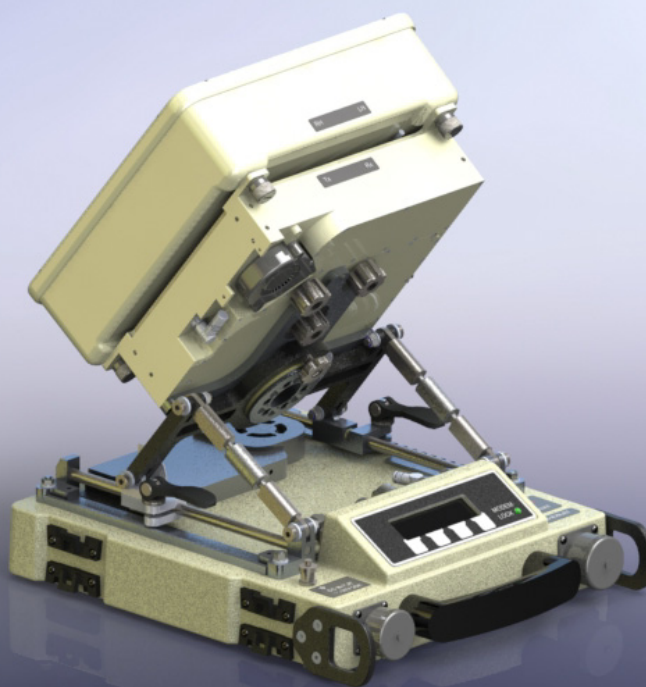
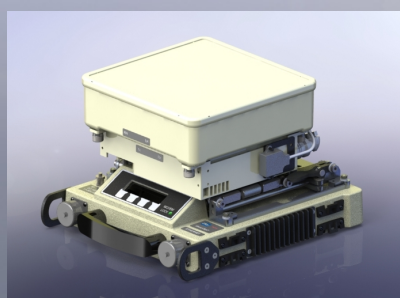
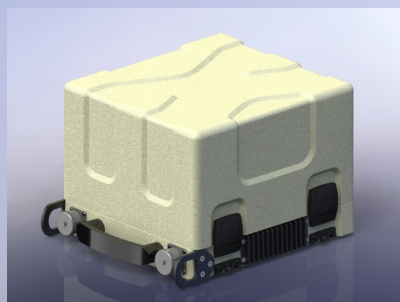




MicroVSAT Terminal

Light and compact flat panel antenna (22lbs) with manual satellite acquisition

Features

- On-Air in minutes
- No tools required
- Ka and X band versions
- Simplicity of a BGAN terminal
- High data rate communications
- Modem agnostic, L-band interface
- Complete integrated system

The MicroVSAT terminal utilises a custom flat panel array.

This rugged suitcase MicroVSAT terminal offers the simplicity of a BGAN terminal with the increased through-put of Commercial and Military satellites.

The complete terminal is designed to be carried as airline cabin luggage.

The standard terminal is offered with an embedded iDirect Evolution modem. The modem incorporates Adaptive Coding and Modulation (ACM), required for Ka-band operation.

The terminal is designed to be modem agnostic and can house a number of modem options including, but not limited to:

iDirect e150 (integral)

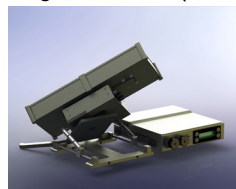
iDirect e850 (external)

iDirect e950 (integral)

Comtech DMD1050 (external)

Paradise Q-Flex (integral)

Hughes HX280 (external)



It is 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 peak the antenna onto the chosen satellite.

The embedded control board controls all functions of the terminal and allows external control via Ethernet.

Data is connected to the terminal using a RJ45 Ethernet connector.

Different size BUCs can be externally connected to the terminal, should increased EIRP be required.

An additional flat panel can be clipped in place, in-field, as another means of increasing EIRP.

The terminal can be powered by DC (11 to 30VDC) or mains (90 to 264VAC) using an external AC-DC adapter.



MICRO-ANT
ANTENNA DESIGN AND MANUFACTURING

GigaSat

Ultra
ELECTRONICS

Specifications

General

Antenna Type	Flat panel
Dimensions of panel	MV-023 8" x 8" (0.2m x 0.2m) MV-032 8" x 16" (0.2m x 0.41m) Option
Polarisation	LHCP/RHCP
Axial Ratio	1.0dB (Tx) 1.5dB (Rx)

Transmit

Transmit Bands	MV-070 (X) MV-300 (Ka) MV-300 (Ka)	7.9 to 8.4GHz 29.0 to 30.0GHz 30.0 to 31.0GHz
3dB Beamwidth	<3.1° at 30.5GHz	For 8" x 8" panel
VSWR	1.3:1	
Transmit Gain	MV-023/70 MV-032/70 MV-023/300 MV-032/300	23.1dBi mid-band 26.0dBi mid-band 35.2dBi mid-band 37.6dBi mid-band
Transmit EIRP Linear (PSat)	MV-023/70 MV-032/70 MV-023/300 MV-032/300	33.1dBW (36.1dBW) 36.0dBW (39.0dBW) 42.0dBW (44.8dBW) 44.5dBW (47.3dBW)

Higher powers available

Terminal User Interface

Simple Intuitive User interface via Graphical Display
Audible Output for Satellite Acquisition
Web Browser Setup
Network Management System (Option)

Satellite Acquisition

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

Receive

Receive Bands	MV-070 (X) MV-300 (Ka) MV-300 (Ka)	7.25 to 7.75GHz 19.2 to 20.2GHz 20.2 to 21.2GHz
Receive Gain	MV-023/70 MV-032/70 MV-023/300 MV-032/300	22.8dBi mid-band 25.5dBi mid-band 34.2dBi mid-band 37.0dBi mid-band
Receive G/T	MV-023/70 MV-032/70 MV-023/300 MV-032/300	2.1dB/K 5.0dB/K 11.3dB/K 14.1dB/K

Power

Power Requirement	+11 to 30V DC External battery (Option) External mains (90 to 264VAC) adaptor (Option)
Operating Powers	150W Maximum (PSat) 130W Typical Operation (PLin) <50W Receive Only

Environmental

Temperature	-40 to +80°C - Transportation & Storage -20 to +55°C - Operational
Humidity	MIL-STD-810G 507.5, Proc II
Altitude	MIL-STD-810G 500.5, Proc II, 15,000ft
Wind Rating	45mph (72km/h) - Operational 65mph (104km/h) - Survival
Shock	MIL-STD-810G 516.6 Proc. I
Shock—Transit Drop	MIL-STD-810G 516.6 Proc. IV
Vibration	MIL-STD-810G 514.6 Proc. I, Cat 24
Ingress Protection	IP65

Physical

Elevation Adjustment	0 to 90°
Azimuth Adjustment	360°
Packed Size	10.7" x 11.5" x 8.5" (272 x 292 x 216mm)
Weight	22lbs (10kgs)



GigaSat

Ultra Electronics reserves the right to vary these specifications without notice.

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