

UHF FIBER GLASS HIGH GAIN COLLINEAR ANTENNA

AC12-450

406-512 MHz.

10dBd. (12 dBi) Gain

DESIGN FEATURES: AC12-450 UHF Fiberglass Omni-directional Collinear Antenna is rugged all weather model uses high class brass and aluminum alloy and does not require any field tuning or adjustments. The antenna is supplied in two segments for easy of handling and shipping. The upper and lower portion of antenna is threaded together to prevent RF inter-modulation and antenna is completely protected within a high-tech ruggedized radome to ensure survivability in the worst environments. The antenna termination is enclosed at bottom of the antenna for complete weather protection.

CONSTRUCTIONS: The AC12-450 is a center fed design which eliminates the distortion of the radiation pattern and ensures a true omni-directional horizontal pattern. The special stub matching is used for smooth VSWR and constant gain over the specified frequency band. The collinear antenna consist of large diameter brass radiating elements stacked vertically, fed in phase and enclosed in fiber glass tube. AC12-450 fiber glass collinear antenna is suitable for side mounting on the tower and is supplied with mounting hardware, including a non metallic 1.2 Meters (4 feet) long horizontal arm to hold the fiberglass omni-directional antenna at the top, on the side of antenna tower.



ELECTRICAL SPECIFICATIONS:

Frequency Range	406 - 512 MHz.
Gain	10dBd. (12 dBi)
Bandwidth	20 MHz.
Polarization	Vertical
Input Impedance	50 Ohms.
Radiation Pattern	Omni Directional
Vertical Beam-width –Half Power Points	7 Degrees
VSWR	1:1.5
RF Power Handling Capacity	250 Watts.
Input Termination	N-Female

MECHANICAL SPECIFICATIONS:

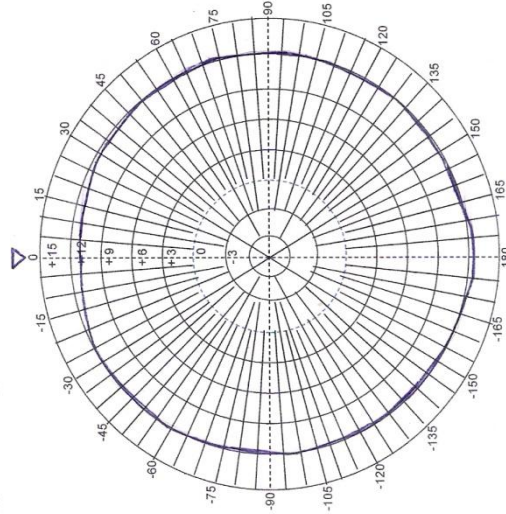
Mounting Hardware	Stainless Steel
Net Weight	8 Kgs.
Gross Weight with Mounting Hardware	20 Kgs
Wind Rating	200 Km/Hr.
Overall Length	6.0 Meters
Shipping Length	3.2 Meters
Support Pipe Materials	Aluminum
Maximum Mount Pipe Diameter	51 mm (2 Inches)
Enclosure Materials	Fiberglass
Enclosure Outer Diameter	45 mm
Enclosure Length	5400 mm

ENVIRONMENTAL SPECIFICATIONS:

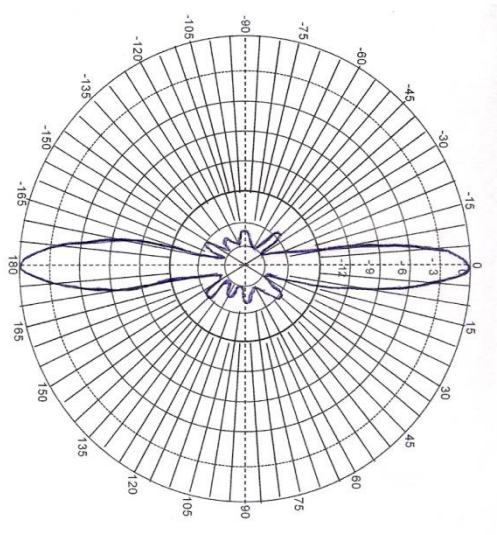
Operating Temperature	(-) 30 to +70 Degrees Celsius
Storage Temperature	(-) 40 to +80 Degrees Celsius
Humidity	0 to 95% RH

Note: All information contained in the datasheet is subject to change without any prior notice.

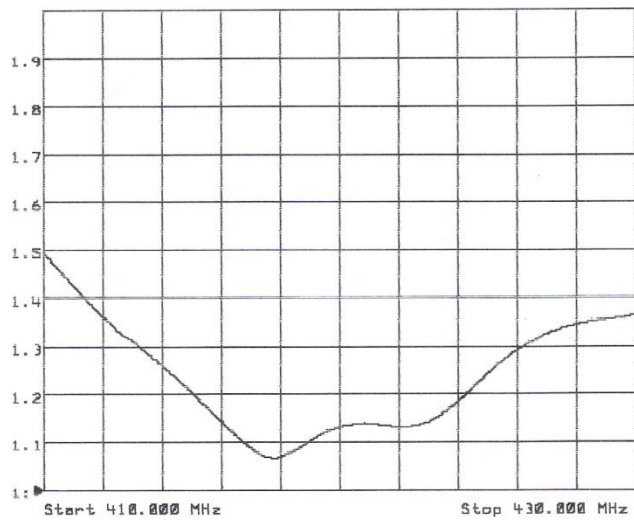
Radiation Patterns UHF Omni-Directional Fiberglass Collinear Antenna Model # AC12-450



AZIMUTH RADIATION PATTERN



ELEVATION RADIATION PATTERN



VSWR Vs FREQUENCY CHART

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