The SurfBeam® 2 system delivers a quantum leap in affordable broadband Internet access via satellite. This next-generation satellite terminal builds on the success that made ViaSat SurfBeam the product of choice for WildBlue, the premier Ka-band satellite broadband service provider. With more than 800,000 terminals shipped, only ViaSat has proven market acceptance of Ka-band performance, cost, and capacity for satellite broadband services.

**HIGH-PERFORMANCE, COST-EFFICIENT INTERNET ACCESS**

The complete SurfBeam 2 residential terminal includes an attractive indoor unit (IDU) similar to a typical cable or DSL modem, and an unobtrusive outdoor unit (ODU) similar to a dish for satellite television reception. The terminal enables fast web browsing at DSL-like speeds and supports video streaming, file sharing, and bandwidth-intensive Internet applications. It is capable of delivering downstream rates up to 40 Mbits/s and upstream rates up to 10 Mbits/s, and the network operator can define lower classes of service using provisioning tools to configure the terminal for lower downstream and upstream speeds.

The IDU has an embedded acceleration client that works with acceleration servers in the gateway to provide a faster, more responsive user experience. The unit integrates seamlessly into any home-based network via a standard Ethernet connection. The ODU includes a satellite reflector and feed, transmit and receive electronics, and a mounting kit, and is available with either pole-mount or universal wall mount.

Incorporating advanced new technologies, the highly integrated SurfBeam 2 residential satellite terminal sets a new standard for performance and reliability. High-volume production ensures flexible product delivery schedules and the lowest possible volume pricing.

**EASY INSTALLATION AND OPERATION**

The compact SurfBeam 2 satellite terminal was designed for a quick and reliable professional installation.

The terminal is part of a complete 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**

- Always-on high-speed connectivity
- Sophisticated quality of service (QoS)
- Built-in TCP and web acceleration
- Built-in security against theft-of-service and theft-of-subscriber
- Gigabit Ethernet CPE interface
- Web GUI local management and SNMP-based remote management and control
- Adaptive coding and modulation (ACM) on the forward link—optimized network capacity
- Automatic power control and rate adaptation on the return link—high availability during fades

**Applications**

- High-speed Internet access
- Video and Voice-over-IP
- High-speed file transfer
- Email
- Web browsing
**PHYSICAL**

- **Status**
  - Indicators: Power; Satellite Acquisition; Activity; Fault
- **Size**
  - 23 x 23 x 3.8 cm
- **Weight**
  - 1.3 lb; 0.6 kg (with external power supply)

**INTERFACES**

- **CPE**
  - IEEE 802.3, 10/100/1000 BaseT, RJ-45 connector
- **Expansion**
  - USB 2.0, type A connector

**OUTDOOR UNIT (ODU) SPECIFICATIONS**

- **Input Frequency**
  - 18.3 to 20.2 GHz
- **Output Frequency**
  - 28.1 to 30.0 GHz
- **Nominal EIRP**
  - 48.4 dBWi
- **Nominal G/T**
  - 17.5 dB/K
- **Polarization**
  - Circular, with remote switching option
- **Mounting**
  - Available pole mount or universal wall mount

**OUTDOOR ENVIRONMENT**

- **Power**
  - Supplied by IDU on IFL coax, 30-55 Vdc
- **Ambient Temperature**
  - -40° to +55° C (up to +80° C survival)
- **Humidity**
  - 0 to 100% (condensing)
- **Rain**
  - < 100 mm/hr
- **Wind**
  - 45 mph

**REGULATORY**

- **Safety**
  - cULus, CE, CB Scheme
- **EMC**
- **RoHS**
  - Compliant to RoHS Directive 2002/95/EC
- **REACH**
  - Compliant to REACH Directive

**PHYSICAL**

- **Reflector Size**
  - 77 x 72 cm
- **Weight**
  - 33.5 lb; 15.2 kg (with transceiver and universal wall mount)

**INTER-FACILITY LINK (IFL) CABLE**

- **Type**
  - RG-6, 75 Ohm
- **Connector**
  - F (male)
- **Length (max)**
  - 60 m