Product Fact Sheet

A1000 Parabolic Manpack SATCOM Terminal



Flexible SATCOM Terminal

Overview

The A1000 Parabolic Manpack SATCOM Terminal is a highly flexible SATCOM terminal suited for operations in harsh environments. Equipped with a high-performance parabolic antenna and designed for operations across Ku or Ka Bands, the terminal is capable of accessing a variety of networks with its modular RF design and ability to support a range of modem platforms.

Highly portable and lightweight for its class, the terminal is quick and easy for operators to deploy with a full auto-pointing capability. Certified to MIL-STD810H, it is suited for deployments under robust conditions and remains highly reliable.

Terminals are available in Standalone and Integrated configurations, fully equipped with a modular RF payload and supports a range of field-swappable integrated modems. This enhances operational flexibility by allowing the terminal to operate under different networks with a common antenna hardware, thus maximizing commonality in hardware for ease of maintenance.

Key Features

- High-performance parabolic antenna
- Quick to deploy in under 10 minutes
- Easy to operate with auto-pointing
- Lightweight amongst its class at 27.5kg
- Multi-personality with flexible modem configurations
- Multi-mission with modular RF payloads

Key Applications

- Tactical Connectivity
- Reconnaissance Operations
- Humanitarian Aid and Disaster Relief

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Technical Specifications

General Specification		
Configuration	Manpack terminal Motorized / Manual	
Antenna Size	1 meter	
Standard Regulation	ITU	
Operating Band	Ka-Band	Ku-Band
Frequency	29.0 to 31.0 GHz (Tx) 19.2 to 21.2 GHz (Rx)	13.75 to 14.50 GHz (Tx) 10.70 to 12.75 GHz (Rx)
Gain	47.8 @ 31.0 GHz (Tx) 44.7 @ 21.2 GHz (Rx)	41.1 @ 14.25 GHz (Tx) 40.0 @ 12.50 GHz (Rx)
Typical System G/T @20deg	20.7 dB/K min.	17.4 dB/K min.
Feed and Polarization	2-port Circular	2-port Linear
Cross Pol / Axial Ratio	1.5 dB (Axial Ratio)	35 dB (Cross Pol)
EIRP Capability	Based on 20W BUC 60.0dBW min. (29 - 30.5 GHz) 57.3dBW min. (>30.5 - 31 GHz)	Based on 25W BUC 54dBW min.

Mechanical Specification	
Tracking mode (Motorized)	Beacon / DVB carrier
Travel Range Azimuth | Elevation | Polarization	+/- 215° | 0° ~ 90° | ±90°
Auto acquisition time	< 3 min
Carrying Case	2 Backpacks (option for hard case)
Weight	27.5kg

Modem	
Integrated Modem	iDirect 950MP | iQ200 | SMB3315

Electrical Specification	
System Voltage / Frequency	48 VDC nominal
Power Consumption	<350W

Environmental Specification	
Operational Temperature	-20°C to +55°C (External/950MP/SMB3315 Modem Variants) -5°C to +55°C (iQ200 Modem Variant)
Humidity	95%
Protection	IP65
Wind Loading Operational	< 11m/s with ballast
Wind Loading Survival	< 18m/s with ballast

1. This product is certified to MIL-STD810H standard
2. This product is designed to meet MIL-STD188-164 RevA standard.

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