



21-53-46
GPS/UHF/MUOS SATCOM
& UHF Public Safety Band Antenna
240 to 385 & 500-941 MHz
& L1 / L2

FEATURES

- **Suitable for helicopter, vehicular, fixed and mobile applications**
- **Covers UHF Satcom and MUOS as well as Public Safety Frequencies and GPS**
- **All Weather operation**
- **Wide Elevation coverage without Hi-Lo switching**
- **200 Watts CW Power handling for Satcom**
- **Designed to MIL-STD-810**



Combining highly efficient “droopy dipoles” with a wide band, line-of-sight linear element, the 21-53-46 provides Hi-Lo angle UHF Satcom from a single connector plus a separate UHF public safety band element in a single airborne antenna. In addition, this antenna includes an L1/L2 stacked patch passive GPS element.

Element shaping and matching of the circularly polarized dipoles provides UHF Satcom coverage right through the UHF and MUOS band with useable radiation and gain typically from zenith down to 20 degrees or less above the horizon.

The robust design is suitable for helicopter and fixed wing aircraft operating up to 450 knots.

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SPECIFICATIONS

Cooper Antennas Model 21-53-46

GPS/UHF/MUOS SATCOM and UHF Public Safety Bands and VHF/UHF LOS Antenna

ELECTRICAL

Frequency	Line of Sight (LOS) :	500-941 MHz
	Satcom :	240- 385 MHz
	GPS :	1565 - 1586 and 1217 - 1238 MHz
Gain (typical)	LOS:	≥ 0 dBi to +3 dBi 500-941 MHz
	Satcom:	≥ +6.5 dBiC @ Zenith ≥ 0 dBiC @ all elevation angles above +25°.
	GPS :	≥ +3 dBiC @ Zenith
VSWR	LOS :	30-449 MHz ≤ 2.5:1; 450-512 MHz ≤ 3:1
	Satcom :	≤ 1.75:1
	GPS :	≤ 2.0:1
Impedance (nominal)		50 Ohms
Power	LOS :	10 Watts
	Satcom :	200 Watts
	GPS :	1 Watt
Polarization	LOS :	Linear
	Satcom and GPS :	Right Hand Circular (maximum at zenith)
Antenna RF Connector	LOS :	TNC Female
	Satcom :	N Female
	GPS :	TNC Female
Operational Temperature		-54°C to +71°C

MECHANICAL

Overall Height (max)	12 inches
Weight (max)	6.1 lbs

FINISH

Standard Urethane Lusterless Grey FED-STD 595 36173

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.