



# ANTENNA EXPERTS

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Model # DME-1100-14-180 960 – 1240 MHz. 14 dBi. Gain

## DME HIGH GAIN DIRECTIONAL ANTENNA SYSTEMS

**DESIGN FEATURES:** DME-1100-14-180 antenna is a 14dBi gain with 180 degrees beamwidth, rugged all weather model uses 6063T6 ultra corrosion resistant architectural aluminum 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 fiber glass radome to ensure survivability in the worst environments. DME-1100-14-180 antenna system has a 180 Degrees wide horizontal beam-width with 14 dBi gain. This higher performance, collinear dipole phased array designed specifically for use as a Distance Measuring Equipment (DME) antenna. The antenna handles input power to 5,000 watts at standard DME pulse duty cycle. DME-1100-14-180 directional antenna comes factory tuned and does not require any field tuning or adjustment.

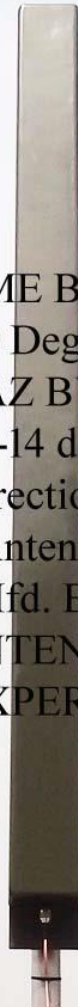
**CONSTRUCTIONS:** The DME-1100-14-180 is a center fed design which eliminates the distortion of the radiation pattern and ensures a true 180 degrees directional horizontal pattern. The special stub matching is used for smooth VSWR and constant gain over the entire frequency band. This DME antenna consist 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 DME directional antenna operates at D.C. ground with low resistance discharge path for protection against lightning and immunity to noise.

**OPTIONAL:** A coupler and two monitoring probes for monitoring the radio signal radiated by the antenna can also supplied with the antenna. Probe output level is -25 dB ± 1 dB below power level applied to main RF input connector. Lightening arrestor and aviation light can also be supplied with this DME directional antenna.

### ELECTRICAL SPECIFICATIONS:

Frequency Range	960 - 1240 MHz
Gain - Typical	14 dBi
Bandwidth	Entire 960-1240MHz Band
Polarization	Vertical
Input Impedance	50 Ohms
Radiation Pattern	Directional
Horizontal Beam-width -3dB.	180 Degrees
Vertical Beam-width -3dB.	9 Degrees
Front to Back Ratio	10 dB.
VSWR – Better Than	2:1
RF Power Handling Capacity	5KW @ Standard DME Pulse Rate
Input Termination	N-Female
<b>MECHANICAL SPECIFICATIONS:</b>	
Reflector Materials	6063T6 Aluminum Alloy
Mounting Hardware -Materials	Stainless Steel
Wind Rating	200 KMPH
Overall Length of antenna	1.9 Meter
Shipping Length of array system	2.0 Meters
Radiating Elements Materials	High Quality Brass
Radome/Housing Materials	High Strength Fiberglass
Final Finish/Color	Olive Green or Customized
Maximum Mount Pipe Diameter	63 mm (2.5 Inches)
Gross Weight	22 Kgs.
<b>ENVIRONMENTAL SPECIFICATIONS:</b>	
Operating Temperature	(-) 30 to +70 Degrees Celsius
Storage Temperature	(-) 40 to +80 Degrees Celsius
Humidity	0 to 95% RH

DME Band  
180 Degrees  
AZ BW  
8-14 dBi  
Directional  
Antenna  
Mfd. By:  
ANTENNA  
EXPERTS



Please contact us for further information like radiation patterns and frequency Vs VSWR graph.

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