

FM BAND HEAVY DUTY OMNI-DIRECTIONAL COLLINEAR ANTENNA

DESIGN FEATURES: FMC-85-HD Omni-directional Heavy Duty FM Band Collinear Antenna is rugged all weather model uses 6063T6 ultra corrosion resistant architectural aluminum, high class brass alloy and does not require any field tuning or adjustments. All junctions are fully welded to prevent RF inter-modulation and antenna is completely protected within a high-tech ruggedized fiberglass radome to ensure survivability in the worst environments. The heavy duty fiberglass enclosure has excellent transparency for RF signals and enough strength to withstand specified wind loads. The compact size of collinear antenna allows easy handling and shipping.

CONSTRUCTIONS: The FMC-85-HD 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 3dBi gain over the entire 84-86 MHz FM frequency band. The collinear antenna consist of large diameter brass radiating element and enclosed in heavy duty fiberglass tube. The antenna termination is enclosed at bottom of the antenna for complete weather protection. The mounting hardware is made of type 316 marine grade stainless steel and supplied with the antenna. The antenna is supplied with standard olive green colour.

**ELECTRICAL SPECIFICATIONS:**

Frequency Range	84-86 MHz.
Gain	3 dBi.
Bandwidth	2 MHz.
Polarization	Vertical
Input Impedance	50 Ohms.
Radiation Pattern	Omni Directional
Vertical Beam-width –Half Power Points	78 Degrees
VSWR – Less Than	1.5:1
RF Power Handling Capacity	250 Watts.
Input Termination	N-Female

MECHANICAL SPECIFICATIONS:

Mounting Hardware	Marine Grade Stainless Steel
Gross Weight	11 Kgs.
Wind Rating	200 Km/Hr.
Overall Length	2.7 Meters
Shipping Length	2.8 Meters
Support Pipe O.D.	70 mm with 5mm Wall Thickness
Support Pipe Materials	6063T6 Aluminum Alloy
Maximum Mount Pipe Diameter	63 mm (2.5 Inches)
Enclosure/Radome Materials	Heavy Duty Fiberglass
Enclosure/Radome Outer Diameter	60 mm with 6mm Wall Thickness
Enclosure Length	1800 mm

