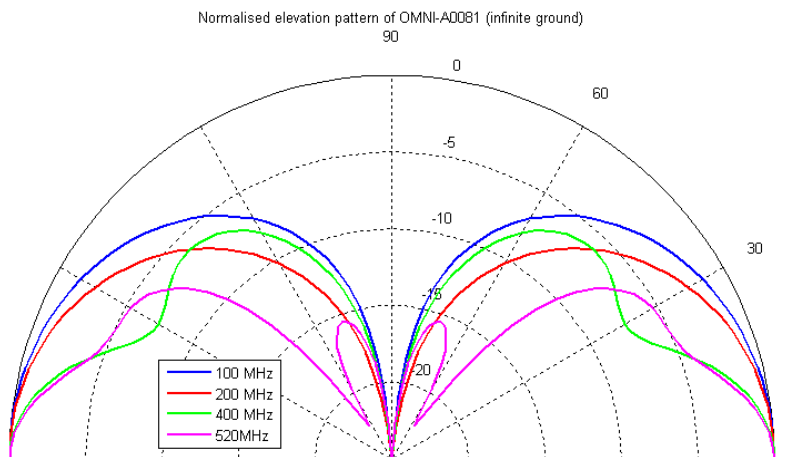
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ELEVATION PATTERNS***



***On infinite groundplane

MECHANICAL INTERFACE DRAWINGS:

