



21-50-79
**Multi-function UHF LOS/Satcom
and GPS Antenna**
225 to 450 MHz and
1564 to 1587 / 1216 to 1239MHz

FEATURES

- **Hi and Lo angle UHF Satcom coverage**
- **Covers L1 and L2 GPS Frequencies**
- **EPLRS compatible**
- **Low height, just 9"**
- **Fixing holes compatible with 437S1-H**
- **Designed to MIL-STD-810 Environmental Requirements**



The 21-50-79 is a rugged multifunction UHF, LOS, UHF Satcom and GPS antenna designed for airborne applications. A high strength aerodynamic vertical shell houses a 225 - 450 MHz linear element that can be used for UHF line of sight "LOS" communications or UHF Satcom at low angles of elevation. This vertical shell also supports a circular horizontal disc containing a pair of cross dipoles connected to provide high angle, right hand circularly polarized UHF Satcom coverage and an L1/L2 passive GPS antenna.

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SPECIFICATIONS

Cooper Antennas Model 21-50-79

Multi-function UHF/LOS/Satcom and GPS Antenna

ELECTRICAL

Frequency	UHF Hi Angle :	240 - 400 MHz
	UHF Lo Angle :	225 - 450 MHz
	GPS:	1564 - 1587 / 1216 - 1239 MHz
Gain (Typical)	Hi Angle :	+5 dBiC at Zenith
	Lo Angle :	+2.0 dBi average @ 225 - 450 MHz
	GPS:	+4 dBiC @ Zenith
VSWR	Hi Angle :	≤ 2.0:1
	Lo Angle :	≤ 2.5:1
	GPS :	≤ 2.0:1
Impedance (nominal)	50 Ohms for all ports	
UHF Power	200 Watts CW	
Polarization	UHF Hi Angle :	Right Hand Circular
	UHF Lo Angle :	Vertical
	GPS:	Right Hand Circular
Isolation	Between Low and High Angle : ≥ 15 dB (mid band)	
	Between Low Angle and GPS : ≥ 30 dB	
	Between High Angle and GPS : ≥ 30 dB	
Antenna RF Connector	UHF Hi Angle :	N Female
	UHF Lo Angle :	TNC Female
	GPS:	TNC Male

MECHANICAL

Height	9 inches (228mm) max
Disc Diameter	15.9 inches (404mm) max
Mounting Hole Configuration	8 holes each 0.208 - 0.234 dia. Inches (5.28 - 5.94mm)
Weight	9 lbs (4.09Kg) max

ENVIRONMENTAL

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

Antenna: Gloss White 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.