



21-50-76

**Multi-Band Satcom &
Communications Antenna**

240 to 400 MHz & 30 to 512 MHz

FEATURES

- **Aerodynamic design**
- **High strength**
- **Fully environmentally sealed**
- **Hi and Lo angle UHF Satcom coverage**
- **Full 30 - 512 MHz LOS communications**
- **PRC-117G, AN/ARC-210 & AN/ARC-231 compatible**
- **Low wingspan minimizes loading on aircraft structure**
- **Footprint fixings compatible with 437S1-H**



The 21-50-76 is a rugged multifunction VHF/UHF, AM-FM, LOS and Satcom antenna designed for airborne, ground and ship borne applications. A high strength aerodynamic vertical shell houses a 30 - 512 MHz linear element that can be used for V/UHF line of sight "LOS" communications or UHF Satcom at low angles of elevation. This vertical shell also supports a "Bat-Wing" shape horizontal element containing a pair of cross dipoles, connected to provide high angle, right hand circularly polarized UHF Satcom coverage.

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

SPECIFICATIONS

Cooper Antennas Model 21-50-76 Multi-band Satcom & Communications Antenna

ELECTRICAL

Frequency	Hi Angle :	240 - 400 MHz
	Lo Angle :	30 - 512 MHz
Gain	Hi Angle :	+6.5 dBiC
	Lo Angle :	-20 dBi @ 30 MHz
		-8.0 dBi @ 88 MHz
		-5.0 dBi average @ 118 -174 MHz
		+2.0 dBi average @ 225 - 512 MHz
VSWR	Hi Angle :	≤ 2.0:1
	Lo Angle :	≤ 2.5:1
Impedance (nominal)	50 Ohms for both ports	
Power	Hi Angle :	200 Watts CW
	Lo Angle :	50 Watts (30-88 MHz), 50 Watts (118-175 MHz), 200 Watts (225-512 MHz)
Polarization	Hi Angle :	Right Hand Circular
	Lo Angle :	Vertical, Linear
Antenna RF Connector	Hi Angle :	N Female
	Lo Angle :	TNC Female

MECHANICAL

Height	12 inches (305mm) max
Wingspan	13 inches (330mm) max
Mounting Hole Configuration	8 holes each 0.208 - 0.234 dia. Inches (5.28 - 5.94mm)
Weight	9 lbs (4.1kg) max

ENVIRONMENTAL

Designed to Environmental	MIL-E-5400 Class 2 / MIL-STD-810
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FINISH

Antenna: Urethane Lusterless Grey FED-STD 595 36173 Baseplate: Unpainted, Alocrom

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.