



21-150-136
Frequency Agile Digitally Tuned
VHF/UHF Antenna
30 - 600 MHz

FEATURES

- Radio silent tuning within typically 60µS
- Latest FPGA logic converter unit technology
- Rugged design has no forward facing or top loading protrusions 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 +80°C operating (Antenna)
-40° to +80° operating (LCU)
- Footprint compatible with AS3191



The 21-150-136 is the latest in a series of high gain, digitally tuned VHF/UHF antennas providing outstanding performance in the same size, shape and footprint as AS-3191 passive blades. Latest p-i-n diode tuning technology for VHF band combined with a passive susceptance corrected element for the UHF band produces exceptional gain / height performance with excellent omnidirectional azimuth patterns throughout the frequency band. 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 less than 60µ second.

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SPECIFICATIONS

Cooper Antennas Model 21-150-136

Frequency Agile, Digitally Tuned VHF/UHF Antenna

ELECTRICAL

Frequency	30-88 MHz 108-174 MHz 225-600 MHz
Gain (typical)	≥ - 9 dBi (30 MHz) ≥ - 1 dBi (88 MHz) ≥ 0 dBi (118 MHz) ≥ 0 dBi (174 MHz) ≥ +2 dBi average (225-600 MHz)
VSWR	≤ 2.5:1
Impedance (nominal)	50 Ohms
Power	30 Watts VHF 50 Watts UHF
Tuning Time	Less than 60μ seconds
Polarization (nominal)	Vertical (when vertically mounted)
Antenna RF Connector	TNC Female
DC connector	D38999/49WB35PN

MECHANICAL

Height	14.7 inches max
Mounting Hole	6 x Ø 0.234 inch holes
Weight	Antenna 4 lbs Logic Unit 1.7 lbs

ENVIRONMENTAL

Temperature	-54°C to +80°C
Operating Speed	Up to Mach 0.95

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.