

Wideband VHF/UHF Vehicle Antenna

100 – 500 MHz

Product Code: MONO-A0070

SPECIFICATIONS:

Electrical:	
Frequency range	100 – 500 MHz, gain optimised in the 130 – 180 MHz and 410 – 470 MHz bands
VSWR:	< 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° (\pm 10°)
Polarisation	Vertical
Ground plane requirements	Ground plane dependent Minimum 2000 mm x 2000 mm recommended
Mechanical:	
Height	650 mm
Diameter	Base 135 mm, radiator 31.8 mm
Weight	< 2.5 kg
Mounting base	NATO 4 and 6 hole flange
Environmental:	
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 500 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 jamming

PRODUCT DESCRIPTION:

The MONO-A0070 is a high-power wideband antenna designed for jamming applications in the 100 to 500 MHz frequency band. The 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 higher 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 painted 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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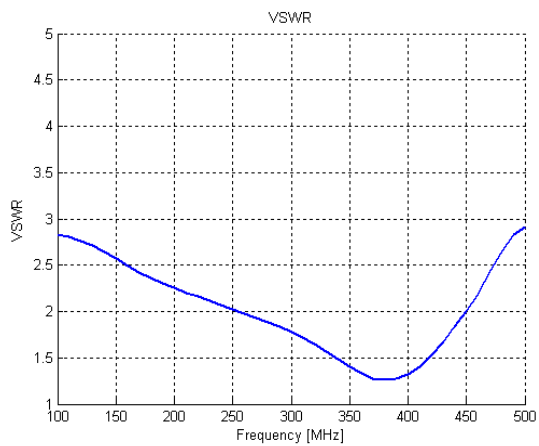
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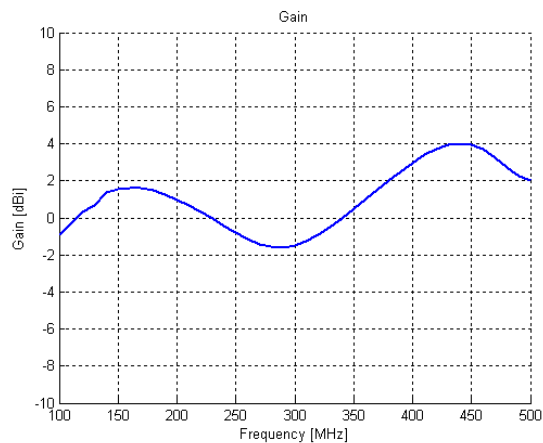
VERSION: 2.0

VSWR AND GAIN GRAPHS:

VSWR*



Gain



ELEVATION PATTERNS***

***On infinite ground plane

