



ANTENNA EXPERTS

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Model # DME-1100-11-180 960 – 1240 MHz. 11 dBi. Gain

DME HIGH GAIN DIRECTIONAL ANTENNA SYSTEMS

DESIGN FEATURES: DME-1100-11-180 antenna is a 11dBi 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-1100-11-180 antenna system has a 180 Degrees wide horizontal beam-width with 11 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-1100-11-180 directional antenna comes factory tuned and does not require any field tuning or adjustment.

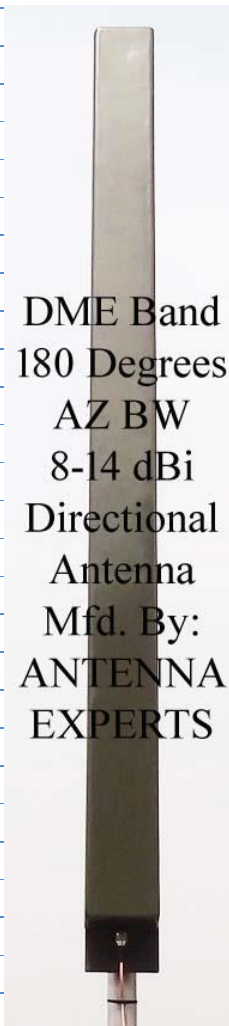
CONSTRUCTIONS: The DME-1100-11-180 is a center fed design which eliminates the distortion of the radiation pattern and ensures a true 180 degrees directional horizontal pattern. The special stub matching is used for smooth VSWR and constant gain over the entire frequency band. This DME antenna consist 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 | 11 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. | 18 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 |
| MECHANICAL SPECIFICATIONS: | |
| Reflector Materials | 6063T6 Aluminum Alloy |
| Mounting Hardware -Materials | Stainless Steel |
| Wind Rating | 200 KMPH |
| Overall Length of antenna | 1.1 Meter |
| Shipping Length of array system | 1.2 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 | 12 Kgs. |
| ENVIRONMENTAL SPECIFICATIONS: | |
| 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:
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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.