



21-50-400
Wideband Receiving Antenna
20 to 3000 MHz

FEATURES

- **Ultra wide-bandwidth**
- **Low profile**
- **Can be used in arrays**
- **Fully sealed construction for environmental reliability**
- **Designed to MIL-STD-810**

Environmental conditions



The 21-50-400 is an ultra wideband, monopole antenna suitable for airborne and vehicular use, designed for use in SIGINT type applications where a number of them can be used to provide a DF array. The antenna structure comprises a unique element design with careful element shaping to optimize radiation diagram and avoid deep nulls in the elevation pattern throughout the band.

Construction is from high strength fibre glass with aluminium alloy base plate and the whole structure is filled with closed cell foam for long term reliability in world wide conditions of service.

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SPECIFICATIONS

Cooper Antennas Model 21-50-400 Wideband Receiving Antenna

ELECTRICAL

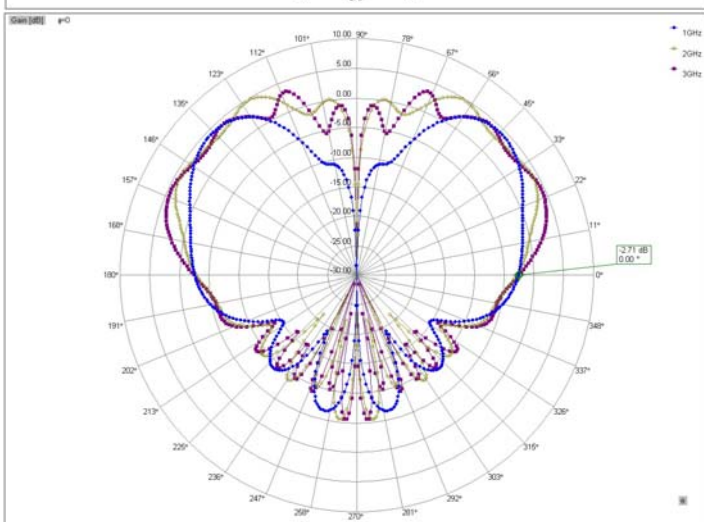
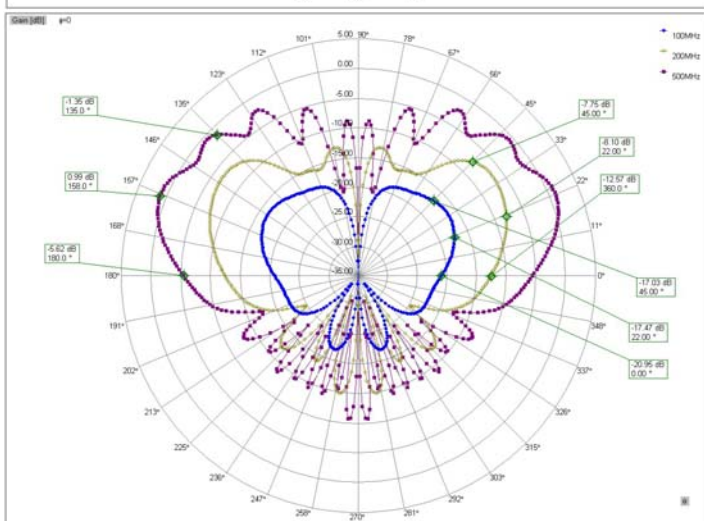
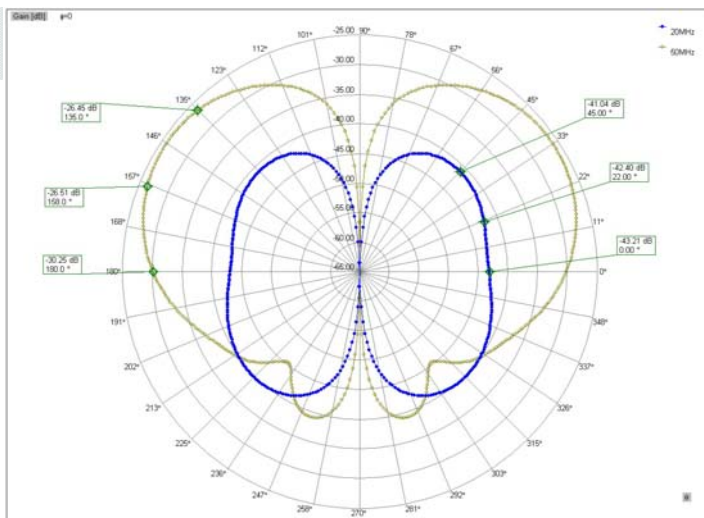
Frequency	20 - 3000 MHz
Gain (Typical)	-40dBi @ 20MHz -30dBi @ 30MHz -20dBi @ 100MHz -12dBi @ 200MHz -5dBi @ 500MHz -2.5dBi @ 1-3GHz
VSWR	≤3:1
Impedance (nominal)	50 Ohms
Power Handling	5 Watts max
Phase/Amplitude match	Can be selected for phase and amplitude matching for DF systems, either to a "Golden Standard" or in sets.
Polarization	Vertical
Radiation	Omni-directional in azimuth, approximately co-sinusoidal in elevation (see graphs)
Connector	TNC Female

MECHANICAL

Height	15 inches (381mm) max
Element Diameter	3.54 inches (90mm)
Base Diameter	5.55 inches (141mm)
Weight	3lbs (1.36Kg) max
Fixing holes	4 x Ø 0.433 inches (11mm) on Ø 4.5 (114mm) PCD

FINISH

Urethane Lusterless Gray
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.