SurfBeam® 2 Pro Portable Terminal

High-Speed Internet Access Over Satellite

The SurfBeam 2 Pro Portable Terminal delivers affordable high-speed Internet access via satellite for workers at temporary sites. The rugged, lightweight terminal is based on ViaSat SurfBeam® 2 technology and builds on the success that made ViaSat SurfBeam the product of choice for Ka-band direct-to-home Internet service. With more than a million terminals shipped, the SurfBeam network has a record of proven reliability, scalability and performance.

HIGH-PERFORMANCE, COST-EFFECTIVE INTERNET ACCESS ON THE GO

The ViaSat SurfBeam 2 Pro Portable Terminal is designed for users requiring high throughput connectivity in a compact and portable package. Field reporters, remote medical and peace workers, and emergency responders benefit from high-speed Internet with the convenience of "near-instant" connectivity even in locations where no other communications infrastructure is available. The form factor is ruggedized to support operation in harsh conditions and supports multiple configuration options to suit user needs. The complete system, including the satellite terminal and antenna, can be packed into a single case for transit and is lightweight enough to be carried by a single user.

The unit enables fast web browsing and supports video streaming, file transfers, VPN connections, and bandwidth-intensive Internet applications. It is capable of delivering downstream rates up to 40 Mbps and upstream rates up to 20 Mbps, and provisioning tools enable the network operator to create different classes of service with configurable downstream and upstream rates. The modem has an embedded acceleration client that works with acceleration servers in the gateway to provide a faster, more responsive user experience. With four standard Ethernet connections, the terminal natively supports up to 4 IP devices, such as PCs, cameras, and routers as well as other user equipment. The antenna includes a collapsible satellite reflector and feed, transmit and receive electronics. The modem can be deployed attached to or located separately from the antenna.

EASY INSTALLATION AND OPERATION

The compact SurfBeam 2 Pro Portable Terminal is designed for a quick and reliable user installation in less than 10 minutes by personnel with minimal satellite training. It is part of a complete SurfBeam 2 system that also includes an innovative Satellite Modem Termination System (SMTS) gateway and Network Management Systems (NMS) that facilitate subscriber management with features such as automated service provisioning, diagnostics, and customer support.

TERMINAL AT-A-GLANCE

- Easily portable high-speed connectivity
- Ruggedized for operation in harsh environments
- Utilizes affordable, high-capacity Ka-band satellite bandwidth
- Supports high-speed live video uplinks
- Quick set-up using built-in antenna pointing aid for rapid satellite acquisition
- Integrated 4-port IP router
- Web GUI local management and SNMP-based remote management and control

APPLICATIONS

- Satellite news gathering
- Emergency response and disaster relief
- Tactical military operations
- Network access for real-time data acquisition in remote areas

SPECIFICATIONS

FORWARD CHANNEL

Modulation/Coding

» **16-APSK Rate**	2/3, 3/4, 4/5, 5/6, 8/9
» **8-PSK Rate**	3/5, 2/3, 3/4, 5/6
» **QPSK Rate**	1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6

» Adaptive Coding & Modulation

Symbol Rate	10 to 52 MSym/s

RETURN CHANNEL

Modulation/Coding

» **8-PSK Rate**	7/12, 2/3, 3/4
» **QPSK Rate**	3/8, 1/2, 5/8, 3/4
» **BPSK Rate**	1/2

» Automatic power control and rate adaptation

Symbol Rate	625, 1250, 2500, 5000, 10000 & 20000 kSym/s

USER SPEEDS

Forward Channel	Operator configurable up to 40 Mbits/sec
Return Channel	Operator configurable up to 20 Mbits/sec

ANTENNA

Input Frequency	18.3 to 20.2 GHz
Output Frequency	28.1 to 30.0 GHz
Polarization	» Standard: Circular, Cross-polarized, with remote switching option » Optional: Circular, fixed Co-polarized, Arabsat 5C frequency plan, alternative RF specifications
Mounting	As part of terminal or deployed independently
Cable Length (max)	50 m

75 cm Reflector

» **Nominal EIRP**	48.7 dBWi
» **Nominal G/T**	17.5 dB/K

ENVIRONMENTAL

Operational	-20° to +50° C (antenna -40° to +65° C)
Storage	-35° to +65° C
Altitude	3000 m
Wind	30 km/h, without ballast
Shock and Vibration	Per ISTA, July 2000, Procedure 1A
Ingress Protection	IP 66

Additional environmental specification limits are available for humidity, loose cargo (bounce/shock/vibration), salt/fog, ice/freezing rain, dust, and solar loading.

POWER

AC	Power Supply 100 to 240 VAC; 50 to 60 Hz
DC	12 to 32 VDC
Battery	Supports a variety of battery options
Power Consumption	<80W / Typical Usage

PACKAGING AND WEIGHT

Packaging Options & Dimensions

» 1 case with linear size less than 62 in; 158 cm (airline checkable)

Terminal Weight	< 30 lb; 13.6 kg

INTERFACES

Ethernet	4x10/100 BaseT, RJ-45
Power Input	1xD38999
Power Output	1xD38999
Antenna	F Connector (male)

NETWORKING

IP Internetworking

» Integrated 4-port IP router
» Transparent TCP and HTTP acceleration
» Packet classification and filtering

POINTING

» On-board pointing information display
» Integrated signal strength indicator

MANAGEMENT

Modem	Web GUI local management
Router	Web GUI local management
Display	Pointing and status indication
LEDs	Quick terminal status

CONTACT

SALES
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For global sales contacts and locations, visit www.viasat.com/commercial-sales-locations.