



# ANTENNA EXPERTS

E-mail: [info@antennaexperts.in](mailto:info@antennaexperts.in) Website: [www.antennaexperts.in](http://www.antennaexperts.in)

DME-960-1240-12

960 – 1240 MHz.

12 dBi. Gain

## DME FIBER GLASS OMNI-DIRECTIONAL HIGH GAIN COLLINEAR ANTENNA

**DESIGN FEATURES:** DME-960-1240-12 antenna is rugged all weather model uses 6063T6 ultra corrosion resistant architectural aluminum alloy and does not require any field tuning or adjustments. No ground plane is required to operate this antenna. The DME-960-1240-12 is an Omni-directional broadband, higher performance, collinear dipole type phased array designed specifically for use as a distance measuring equipments (DME) antenna. All junctions are fully welded to prevent RF inter-modulation and antenna is completely protected within a high-tech ruggedized fiber glass radome to ensure survivability in the worst environments. The design of antenna allows controlling friction induced static, which could be created by wind and dust. The compact size of fiber glass collinear antenna allows easy handling and shipping.

**CONSTRUCTIONS:** The DME-960-1240-12 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 entire frequency band. This DME antenna consist of large diameter brass radiating elements stacked vertically, fed in phase and enclosed in fiber glass tube. The antenna termination is enclosed at bottom of the antenna for complete weather protection. The high gain DME antenna is strong enough to withstand an ice storm, and will also do well in a shoreline environmental conditions. The marine grade stainless steel mounting hardware is supplied with the antenna.

**COUPLER & MONITORING PROBES:** A coupler and two monitoring probes for monitoring the radio signal radiated by the antenna are supplied with the antenna. Probe output level is -25 dB ± 1 dB below power level applied to main RF input connector. The coupler is suitable to mount on the same mast near the antenna.



### ELECTRICAL SPECIFICATIONS:

Frequency Range	960 - 1240 MHz.
Gain	12 dBi.
Bandwidth	Entire Band
Polarization	Vertical
Input Impedance	50 Ohms.
Radiation Pattern	Omni Directional
Vertical Beam-width –Half Power Points	7 Degrees
VSWR	2:1
RF Power Handling Capacity	150 Watts.
Input Termination	N-Female

### MECHANICAL SPECIFICATIONS:

Mounting Hardware	Marine Grade Stainless Steel
Gross Weight – Antenna only	8 Kgs.
Wind Rating	200 Km/Hr.
Overall Length	3.0 Meters
Shipping Length	3.1 Meters
Support Pipe Outer Diameter	51 mm
Support Pipe Materials	6063T6 Aluminum Alloy
Maximum Mount Pipe Diameter	51 mm (2 Inches)
Enclosure Materials	Fiberglass
Enclosure Outer Diameter	45 mm
Enclosure Length	2350 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.