



# SkyEdge™ Pro

Bundling data, Broadband IP, and telephony on a single, multi-service VSAT

The SkyEdge™ Pro VSAT is a state of the art, two-way satellite-based solution, bundling interactive data, Broadband IP, public & corporate telephony and video on the same VSAT platform. The SkyEdge Pro brings you the power to satisfy the ever-expanding need to support additional markets and applications with reliable connectivity anywhere it is deployed.

### **Field Proven Satellite Technology**

SkyEdge Pro, the first truly multi-service VSAT, offers a thoroughly manageable and comprehensive service provisioning solution that combines the best of all of our industry leading technologies into one product.

The unparalleled field proven data and telephony experience of Spacenet's Skystar family and DialAw@y IP VSAT products that reliably serve the IP, data and telephony business needs of some of the worlds largest companies, has created the most powerful and flexible VSAT in the market today.

With embedded IP and HTTP acceleration software, VPN, mesh telephony, VoIP and plug-in card architecture, the SkyEdge Pro presents a versatile VSAT that can empower virtually any market by optimizing every communication application.

### **Tailored Solutions**

A wide-ranging solution with full telephony and extensive IP capabilities, supports all data and IP multicast applications, interactive broadband IP, legacy protocol and VoIP. SkyEdge Pro also offers seamless PSTN and Internet backbone connectivity with call data for billing support. Enterprises, Carriers, ISP's and Governmental agencies can leverage the multi-functional SkyEdge Pro VSAT to expand their business opportunities.

The SkyEdge Pro integrates full mesh capabilities for circuit switched voice, VoIP and video conferencing, resulting in seamless, single hop performance with minimal delay, increased quality and subsequently, improved cost-effective space segment utilization. Moreover, the SkyEdge Pro offers optional prepaid support for increased revenue and easier collection for all network topologies.

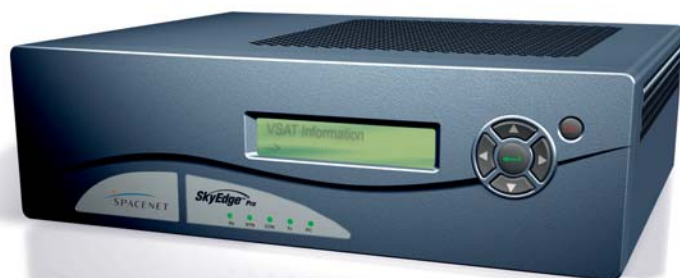
### **Maximum VSAT Flexibility**

Ideal for shared hubs, the SkyEdge Pro answers the need for a modular solution with flexible hardware and software enabling you to expand the capabilities of the VSAT as the need arises with a variety of optional plug-in expansion cards. This flexible architecture creates a simple way to deliver outstanding features such as full mesh support and high telephony capacity by simply adding Mesh and voice expansion cards with up to 12 telephone lines per VSAT.

Other value-added expansion cards are a Quad LAN interface for connecting multiple IP devices as well as a multiple serial ports enabling revenue-generating applications such as PoS, ATM and credit card readers or dial-back via external modem.

As software is embedded into the VSATs, there is no need for external boxes or installation of software on the client's PC. All software can be easily managed, fully controlled and updated over the air, remotely from the NMS.

For greater efficiency, the SkyEdge Pro is equipped with an advanced user interface with LCD and keypad navigator enabling improved operation and maintenance of remote VSATs providing a variety of value added services using the LCD display.





## Technical Specifications

### Outbound Carrier:

- Standard: DVB-S
- Carrier bit rate: 340Kbps - 66Mbps
- Modulation: QPSK or 8PSK (optional)
- Coding: Viterbi & Reed Solomon or Turbo (optional)
- FEC rate: 1/2, 2/3, 3/4, 5/6, 7/8

### Inbound Carrier:

- Access Scheme: Combined TDMA, FDMA
- Bit rate: 60Kbps – 2Mbps  
Supporting different bit rates for different work groups
- Modulation: GMSK
- Coding: Turbo coding FEC ~3/4, ~7/8

