

Benefits

- High performance broadband IP VSAT
- Embedded TCP & HTTP acceleration
- Embedded VPN acceleration
- QoS support for all traffic, enabling prioritization and fairness
- Supports wide range of IP applications such as Internet/Intranet, transactional traffic, VoIP, IP multicast, video conferencing



IP Router VSAT

The SkyEdge™ IP is a compact design, two-way VSAT enabling interactive Broadband IP and multicasting to one or all of your business locations. With DVB standards and extensive IP capabilities, the VSAT is ideal where extremely fast throughput for multimedia applications, large file delivery and extremely rapid access to the Web are required.

Full Strength Broadband IP

SkyEdge IP delivers advanced IP services supporting a wide range of applications including Internet, VoIP, digital signage, video conferencing, data access and VPNs. It is the perfect answer for IP services and customers of all types, including large enterprises, small & medium businesses, SOHO and residential users. SkyEdge IP provides speed, quality, and superior support for all web and bandwidth intensive applications while enabling prioritization and fairness.

All SkyEdge VSATs are built to last, with well tested components. In order to further ensure network

availability, the SkyEdge IP can provide automatic failover via a serial interface to a dial backup modem.

Value-Added Capabilities

The SkyEdge IP is the satellite solution for Internet access, incorporating embedded functionality for better performance and simpler operations. Embedded TCP and HTTP acceleration technologies provide high-speed connectivity and heightened user experience. Embedded VPN capabilities offer the same high quality for private networks. Embedded encryption guarantees secure business communications.

End-to-end QoS, vital for running a cost effective IP network, is simple with the flexible bandwidth access features. Managing bandwidth on a per user or per application basis, SkyEdge IP provides tiered services, access to bandwidth and enables CIR guarantees.

For operational efficiency, SkyEdge IP has a Web interface that improves remote maintenance of VSATs. Firmware, including all embedded functionality, is easily managed, fully controlled and updated from the central NMS.

Technical Specifications

Outbound Carrier

Standard: DVB-S
Carrier bit rate: 340Kbps – 62Mbps
Modulation: QPSK or 8PSK (optional)
Coding: Viterbi & Reed Solomon or Turbo (optional)
FEC rate: 1/2, 2/3, 3/4, 5/6, 7/8, 8/9

Inbound Carrier

Access Scheme: MF-TDMA
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: 1W, 2W or 4W Ku-band, 2W, 5W C or Ext C band
LNB: Standard TVRO type

Indoor Unit

RF Input/Output: Two F connectors, 75 Ω female
Data Interface: Ethernet 100BaseT, RS-232
Operating Voltage: 100-240V AC or 12V DC
Power consumption: Less than 20W
Size: 180mm x 190mm x 54mm

Security

DES or AES-128 encryption

IP Features

Enhanced IP features for full flexibility: RIP, IRDP, DHCP, NAT/PAT, IGMP, IP prioritization, ACL, VLAN, DiffServ, IPSec

Other Features

Traffic engineering, Bandwidth on Demand, Multiple satellite support, Multiple outbound, Auto pointing tool

Environmental Conditions

Operating Temperature: -5 to +50 C (optional -40 to +60 C)
Storage Temperature: -40 to +70 C
Relative Humidity: Up to 90%

Compliance

Safety: IEC 60950-1, UL/EN 60950-1, AS/NZS3548, c-TUV-us, GS Mark, CB
EMC/EMI: ETSI EN 301 489-1, ETSI EN 301 489-12, ETSI EN 300 386, AS/NZS CISPR22:04, FCC CFR 47 Part 15 Subpart B, ICES-003, VCCI Technical Requirements, V-3/2001.04
RF Spectrum: EN 301-428, CE 0682
WEEE/RoHS: RoHS Compliant

Eb/NO Performance

QPSK-Turbo:

| | | | | | |
|------------|-----|-----|-----|-----|-----|
| Code Rate: | 1/2 | 2/3 | 3/4 | 5/6 | 7/8 |
| Eb/NO: | 2.4 | 3.1 | 3.6 | 4.1 | 4.6 |

DVB:

| | | | | | |
|------------|-----|-----|-----|-----|-----|
| Code Rate: | 1/2 | 2/3 | 3/4 | 5/6 | 7/8 |
| Eb/NO: | 4.5 | 5 | 5.5 | 6 | 6.4 |

8PSK-Turbo:

| | | | | |
|------------|-----|-----|-----|-----|
| Code Rate: | 2/3 | 3/4 | 5/6 | 8/9 |
| Eb/NO: | 4.8 | 5.4 | 6.8 | 7.4 |

