



21-50-17
Combined UHF/L-Band
Airborne Blade Antenna
225 - 450 & 960 - 1850 MHz

FEATURES

- **Covers UHF Com, EPLRS and Link16 Band**
- **High Strength Composite Blade with Aluminum Alloy Base Block**
- **Low Side Area, Low Drag**
- **Single 'N' Type Connector**
- **Footprint replacement for AT-256**
- **Environmental Performance to MIL-STD-810**
- **Foamed in place radiating elements**



The 21-50-17 is a high performance combined UHF/L-Band airborne blade antenna suitable for helicopters and aircraft operating in excess of Mach 2.5

Construction is from a one piece glass loaded thermoplastic blade molding intimately bonded into an aluminum alloy base block which houses the matching circuits and provides for very solid attachment to the airframe via 6 fixing holes drilled to the same pattern as the AT-256 UHF antenna.

The metal base block also enables the 21-50-17 to meet the lightning protection requirements of AS-3191/A.

Internal radiating elements are shaped in such a way as to produce minimum VSWR and also to optimize radiation. The antenna assembly is sealed by closed cell foam and finished in lusterless black or grey urethane paint.

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Cooper Antennas Ltd is Accredited to: ISO9001, AS9100, ISO14001 and MAA Approved

SPECIFICATIONS

Cooper Antennas Model 21-50-17

Airborne Blade Antenna

ELECTRICAL

Frequency	225 MHz - 450 MHz 960 - 1850 MHz
Gain (typical) (Average azimuthal)	+1 to +4 dBi (UHF), +1 to +3 dBi (L-band) when mounted at center of an a 4 foot diameter ground plane.
VSWR	≤ 2.5:1
Impedance (nominal)	50 Ohms
Power	100 Watts CW UHF 200 Watts CW, 2KW peak (L-band)
Polarization	Vertical (Horizontal ≤ 10dB)
Radiation	Nominally Omni directional in azimuth plane
Antenna RF Connector	N Female

MECHANICAL

Antenna Shell Type	Glass loaded thermoplastic blade in aluminum alloy base collar
Height	9 inches (229mm)
Weight	0.9 lbs (0.4kg)
Side Loading	≥ 8 psi ultimate
Base Plate Shape	Diamond shape
Fixing Holes	6 x Ø 0.2 inch (5.08mm) holes, spot faced Ø 0.43 inches (10.9mm)

FINISH

Antenna	Urethane Lusterless Black
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Other finish options are available. Please specify finish required when ordering.

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.