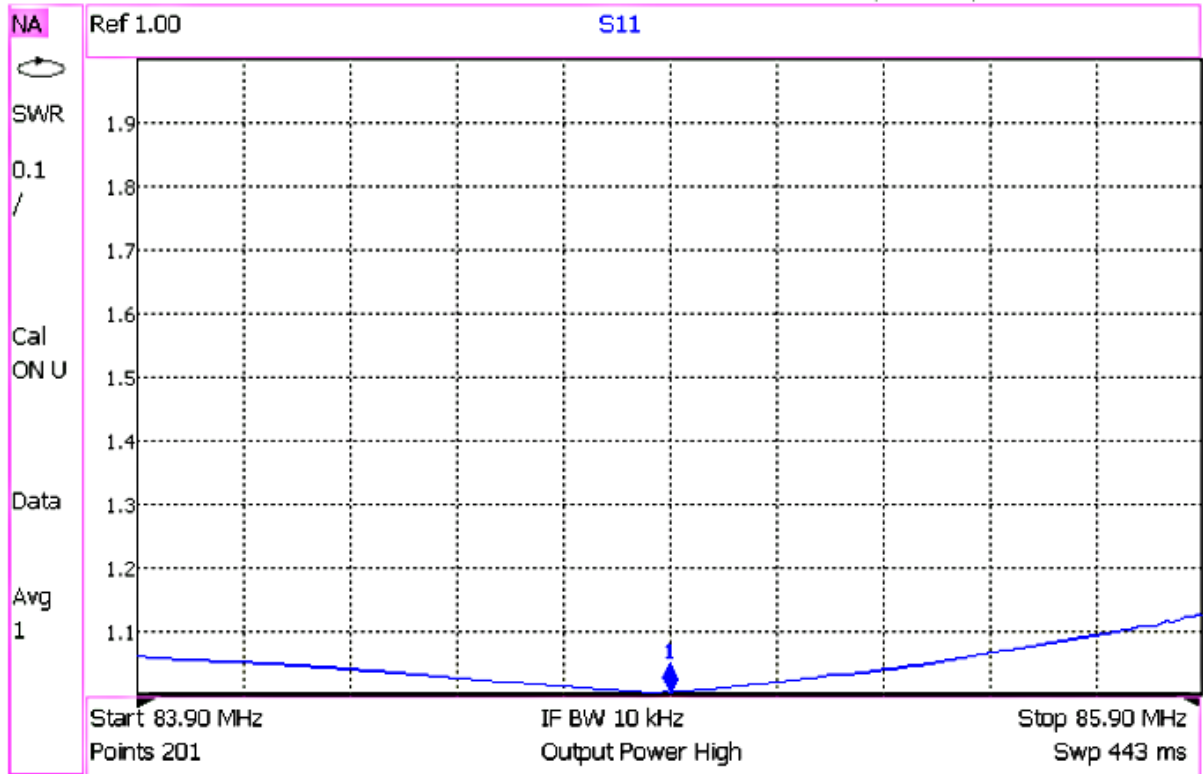
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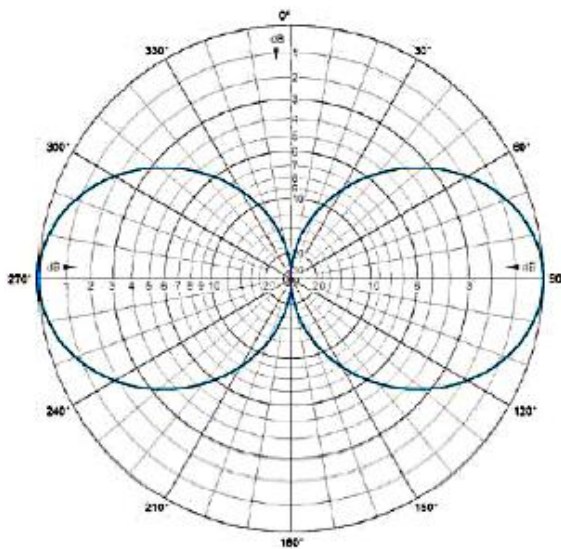
www.saratelecom.fr - RC N° 501 687 586 SIRET N° 501 687 586 00021 - FR 03 501687586

ENVIRONMENTAL SPECIFICATIONS:

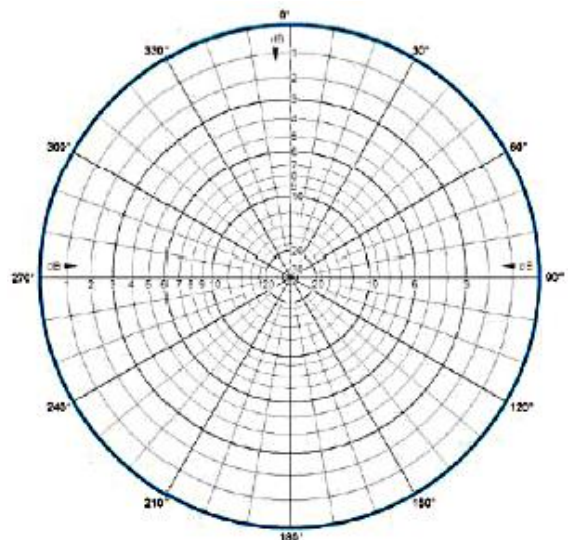
Operating Temperature	(-) 30 to +70 Degrees Celsius
Storage Temperature	(-) 40 to +80 Degrees Celsius
Humidity	0 to 95% RH



Frequency Vs VSWR Curve



Elevation radiation pattern



Azimuth radiation pattern