



21-50-21
VHF/UHF High Power Airborne
Blade Antenna
100 to 500 MHz

FEATURES

- **Continuous Frequency Coverage**
- **300 Watts CW power handling, 500 Watts with duty cycle**
- **Passive design - does not require tuning**
- **DC Grounded Element**
- **Rugged aerofoil radome**
- **Suitable for use up to Mach 0.85 subject to side loading**
- **Designed to MIL-STD-810 Environmental Conditions**



The 21-50-21 is an airborne blade capable of accepting high power inputs over the continuous frequency range of 100-500 MHz.

Designed as a modified discone with loss-less matching, the antenna comprises a three dimensional radiating element contained within a one-piece molded radome of glass-epoxy.

Attachment to airframe is via a substantial aluminum baseplate with 8 mounting holes making the antenna suitable for transport-type aircraft operating up to Mach 0.85.

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

SPECIFICATIONS

Cooper Antennas Model 21-50-21 VHF/UHF High Power Airborne Blade Antenna

ELECTRICAL

Frequency	100 - 500 MHz continuous
Impedance (nominal)	50 Ohms
VSWR	3:1 max 100 - 200 MHz } see graph 2.5:1 max 201- 500 MHz }
Polarization	Vertical when vertically mounted
Gain (typical) at beam maximum	≥ 1 dBi @ 100 MHz ≥ 2 dBi @ 200 MHz ≥ 3 dBi 300 to 500 MHz
RF Power Handling	300 Watts CW, 500 Watts with 10% Duty Cycle
Patterns	Nominally Omnidirectional (with ± 1.5 dB) azimuth
Connector	N Type Female

MECHANICAL

Height	16 inches (406mm) max
Weight	6 lbs (2.73kg)
Fixing Holes	8 x Ø 0.234 0.208 inch holes

FINISH

Urethane Lusterless Black

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.