



ULV MicroVSAT

LEADING EDGE, COMPACT & POWERFUL, MULTI-CERTIFIED, MULTI-BEARER, MULTI-FREQUENCY MANPACK TERMINAL

Features

- Ultra-lightweight, robust, carbon fibre composite design
- Leading-edge ergonomic
- Multi-bearer certified
- WGS, Intelsat Flex, Inmarsat GX, Avanti Multi-frequency – X, Ku & Ka
- Swap RF cartridges in minutes
- For global use, including the harshest environments (MIL-STD-810G certified)
- Rapidly deployable in less than 5 minutes
- No tools
- High EIRP/data throughput
- Integrated modem agnostic terminal
- Configurable manpack pack-out
- Tri-Band (X, Ku & Ka)
- 45 linear inches (114cm)
- Weighs less than 25lbs (11kgs)
- Flyaway antennas available from 0.23m to 3.7m diameter

Overview

The ULV MicroVSAT is designed to meet the most stringent Size, Weight and Power (SWaP) requirements, It delivers enhanced performance of size, weight and speed of deployment on multi-band, multi-bearer networks.

Power & performance

The ULV utilizes an Offset Gregorian Antenna, which provides excellent efficiencies and performance. Its unique performance advantage is high EIRP Spectral Density that allows maximum EIRP towards the Satellite and enables higher data rates.

Lighter and more compact than a traditional centre-fed 0.65m parabolic, the ULV provides superior performance in a highly transportable robust solution for multiple bearers.

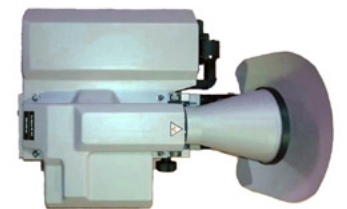
Designed to be modem agnostic, it can house a number of modem options including, but not limited to:

- iDirect 950mp (velocity capable)
- ComTech DMD 1050TS
- Teledyne Paradise Q-Lite
- NSSL Satlink 2900
- iDirect e150mp

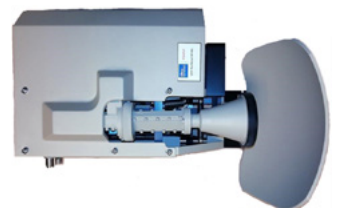
It's possible to bypass or omit an internal modem and connect an external modem using the L-band interfaces. The terminal incorporates a simple pointing system using a highly intuitive Graphical User Interface to assist in pointing and peaking the antenna onto the chosen satellite. The embedded control board controls all terminal functions and allows external control and monitoring via Ethernet.



X-band RF Assembly



Ku-band RF Assembly



Ka-band RF Assembly

Technical Specification

General	
Antenna Type	Offset Gregorian with Segmented Reflector
Diameter	Equivalent to 0.65m circular
Configuration	Offset Gregorian
Polarisation	Linear Orthogonal for Ku band, optional for Ka-band RHCP, switchable to LHCP, for X-band and Ka band
Acquisition	Manual with auto-assist pointing, using integrated GUI or web-based GUI.

RF Performance			
Band	X	Ku	Ka
Transmit (GHz)	7.9 - 8.4	13.75 - 14.5	29.0 - 31.0
Receive (GHz)	7.25 - 7.75	10.95 - 12.75	19.2 -21.2
EIRP (dBW)	49.4	54.3	57.7
G/T (dB/K)	10.6	14.3	16.5

Certifications
WGS (ARSTRAT) – X-band, Ka-band
Immarsat GX
Intelsat Flex
Avanti
MIL-STD-810G

Terminal User Interface
Simple Intuitive User Interface via Graphical Display
Web Browser Setup
Network Management System (Option)

Satellite Acquisition
Via Modem SNR or Rx Signal Level
Via Beacon Receiver (Option)

Interfaces	
Data Ports	2 LAN (RJ45)
DC Input	18 to 36V DC
RF Monitor	L-band Coaxial Connector (N-Type)
Batteries	BB-2590, BA-5590, BB-590 or similar

Power	
Power Requirement	+18 to 36V DC External battery (Option) Optional mains adapter (90-264V AC)
Power Consumption	+100W to 280W

Environmental	
Temperature	- 40 - +70K° Transportation & Storage - 20 - +55° Operational - 20 - +50°C Operational if fitted with DMD-1050 series modem
Humidity	MIL-STD-810G 507.5, Proc II
Wind Rating	30mph, gusting to 45mph, with anchors
Altitude	MIL-STD-810G Method 500.5 Proc II
Shock	MIL-STD-810G Method 516.6 Proc I
Shock—Transit Drop	MIL-STD-810G Method 516.6 Proc IV
Vibration	MIL-STD-810G Method 514.6 Proc I
Ingress protection	IP65

Physical	
Elevation Adjustment	0 to 90°
Azimuth Adjustment	360°
Packed Size	45 linear inches (1.14 linear m)
Number of Cases	One
Weight	>25lbs (11kgs) excluding carry case Weights above are for baseline configuration



Ultra reserves the right to vary these specifications without notice.

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