

Sub-1M Ku-Band Manpack Satcom Terminal (MPT)

1m Parabolic Reflector is designed to be used in Ku band frequency range. In this frequency range the profile RMS error of reflecting surface has be less than 0.5mm. The reflector has the following features:

- Must withstand wind load 56Kmph
- Light weight
- High strength to weight ratio
- Easy to assemble & disassemble
- Good Aesthetic



The reflector manufactured using Carbon fiber reinforced Plastic (CFRP) in segments and joined together to form a Parabolic Reflector.

Features:

1. Indigenous, rugged and light-weight VSAT Terminal suitable for Man-portable applications.
2. Fast deployment with Manual assisted Satellite Acquisition using GPS & BTR
3. GUI based Operations of terminal.
4. Can be Integrated with any Standard Satellite Modem to support reliable data/voice traffic.
5. RF Monitoring available at GUI and with external Spectrum Analyzer
6. Tool free setup and operation
7. Low Maintenance

Applications:

1. Disaster Relief and Recovery
2. Special Forces
3. Defence

System Specifications:

1. 0.76M Multi piece CFRP reflector with feed.
2. Data Rate : 2 Mbps or better
3. Tx EIRP : 50 dBW
4. G/T Ratio : 16 dB/0 K (Typical)
5. Weight of Terminal: 25 Kg (Excluding battery of weight 6Kg)
6. Designed for Internal and External Modem integration
7. Packing options
8. Soft backpack carrying
9. Rugged Case 2 Box Solution
10. Operates on Single Phase AC (as per Indian VAC, 50 Hz) and 24 VDC

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Technical Specifications of Sub-1M Ku Band Manpack Satcom Terminal

RF Parameter	Specifications
Frequency Band	10.70 GHz - 12.75 GHz 13.75 GHz - 14.50 GHz
Gain	Tx>37dBi, Rx>36dBi
Antenna Performance	Conforms to ITU RS 580.6
BUC	16 Watt/40 Watt
Polarization	Linear
Cross Polarization (XPD)	30 dB (Typ), 28dB (min)
MODEM Interface	L-Band
Mechanical Specifications	
Antenna Size	0.76 M Parabolic Multi-Piece Carbon Fiber Reflector
Feed Type	Compact DHF
Azimuth travel range	±100°
Elevation travel range	5° to 90°
Polarization travel range	±90°
Environmental Specifications	
Operating Temperature	-30°C to +55°C
Storage Temperature	-40°C to +70°C
Weather Proofing	IP65
Complies to MIL Grade JSS 55555 specifications and EMI/EMC specifications	
Note: Specifications are subject to change without prior notice. Product can be customized as per customer requirement also.	



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