



**21-50-40**  
**ELT**  
**Airborne Blade Antenna**  
**121.5, 243 and 406 MHz**

## FEATURES

- **Covers 121.5, 243 and 406 MHz without tuning**
- **High Strength Composite Blade with Aluminum Alloy Base Block**
- **Low Side Area, Low Drag**
- **Single TNC Type Connector**
- **Meets Lightning Strike Criteria of AS-3191**
- **Environmental Performance to MIL-STD-810**



The 21-50-40 is a high performance V/UHF airborne three frequency ELT blade antenna suitable for aircraft installation.

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 21-50-40 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.

**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](mailto:sales@cooperantennas.com)  
[www.cooperantennas.com](http://www.cooperantennas.com)



**Australian Representatives**  
**ROJONE, PTY LTD.**  
Tel: 02 9829 1555  
E: [sales@rojone.com.au](mailto:sales@rojone.com.au)  
[www.rojone.com.au](http://www.rojone.com.au)

# SPECIFICATIONS

## Cooper Antennas Model 21-50-40 ELT Airborne Blade Antenna

### ELECTRICAL

Frequency	121.5, 243 and 406 MHz
Gain (typical)	+ 2dBi (UHF) - 2dBi (VHF)
VSWR	2.0:1 max @ 121.5 and 243 MHz 1.5:1 max @ 406 MHz
Impedance (nominal)	50 Ohms
Power	25 Watts CW
Polarization	Essentially Vertical (when mounted vertically)
Radiation	Nominally omni directional in azimuth plane
Antenna RF Connector	TNC Female

### MECHANICAL

Antenna Shell Type	Thermoplastic/glass blade in aluminum alloy base collar
Height	9 inches (229mm)
Weight	2 lbs approx. (0.9kg)
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.