### Outdoor Unit:

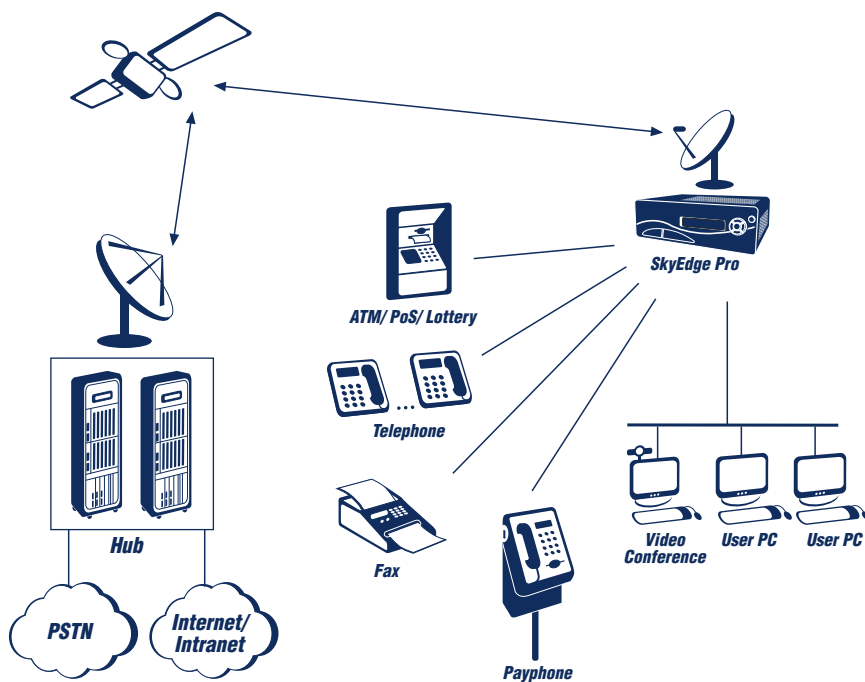
- Antenna size (typical):  
Ku-Band: 0.55 m to 1.2 m C-Band: 1.8 m
- Operating Temperature: -40 to +60 C
- Humidity: Up to 100%
- Transmitter ODU:  
0.5W, 1W or 2W Ku-band, 2W C or Ext C band
- LNB: Standard TVRO type

### Indoor-Unit:

- RF Input/Output: Two F connectors, 75 Ω female
- Data Interface:  
Ethernet 100BaseT, Async RS-232 (optional)
- Expansion cards:  
Serial; Async RS-232  
Quad LAN; Ethernet 100 Base T  
Voice; 2W FXS  
Mesh Receiver
- Expansion slots: 3
- Max. Voice Interfaces: 12
- Full Telephony Support:  
Voice compression: 6.3 Kbps (ITU G.723.1),  
8Kbps (ITU G.729)  
Group 3 Fax Relay speed: up to 14.4 kbps (ITU T.38),  
Echo canceller: ITU G.168
- Payphone Support:  
Metering Pulses at 12/16KHz or reverse polarity,  
V.23/V.22bis protocol support
- Operating Voltage:  
AC: Wide range 72-250V or DC: 12V
- Power consumption: Less than 20W
- Size: 235mm x 290mm x 95mm

### Environmental Conditions:

- Operating Temperature: -5 to +50 C
- Storage Temperature: -40 to +70 C
- Relative Humidity: Up to 90%



## Key Features

- Mesh, star or multi-star network topology support
- Expansion cards architecture
- DVB-S outbound
- 8 PSK outbound, turbo coding and encryption support, optional
- Unique support for small networks starting as low as 340Kbps
- Wide range of inbound access schemes for efficient space segment utilization
- High inbound bit rate up to 2Mbps
- Stand-alone unit with embedded acceleration software
- Embedded TCP and HTTP acceleration
- Embedded hardware based VPN
- QoS support for both upstream and downstream traffic
- Full telephony support: Mesh circuit switched voice, Mesh VoIP and Payphone support
- Supports any standard IP application such as Broadband Internet/Intranet, VoIP, IP multicast, Video conferencing
- Enhanced IP features for full flexibility: RIP, IRDP, DHCP, NAT, IGMP, IP prioritization, ACL
- Enables prioritization and fairness between applications.
- Serial port to support Async protocol (optional)
- Advanced user interface with LCD and keypad navigator
- Ultra low power consumption

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**SkyEdge™ Product Family**

**SkyEdge™ Pro**  
Multi-Service VSAT

**SkyEdge™ Call**  
Telephony VSAT

**SkyEdge™ IP**  
IP Router VSAT

**SkyEdge™ DVB-RCS**  
Enhanced Standard VSAT

**SkyEdge™ Gateway**  
Trunking Solutions VSAT