

## Mesh-card Capable Modular VSAT

SkyEdge II Pro is a modular, two way VSAT enabling broadband IP access and multicasting to one or many business or rural locations. Mesh capability ensures reduced delays for VSAT to VSAT communications. This VSAT is ideal for extremely fast throughput for rapid access to the Web, VoIP, enterprise connectivity and multimedia applications. Voice ports simplify connection to local phones.

### **Enhanced Capabilities**

SkyEdge II Pro provides superior bandwidth efficiency and high availability through the use of DVB-S2 ACM (Adaptive Modulation and Coding) for the outbound path, QPSK/8PSK/16APSK/32APSK Modulation and LDPC coding.

The SkyEdge II Pro ICM inbound performance can provide over 4Mbps per VSAT, on adaptive and dynamic channels. High bandwidth efficiency is supported with QPSK/8PSK modulation and DVB-RCS based turbo coding. ICM provides four dimensions of inbound adaptivity: Adaptive uplink power control; adaptive symbol rate, coding, and modulation. These combine to ensure higher availability even in rain fade conditions, with a maximum dynamic range of up to 23dB. Because the mesh traffic shares the same inbound bandwidth as star traffic, efficiency is improved.

Beyond compliance with standards, SkyEdge II Pro provides embedded IP, TCP/HTTP acceleration, routing capabilities, encryption, VLAN, VRF, end-to-end QoS, tiered services and SLA support. There is no need for external boxes or installation of software on the customer's PC.

#### **Maximum VSAT Flexibility**

SkyEdge II Pro is modular and enables expansion of VSAT capabilities as the need arises. A variety of optional plug-in expansion cards such as Mesh and telephony ports can be added in the four expansion slots. SkyEdge II Pro is also rack-mountable and includes a keypad and detailed local display for simpler configuration and maintenance.



#### Benefits

- High performance service rates up to 30/4 Mbps
- High availability and efficiency utilizing DVB-S2 ACM and ICM adaptive inbound
- Feature-rich functionality optimizing performance of multiple layers with TCP and HTTP acceleration, QoS, VoIP and compression
- 19" rack mountable with height of 1 RU
- Field-upgradable, with four expansion slots for adding a mesh card or supporting analog phones



# **SkyEdge II Pro and Mesh Card Technical Specifications**

Outbound Carrier	
	DVD C2 Addertive Coding and Madulation (ACM)
Standard Courier Bate	DVB-S2 Addaptive Coding and Modulation (ACM)
Carrier Rate	256Ksps - 45Msps (in 1Ksps steps)
Carrier Data Rate	Up to 135 Mbps
VSAT Data Throughput	Up to 30 Mbps UDP, 30Mbps TCP
Modulation	QPSK, 8PSK, 16APSK, 32ASPK
Coding	LDPC and BCH (DVB-S2)
FEC Rate (DVB-S2)	1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
Mesh Capability and Inbound Carrier	
Access Scheme	MF-TDMA DVB-RCS
Channel Rates (Mesh/Star)	128Ksps-2.56Msps
Mesh VSAT Data Throughput	Up to 4.7 Mbps UDP/TCP
Modulation	QPSK, 8PSK
Coding	Turbo coding FEC 1/2; 2/3; 3/4; 4/5; 6/7
Mesh Connections	Up to 1000, 30 simultaneous sessions
Interfaces and Power	
RF Input/Output	Two F connectors, 75 $\Omega$ female
Data Interface	4 x Ethernet 10/100BaseT, RJ-45, Serial console: RJ-45
Power Supply Options	Autorange 100-240V AC or Autorange 10-59V DC
Power Consumption	13W for IDU (up to 4 add-on cards, 10W each)
Enhanced Features	
Enhanced IP features	Multi VRF and VLAN, RIP, VRRP, DHCP, NAT/PAT, IGMP, IP prioritization, ACL, DiffServ, BGP
Other Features	Bandwidth on Demand, TCP and HTTP acceleration, Multi-Level QoS and MPN
Security	AES-128 or AES-256 Encryption
Mechanical / Environmental Conditions	
Size (WxDxH)	483x45x348 mm
Weight	2.17 Kg
Operating Temperature	0° to +50° C
Storage Temperature	-40° to +70° C
Relative Humidity	Up to 90%
Outdoor Unit	
Frequency	Ku, Ext Ku, C
Operating Temperature	-40° to +60° C
Humidity	Up to 100%
Linear BUC Interface	Internal 24V up to 4W BUC; External DC for 6W BUC and higher; Ku, Ext Ku, C
LNB	Standard TVRO type or PLL



