



FEATURES

- **Frequency Hopping - fast tune**
- **Only 9.5" height**
- **Radio Silent Tuning Controlled by Separate Logic Converter Unit (LCU)**
- **Compatible with Tacan, MIDS, IFF, Link16 and APC025 UHF as well as VHF/UHF LOS**
- **LCU's compatible with all versions of ARC210 including GEN5, ARC231, M3RA and TR6000**
- **Design to MIL-STD-810 Environmental conditions**
- **Suitable for helicopters and fixed wing aircraft**
- **Lightning Protected**



Logic Converter Unit

The 21-150-21 tuneable antenna provides exceptional gain in the 30 - 88 MHz SINCGARS band compared to similarly sized passive antennas, and maintains optimum performance up to 512 MHz. It also provides frequency coverage from 760 to 1220 MHz on a separate connector, independent of tuning to operate in the UHF/FM public services band (P25) and in L-Band for Tacan, IFF and Link 16 systems.

Many years of experience in designing solid-state tuned antennas has enabled our engineers to provide the ultimate in performance and reliability for a frequency agile airborne blade. Close attention to environmental, EMI and reliability design considerations combined with latest composites structural technology makes the 21-150-21 suitable for helicopters, subsonic and supersonic aircraft under demanding tactical conditions. The separate logic converter unit combines flash memory technology with MIL spec'd power supply in a MIL-STD-461 compliant package capable of tuning the antenna with radio silence under 50µ seconds.

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

SPECIFICATIONS

Cooper Antennas Model 21-150-21

High Gain Digitally Tuned VHF/UHF + UHF/FM+ L-Band Antenna

ELECTRICAL

Frequency	30-174 MHz, 225-512 MHz, 760-870 MHz, 960-1220 MHz
Gain (typical)	≥ -12.5 dBi (30 MHz) ≥ - 4 dBi (88 MHz) ≥ - 2 dBi (108 MHz) ≥ 0 dBi (174 MHz) + 1 dBi average (225-512 MHz) + 1 dBi average (760-870/960-1220 MHz)
VSWR	≤ 2.5:1 (VHF/UHF) ≤ 2.0:1 (L-Band)
Impedance (nominal)	50 Ohms
Power	25 Watts 100 Watts peak
Tuning Time	Less than 60μ seconds
Polarization (nominal)	Vertical (when vertically mounted)
Antenna RF Connector	TNC Female (VHF/UHF) N-type Female (UHF/FM and L-Band)
Antenna DC connector	Multi pin D38999

MECHANICAL

Antenna Height	9.5 inches max
Antenna Mounting Hole	10 x Ø 10:32 UNF holes or similar
Antenna weight	4 lbs (1.81kg)

ENVIRONMENTAL

Temperature	-54°C to +71°C
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FINISH

Antenna	Urethane Lusterless Black
Base Plate	Unpainted

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.