

SATELLITE

A1000 Triband Parabolic Manpack



Manpack Satellite Terminal

A1000 Parabolic Manpack Triband SATCOM terminal provides high reliability, superior performance for users. This terminal is highly suited for operations in harsh environmental conditions.

The terminal is suited for use in places where there is no fixed communications infrastructure and where access by vehicles is limited. The terminal is man-portable and can be deployed quickly. The equipment includes BUC, LNB, Modem, Power Supply, M&C and GPS. Given its innovative design, the terminal is compact and light weight without reducing any of its functionality. Deployment of the Manpack terminal is simple, with minimal assembly of separate parts and automatic antenna pointing. Full deployment can be completed in less than 10 minutes for rapid deployment in hostile environment.

Key Features

- High performance parabolic antenna
- Compact and Rugged
- Manual or Motorised with Auto Pointing Options
- Deployment using wireless hand-held device
- Optimal size, weight and power
- Built-in Tx Rejection Filter
- Better RF feature, high gain, low sidelobe and remarkable cross-pol
- Built-in Digital Compass
- Built-in GPS receiver
- Built-in Dual Axis Positioner

Technical Specifications

General Specifications

Configuration	Manpack terminal (Flyaway) Motorized / Manual
Antenna Size	1m
Standard Regulation	FCC, ITU, Eutelsat Compliant

RF Specifications

Operating Band	Ka-Band	Ku-Band	X-Band
Frequency	29.00 GHz – 31.00 GHz (Tx) 19.20 GHz – 20.20 GHz (Rx)	13.75 GHz – 14.50 GHz (Tx) 10.95 GHz – 12.75 GHz (Rx)	7.90 GHz – 8.40 GHz (Tx) 7.25 GHz – 7.75 GHz (Rx)
Gain	Tx: 47.6 @ 30 GHz Rx: 44.5 @ 20.2 GHz	41.1 @ 14.25 GHz 40.0 @ 12.5 GHz	36.4 @ 8.15 GHz 35.6 @ 7.5 GHz
Typical System G/T @20deg	20.1 dB/K min.	17.6 dB/K min.	14.5 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	With 16W BUC: 52dBW min. (Ku Band)		
HPA & LNB Configuration	Single thread BUC (16W) LNB		
Optics Type	Prime Focus		
Reflector Material	Carbon fibre		
Reflector Segments	8		
Sidelobe Performance	ITU Compliance		

Mechanical Specifications

Travel Range	±200° 0° ~ 90° ±90°
Azimuth Elevation Polarization	
Auto acquisition time	≤ 3 min
Tracking mode	Beacon/DVB carrier
Carry Case	2 Field Bag (option for single carry case)
Weight	< 20kg approx (Antenna (Ku), RF)

Baseband Case

Modem	iDirect 950MP / SMB3310 (others please check with factory)
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Electrical Specifications

System Voltage / Frequency	48 VDC
Power Consumption	<300W

Environmental Specifications

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

Note: All specifications are subject to change without notice.

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DOP 0120