

TECHNICAL SPECIFICATION OF HALF LOOP ANTENNA (NVIS)

(Near Vertical Incidence Sky wave)

1. GENERAL SPECIFICATION:

PARAMETER	SPECIFICATION
Frequency Range	2.0 MHz to 29.9999 MHz
Power Rating	Max 100 Watts PEP
Role	Static and Mobile
Input Impedance	50 ohms
VSWR	Better than 1.5:1 at the resonance peak
Pattern Radiation	Omni directional, HRP Offsets less than 1 dB at two opposite minima, Vertical Elevation Radiation towards Zenith @ 90° (NVIS)
Power Supply Voltage	12 VDC Nominal (10.8 V to 14.4 V DC) Current Less than 2 Amps.
ATU Tuning Method	Continuous Variable Tuning
Tuning Time	< 3 seconds average, 8 seconds max.
Compatible	The Loop antenna should be compatible with HF Radios as per enclosed technical specifications of 100 Watts HF Transceivers
Programming Port	RS-232 / USB
Shape and Dimensions of antenna	Radiating Element (i) Semi Circular: Max. Length: 2.4 Meters Max. Height: 1.0 Meters (ii) Rectangular: Max.(750 mm x 1250 mm x1850mm) (H x B x L)
Weight (without mounting brackets)	Less than 15 kg

2. ENVIRONMENTAL PARAMETER

Operating Temperature	-30°C to +55°C
Storage Temperature	-30°C to +60°C
Humidity	95% max at +20°C non-condensing
Dust	MIL STD 810 C/D/E
Vibration	MIL STD 810 C/D/E
Water Intrusion	MIL STD 810 C/D/E
Shock	MIL STD 810 C/D/E
Attitude	MIL STD 810 C/D/E