

## **ANTENNA EXPERTS**

E-mail: info@antennaexperts.in Website: www.antennaexperts.in

Model # DME-1100-8-180 960 – 1240 MHz.

## 960 – 1240 MHz. 8 dBi. Gain

## **DME HIGH GAIN DIRECTIONAL ANTENNA SYSTEMS**

DESIGN FEATURES: DME-1100-8-180 antenna is a 8dBi 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-1100-8-180 antenna system has a 180 Degrees wide horizontal beam-width with 8 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-1100-8-180 directional antenna comes factory tuned and does not require any field tuning or adjustment.

**CONSTRUCTIONS:** The DME-1100-8-180 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  $\pm$  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:**

ELECTRICAL SPECIFICATIONS:	_	
Frequency Range		960 - 1240 MHz
Gain - Typical		8 dBi
Bandwidth		Entire 960-1240MHz Band
Polarization	6.0	Vertical
Input Impedance		50 Ohms
Radiation Pattern		Directional
Horizontal Beam-width -3dB.		180 Degrees
Vertical Beam-width -3dB.	- DME Band -	38 Degrees
Front to Back Ratio		10 dB.
VSWR – Better Than	180 Degrees	2:1
RF Power Handling Capacity	AZBW	5KW @ Standard DME Pulse Rate
Input Termination		N-Female
MECHANICAL SPECIFICATIONS:	8-14 dBi	
Reflector Materials	Directional	6063T6 Aluminum Alloy
Mounting Hardware -Materials	Antenna	Stainless Steel
Wind Rating		200 KMPH
Overall Length of antenna	Mfd. By:	0.5 Meter
Shipping Length of array system	ANTENNA	0.6 Meters
Radiating Elements Materials	EXPERTS	High Quality Brass
Radome/Housing Materials	LAILKIS	High Strength Fiberglass
Final Finish/Color		Olive Green or Customized
Maximum Mount Pipe Diameter		63 mm (2.5 Inches)
Gross Weight		5 Kgs.
ENVIRONMENTAL SPECIFICATIONS:		
Operating Temperature		(-) 30 to +70 Degrees Celsius
Storage Temperature		(-) 40 to +80 Degrees Celsius
Humidity	<b>*</b>	0 to 95% RH

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