

21-150-200 Fast Tune VHF/UHF Antenna 30 - 512 MHz

FEATURES

- Radio silent tuning within typically 60µS
- Only 9.5 inches (240mm) height
- Latest FPGA logic converter unit technology
- Can accept both VHF/UHF and EPLRS radio inputs (via diplexer)
- Rugged design has no forward facing projections for ground handling and in-flight safety
- Designed for helicopters and subsonic fixed wing aircraft to MIL-STD-810 environmental conditions
- EMI/EMC design to MIL-STD-461
- -54° to +75°C operating (Antenna)
 - -40° to +75° operating (LCU)



21-151 series Logic Converter Unit

Footprint and fixing compatible with AS3191

The 21-150-200 is the latest in a series of high gain, digitally tuned VHF/UHF antennas providing outstanding performance in a physically small package of just 9.5 inches (241mm) height. This antenna has the additional benefit of having the same footprint size and fixings as AS3191. Latest p-i-n diode tuning technology for VHF band combined with a passive susceptance corrected element for the UHF band provides capability for use with both multiband VHF/UHF radios and when used with external diplexer type 21-80-25, UHF EPLRS radios working in the 420 - 450 MHz frequency range. A separate, lightweight logic converter unit (LCU) accepts data from the VHF/UHF radio, and using latest FPGA technology, provides tuning codes for the antenna. Tuning time, which is 100% radio silent, is typically 60µ second.

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SPECIFICATIONS

Cooper Antennas Model 21-150-200 Fast Tune VHF/UHF Antenna

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Frequency 30-88 MHz

108-174 MHz 225-512 MHz

Gain (typical) ≥- 12 dBi (30 MHz)

≥ -6 dBi (88 MHz)

≥ -3 dBi average (118-174 MHz) ≥ +2 dBi average (225-512 MHz)

VSWR ≤ 2.5:1

Impedance (nominal) 50 Ohms

Power 50 Watts UHF 25 Watts VHF

Tuning Time Less than 60µ seconds

Polarization (nominal) Vertical (when vertically mounted)

Antenna RF Connector TNC Female

Antenna DC Connector Multi pin PTO 12-10P to MIL-C-26482

MECHANICAL

Height 9.5 inches (241mm)

Weight Antenna 3.5 lbs (1.59kg)

Logic Unit 1.65 lbs (0.75kg)

Fixing Holes 6 x Ø 0.208 inch holes for 10:32 UNF holes or similar

Temperature -54° to +80° C (Operating) Antenna

-54° to +80° C (Non operating) LCU

-40° to +80° C (Operating) LCU

Operating Speed Up to Mach 0.85

FINISH

Antenna Urethane Lusterless Black

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.