# 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



## **Technical Specifications**

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

Operating BandKa-BandKu-BandX-BandFrequency29 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)Gain47.8 @ 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 @20deg20.7 dB/K min.17.4 dB/K min.14.1 dB/K min.Feed and Polarisation2-port Circular2-port Linear2-port CircularCross Pol / Axial Ratio15 dB35 dB1 dBEIRP Capability57dBW min (10W)52dBW min (16W)48.5dBW min (20W)	RF Specifications	ecifications		
19.2 to 21.2 GHz (Rx)       10.7 to 12.75 GHz (Rx)       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       15 dB       35 dB       1 dB	Operating Band	Ka-Band	Ku-Band	X-Band
44.7 @ 21.2 GHz (Rx)       40 @ 12.5 GHz (Rx)       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       15 dB       35 dB       1 dB	Frequency			
Feed and Polarisation     2-port Circular     2-port Linear     2-port Circular       Cross Pol / Axial Ratio     1.5 dB     35 dB     1 dB	Gain			
Cross Pol / Axial Ratio     1.5 dB     35 dB     1 dB	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
EIRP Capability         57dBW min (10W)         52dBW min (16W)         48.5dBW min (20W)	Cross Pol / Axial Ratio	1.5 dB	35 dB	1 dB
	EIRP Capability	57dBW min (10W)	52dBW min (16W)	48.5dBW min (20W)

Mechanical Specifications	anical Specifications	
Tracking mode (Motorised)	Beacon/DVB carrier	
Travel Range		
Azimuth   Elevation   Polarization	+/- 200°   0° ~ 90°   390°	
Auto acquisition time	≤ 3 min	
Carry Case	2 Field Bag (option for hard case)	
Weight	23kg	

Modem Case (Option)	
Integrated Modem	iDirect 950MP   iQ200

#### **Electrical Specifications**

System Voltage / Frequency	24-48 VDC
Power Consumption	<300W

Environmental Specifications	
Operational Temperature	-20°C to 55°C

operational remperature	20 0 10 00 0
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

www.stengg.com digitalsystems@stengg.com