



21-20-19
VHF
Airborne Blade Antenna
170 to 220 MHz

FEATURES

- **Covers VHF 170-220 MHz band**
- **High Strength Composite Blade with Aluminum Alloy Base Block**
- **Low Side Area, Low Drag**
- **Single 'N' Type Connector**
- **Meets Lightning Strike Criteria of AS-3191**
- **Designed to meet Environmental Performance to MIL-STD-810**
- **Foamed in place radiating element**



The 21-20-19 is a high performance VHF airborne blade antenna suitable for use on fixed and rotary wing aircraft.

Construction is from a one piece glass loaded thermoplastic moulding 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 21-20-19 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 close cell foam and finished in lusterless black urethane paint.

Cooper Antennas Ltd for non-USA customers
Thames Industrial Estate, Unit K, Fieldhouse Lane,
Buckinghamshire SL7 1TB, UK
Tel: +44 (0) 1628 482 360
Email: sales@cooperantennas.com
www.cooperantennas.com



Australian Representatives
ROJONE, PTY LTD.
Tel: 02 9829 1555
E: sales@rojone.com.au
www.rojone.com.au

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

SPECIFICATIONS

Cooper Antennas Model 21-20-19 Airborne Blade Antenna

ELECTRICAL

Frequency	170 MHz to 220 MHz
Gain	+1 dBi typical
VSWR	≤ 2.5:1
Impedance (nominal)	50 Ohms
Power	50 Watts CW
Polarization	Vertical (when mounted vertically)
Radiation	Omni directional in azimuth plane
Antenna RF Connector	N Female

MECHANICAL

Antenna Shell Type	Glass loaded thermoplastic blade in aluminum alloy base collar
Height	9.10 inches (231mm)
Weight	0.9 lbs (0.4kg)
Side Loading	≥ 8 psi ultimate
Base Plate Shape	Diamond shape
Fixing Holes	6 x Ø 0.203 inch (5.2mm) holes, counter bored 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.