



21-50-38
VHF / UHF Airborne Blade
Antenna
108 to 512 MHz

FEATURES

- **Low Profile**
- **Excellent performance in low height (10.5")**
- **No Tuning required**
- **High Strength Blade Antenna**
- **Frequency Selective Passive Matching Network**
- **High Environmental Integrity**
- **Suitable for VHF-AM and UHF LOS Communications**
- **Designed to MIL-STD-810**
- **Footprint compatible with AS3191 and other common VHF/UHF airborne antennas**



The 21-50-38 is a low height passive, top loaded airborne blade having the level of performance normally only achieved in significantly taller antennas.

Designed for use on rotary wing and high performance fixed wing aircraft operating up to Mach 1, this antenna covers the full VHF and UHF AM aircraft frequency bands.

Design comprises a shaped radiating element, top loaded for enhanced VHF gain, contained within a high strength glass-epoxy one-piece moulded shell. Proprietary matching circuits are employed and the antenna has a solid aluminium alloy baseplate with mountings compatible with AS3191, 37R2-U and similar antennas.

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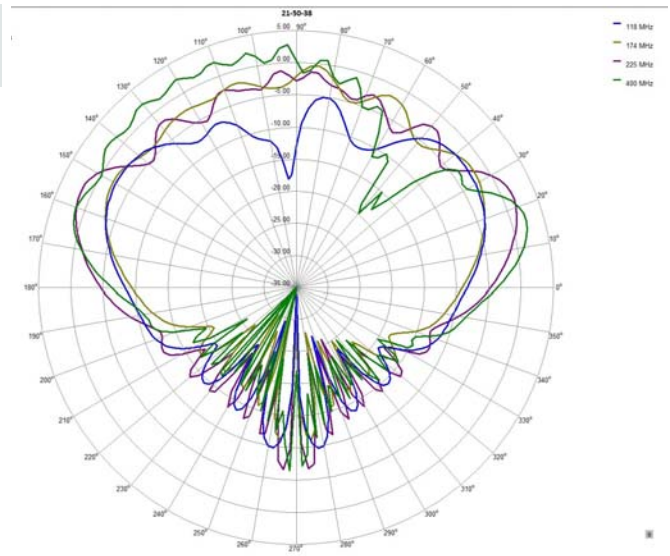
SPECIFICATIONS

Cooper Antennas Model 21-50-38

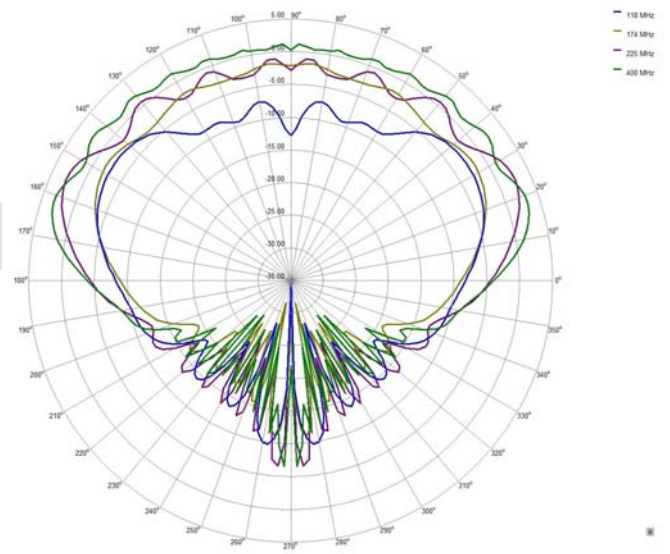
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ELECTRICAL

Frequency	108 - 512 MHz
Gain (typical)	108 MHz ≥ -3 dBi 137 MHz ≥ +1 dBi 152 MHz ≥ -3 dBi 174 MHz ≥ -3.5 dBi 225 MHz ≥ +1 dBi 300 MHz ≥ +3 dBi 400 MHz ≥ +3 dBi 512 MHz ≥ 0 dBi
VSWR	≤2.5:1
Impedance (nominal)	50 Ohms
Power	50 Watts CW
Polarization Pattern	Vertical (nominal)
Radiation	Azimuth : Omni-directional nominal Elevation : See graph
Antenna RF Connector	TNC Female



PITCH



ROLL

MECHANICAL

Antenna Shell Type	High density foam filled epoxy/fibre glass shell set on aluminium alloy base plate
Height	10.5 inches (267mm)
Weight	4 lbs (1.8kg) max
Base Plate Shape	Tear drop
Fixing Holes	6 x Ø 0.234 inch (5.9mm) holes, counter bored Ø 0.39 inches (9.9mm)

FINISH

Antenna	Urethane Lusterless Black
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Note: Cooper Antennas Ltd has a policy of continuous product improvement and data herein is therefore subject to change. Please check with Cooper Antennas Ltd that this data sheet is at latest issue before initiating contract activity.