Product Fact Sheet

Starlight A1000 Manpack Terminal

Flexible SATCOM Terminal

Starlight 1000 Manpack Terminal is a highly flexible SATCOM terminal suited for operations in harsh environments. Equipped with a high performance parabolic antenna and designed for Tri-band operations across Ku, Ka and X 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. Designed to MIL-STD810G, it is suited for deployments under robust conditions and remains highly reliable. It is a perfect fit for the Defence market for applications such as tactical communications, reconnaissance and critical communications support, and extends well to support first responders and for humanitarian and disaster relief operations.

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 23kg
- Multi-personality with flexible modem configurations
- Multi-mission with modular RF payloads

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Technical Specifications

General Specification			
Configuration	Manpack terminal Motorized / Manual		
Antenna Size	1m		
Standard Regulation	ITU		

GF Specification			
Operating Band	Ka-Band	Ku-Band	X-Band
Frequency	29 to 31 GHz (Tx) 19.2 to 21.2 GHz (Rx)	13.75 to 14.5 GHz (Tx) 10.7 to 12.75 GHz (Rx)	7.9 to 8.4 GHz (Tx) 7.25 to 7.75 GHz (Rx)
Gain	47.8 @ 31 GHz (Tx) 44.7 @ 21.2 GHz (Rx)	41.1 @ 14.25 GHz (Tx) 40 @ 12.5 GHz (Rx)	36.4 @ 8.15 GHz (Tx) 35.6 @ 7.5 GHz (Rx)
Typical System G/T @20deg	20.7 dB/K min.	17.4 dB/K min.	14.1 dB/K min.
Feed and Polarisation	2-port Circular	2-port Linear	2-port Circular
Cross Pol / Axial Ratio	1.5 dB	35 dB	1 dB
EIRP Capability	57dBW min (10W)	52dBW min (16W) 57dBW min (50W)	48.5dBW min (20W)

Mechanical Specification	
Tracking mode (Motorised)	Beacon/DVB carrier
Travel Range Azimuth | Elevation | Polarization	 +/- 200° | 0° ~ 90° | ±90°
Auto acquisition time	≤ 3 min
Carry Case	2 Field Bag (option for hard case)
Weight	23kg

Modem Case (Option)	
Integrated Modem	iDirect 950MP | iQ200 | SMB3315

Electrical Specification	
System Voltage / Frequency	24-48 VDC
Power Consumption	<350W

Environmental Specification	
Operational Temperature	-20°C to 55°C
Humidity	100%
Protection	IP65
Wind Loading Operational	< 11m/s with ballast
Wind Loading Survival	< 18m/s with ballast

This product is designed to MIL-STD810G standard

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