



**21-50-30**  
**Airborne Stub Antenna**  
**30 to 512 MHz**

## FEATURES

- **Covers full JTRS VHF/UHF Comms band**
- **Robust Fiberglass construction**
- **Lightweight**
- **Meets AS-3191 lightning strike requirements**
- **Designed to meet MIL-STD-810**

### Environmental Specification

- **Low profile, 21 inch height**
- **Omni-directional azimuthal radiation pattern**
- **50 Watts power handling**
- **Gain from -24 to 0 dBi**



Covering the full VHF/UHF JTRS frequency band, the 21-50-30 is a lightweight broadband stub antenna intended for helicopter and moderate speed aircraft.

Construction uses an advanced fiberglass covered radiating element bonded into a machined aluminum base.

Unique double trap design ensures good elevation pattern throughout the frequency band and passive matching housed within the base maintains VSWR within 2.5:1 and provides exceptional gain for such a small overall structure.

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# SPECIFICATIONS

## Cooper Antennas Model 21-50-30

### Airborne Stub Antenna

#### ELECTRICAL

Frequency	30-512 MHz	
Gain (at beam max)	30 MHz	-24 dBi
	70 MHz	-15 dBi
	88 MHz	-12 dBi
	108-174 MHz	-3 dBi average
	225-512 MHz	0 dBi average
VSWR	30-174 MHz	≤ 2.5:1
	225-512 MHz	≤ 2.5:1
Impedance (nominal)	50 Ohms	
Power	50 Watts	
Polarization	Vertical	
Radiation	Omni directional in azimuth plane	
Antenna RF Connector	TNC Female	

#### MECHANICAL

Antenna Shell Type	Fiberglass element in aluminium base collar	
Height	21 inches (533mm)	
Weight	0.9 lbs (0.4kg)	
Base Plate Shape	Circular	
Fixing Holes	4 x Ø 0.196 inch (5mm) holes, counter sunk 100°.	

#### 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.