

Wideband VHF/UHF Vehicle Antenna

100 – 600 MHz

Product Code: MONO-A0063

VERSION: 5.1

SPECIFICATIONS:

Electrical:	
Frequency range	100 – 600 MHz
VSWR: 100 – 550 MHz	< 2.5:1
550 – 600 MHz	< 3:1
Nominal input impedance	50 Ω
Feed power handling	140 W (excluding chassis cooling effects)
Connector	N-type female
Gain: (on horizon over large ground plane):	See graph
E-plane 3 dB beamwidth	40° (± 10°)
Polarisation	Vertical
Groundplane	Dependent Groundplane required
Mechanical:	
Height	550 mm
Diameter	Base 135 mm, radiator 31.8 mm
Weight	< 2.5 kg
Mounting base	NATO 4 and 6 hole flange
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) IP65



PRODUCT FEATURES:

- Wide frequency coverage (100 to 600 MHz)
- High-power, 140 W at 100% duty cycle
- Excellent VSWR
- Omni-directional azimuth pattern
- Rugged and hard-wearing
- Suited to low-profile applications

APPLICATIONS:

- RCIED suppression (force protection)
- Communications interception

PRODUCT DESCRIPTION:

The MONO-A0063 is a high-power wideband antenna designed for high-power applications in the 100 to 600 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. This ensures efficient operation of power amplifiers yielding much high ERP than is accomplished with higher VSWR antennas.

The antenna can handle full rated power continuously at all frequencies, making it ideal for all 100% duty-cycle applications. The rated power of 140 W is possible even if there is poor thermal contact between antenna and vehicle chassis. If good thermal contact is achieved, the power rating can be safely increased to about 200 W.

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 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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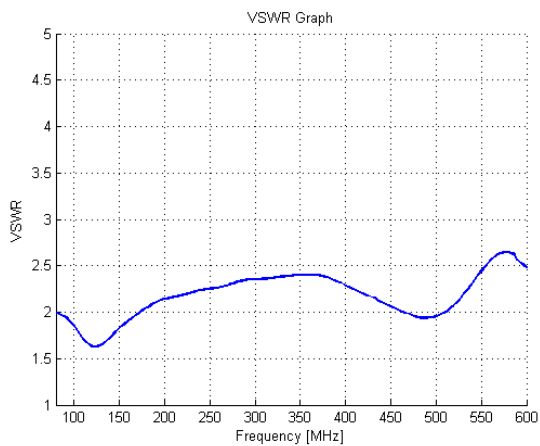
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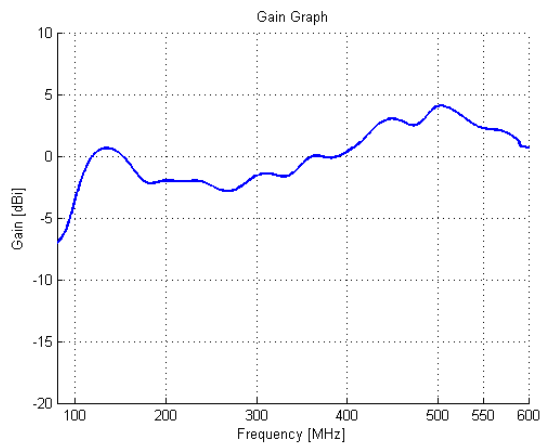
VSWR AND GAIN GRAPHS:

VSWR*



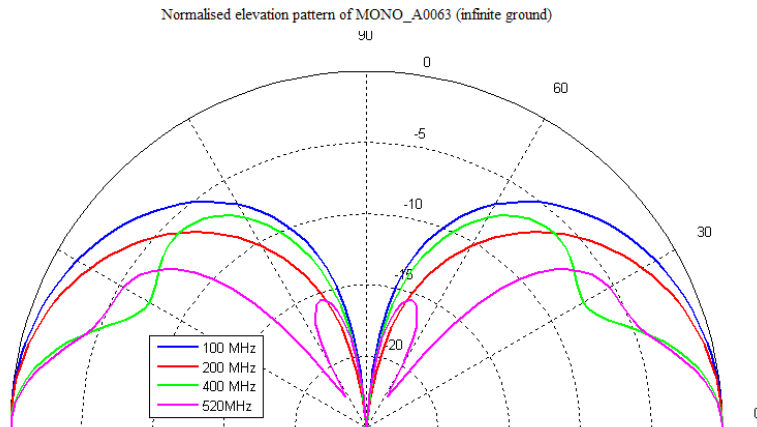
*Measured on groundplane 5000 mm x 5000 mm

Gain**



**On horizon, on a typical vehicular groundplane

ELEVATION PATTERNS***



***On infinite groundplane



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ANTENNA DIMENSIONS:

