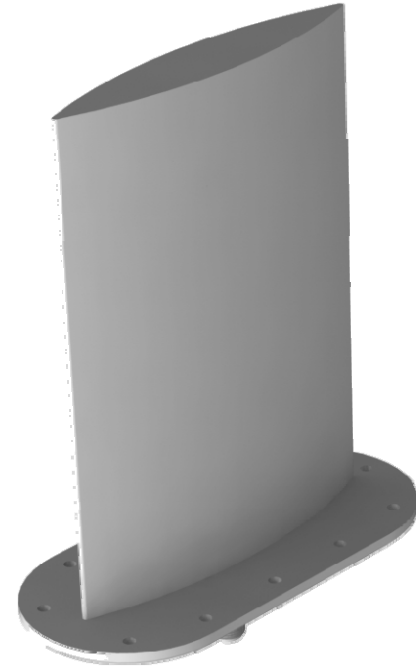




**21-50-114**  
**VHF/UHF/L-Band**  
**Airborne Blade Antenna**  
**30 to 512 / 960 to 1220 MHz**

## FEATURES

- **Very low height 8.2"**
- **50 dB isolation with in-built filters**
- **Very wide band with no tuning required**
- **Designed to MIL-STD-810**
- **Fully environmentally sealed**
- **Suitable for Link 16, IFF, Tacan**



The 21-50-114 is a low profile blade antenna providing excellent UHF and L-Band performance while also providing frequency coverage in the 30-88 and 108-174 MHz bands. Radiating element design is optimized to provide excellent gain and omni-directivity in azimuth over the full 225-512 MHz and 960-1220 bands while VHF provides moderate performance only due to the antenna's very low height.

Construction uses a glass epoxy radome bonded into an aluminum alloy base plate which carries a TNC type and SC connector and contains internal filters to isolate signals between V/UHF and L-Band.

The antenna is suitable for rotary and fixed wing aircraft operating in excess of Mach 1.

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

# SPECIFICATIONS

## Cooper Antennas Model 21-50-114

### VHF/UHF/L-Band Airborne Blade Antenna

#### ELECTRICAL

<b>Frequency Range</b>	30-88 MHz 116-174 MHz 225-512 MHz 960-1220 MHz
<b>Polarization</b>	Vertical
<b>Impedance</b>	50 Ohms (nominal)
<b>VSWR</b>	2.0:1 L-Band 2.5:1 max VHF/UHF
<b>Gain (typical)</b>	30-88    -40 dBi 116-174 -15 dBi 225-512  +2 dBi 960-1220 +2 dBi
<b>Isolation</b>	50 dB minimum between V/UHF and L-Band
<b>Power Handling</b>	25 Watts (average) V/UHF 2 KW peak L-Band
<b>Connectors</b>	Type SC Female (L-Band) Type TNC Female (V/UHF)

#### MECHANICAL

<b>Height</b>	8.2 inches (208 mm)
<b>Weight</b>	2.1 lbs (0.96kg) max

#### FINISH

<b>Antenna</b>	Urethane Lusterless Grey
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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.