



**21-50-36**  
**VHF/UHF Ultra Low Height**  
**Airborne Antenna**  
**110-512 MHz**

## FEATURES

- **Covers 110-512 MHz without tuning**
- **Lightweight and Ultra Low Profile**
- **Only 8.5” stand off height**
- **For helicopter and fixed wing aircraft up to 250 Knots**
- **Glass/Epoxy –Aluminum construction**
- **Small footprint**
- **Designed to MIL-STD-810 Environmental Conditions**
- **50 watts power handling**



The 21-50-36 is an externally mounted airborne VHF/UHF antenna operating over the civil and military communication band of 110-512 MHz

The radiating element comprises a hard drawn alloy tube inserted into an aluminum base which contains foamed-in place matching circuits capable of handling up to 50 Watts power.

The method of construction provides protection from military environmental conditions including vibration, shock and temperature variations.

**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)

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

# SPECIFICATIONS

## Cooper Antennas Model 21-50-36 VHF/UHF Ultra Low Height Airborne Antenna

### ELECTRICAL

|                      |   |
|----------------------|---|
| Frequency Range      | 110 - 512 MHz   |
| Gain (typical)       | -9 dBi @ 110 MHz rising to 0 dBi @ 225 MHz<br>-3 dBi average @ 225 MHz to 512 MHz |
| VSWR                 | ≥ 3:1   |
| Impedance (nominal)  | 50 Ohms   |
| Power                | 50 Watts  |
| Polarization         | Nominally vertical  |
| Radiation            | Nominally omni directional in azimuth plane                                       |
| Antenna RF Connector | BNC Female  |

### MECHANICAL

|                  |  |
|------------------|--|
| Construction     | Hard drawn aluminum alloy tube in aluminum base  |
| Height           | 8.5 inches (216mm)   |
| Weight           | 0.37lbs (168g)   |
| Base Plate Shape | Tear drop  |
| Fixing Holes     | 4 x Ø 0.170 inches (4.3mm) ±0.005 inches (0.127mm) holes, counter sunk at 100° Ø 0.320 inches (8.1mm). |

### FINISH

|         |            |
|---------|------------|
| Antenna | Matt 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.