SkyEdge II Access
High Performance Multi-Purpose VSAT

Multi-Purpose Modular VSAT

SkyEdge II Access is a modular, two way VSAT enabling broadband IP access, and multicasting to one or many business or rural locations. This VSAT is ideal for extremely high throughput for rapid access to the Web, VoIP, enterprise connectivity and multimedia applications. Add on Voice ports simplify connection to local phones and an optional Mesh card provides efficient single-hop communications.

Enhanced Capabilities

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

The SkyEdge II Access ICM inbound performance can provide over 6Mb/sec per VSAT, on adaptive and dynamic channels. High bandwidth efficiency is supported with QPSK/8PSK modulation and DVB-RCS based turbo coding.
ICM technology provides 3 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. Mesh traffic shares the same inbound bandwidth and all adaptivity features.

Above compliance to the standards, SkyEdge II Access provides embedded IP, IPv6, 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 Access is modular and enables expansion of VSAT capabilities as the need arises. A variety of optional plug-in expansion cards such as telephony ports, or Mesh, can be added in the two expansion slots. There is no need for external boxes and all expansion ports can be easily managed, fully controlled and updated over the air, remotely from the NMS.

Benefits

- High performance service rate 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

- Field upgradeable with two expansion slots

- Support for Mesh and NetEdge multi-star technology

Technical Specifications

Outbound Carrier	
Standard	DVB-S2 Adaptive 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
Inbound Carrier	
Access Scheme	MF-TDMA DVB-RCS
Channel Rates	128Ksps-2.56Msps
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
Coding (RCS Based)	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 Ω 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 2 Add on cards, additional 10W each)
Enhanced Features	
Enhanced IP Features	Multi VRF and VLAN, IPv6 Ready, RIP, VRRP, DHCP, NAT/PAT, IGMP, IP prioritization, ACL, DiffServ
Other Features	Bandwidth on Demand, TCP and HTTP acceleration, Multi-Level QoS and MPN
Security	AES 256 Encryption
Indoor Unit Mechanical / Environmental Conditions	
Size (WxDxH)	320x60x280 mm
Weight	1.74 Kg
Operating Temperature	0° to +50° C
Storage Temperature	-40° to +70° C
Relative Humidity	Up to 90%
Outdoor Unit	
Antenna	Ka, 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; Ka, Ku, Ext Ku, C
LNB	Standard TVRO type or PLL

2014-04-17

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