



SkyEdge™ II-c Aries

High Performance Satellite Router

Enabling High Speed Broadband Services

SkyEdge II-c Aries is a compact high-throughput VSAT, designed to enable high speed broadband services while meeting cost efficiencies required by residential customers and small businesses. Aries enables fast web browsing, video streaming, IPTV, VoIP, and other bandwidth-intensive services.

Aries is a full-featured IP router, eliminating the need for an external router via support of enhanced IP routing features such as DHCP, NAT/PAT and IGMP. Advanced application-based QoS guarantees the performance of real-time applications such as VoIP and video streaming, while also supporting other data applications. Aries also supports next generation IPv6 networking.

Aries includes a full set of protocol optimization and application acceleration features. TCP and HTTP protocol acceleration, payload compression and embedded web caching technologies enable fast Web browsing and high user experience.

Aries provides the highest level of transmission security supporting AES-256 bit link layer encryption with dynamic key rotation to protect all user traffic.

EasyConnect - Simple, Do-It-Yourself Installation and Service Activation

Aries is designed to support quick and reliable installation, and automatic service activation. The process requires no prior VSAT installation skills or technical support.

The outdoor electronics and antenna are designed to simplify the assembly and mounting, and shorten the antenna pointing procedure. Outdoor unit includes an audio device to guide and provide feedback during the antenna pointing process. The indoor terminal includes an intuitive web-based Graphical User Interface to assist the user during the final installation and service activation process.



Benefits

- Fast web browsing with web acceleration, compression and multi Gigabyte caching
- High quality VoIP and video
- EasyConnect, for self-installation and automatic service activation
- DVB-S2 ACM and DVB-RCS adaptive transmission standards
- Central monitoring and service management
- Ku/Ka/C band



Enhanced Central Service Management Interface for ISPs

Aries is part of a complete VSAT ground system that includes advanced Network Management System (NMS) and facilitates service management that is available to ISPs via an electronic B2B interface.

SkyEdge II-c service management enables ISPs to manage their services totally independent of the satellite network operator providing complete management suit including real time view of the service status including events, alarms and statistics as well as historic/trend analysis of the service over longer periods.

Technical Specifications

General

- **Frequency:** Ka, Ku, C

Forward Channel

- **Standard:** DVB-S2 Adaptive Coding and Modulation (ACM)
- **Carrier rate:** 300Ksps-66Msps (200 Mbps)
- **Modulation:** QPSK, 8PSK, 16APSK, 32APSK
- **Coding:** LDPC, BCH
- **FEC:** 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
- **Terminal Data Rate:**
 - HTTP data throughput up to 20 Mbps
 - TCP data throughput up to 30 Mbps
 - Multicast data throughput up to 60 Mbps

Return Channel

- **Access Scheme:** MF-TDMA, DVB-RCS, Dynamic Channels
- **Inbound rates:** Symbol rate - 128ksps-2.5Msps
- **Modulation:** QPSK, 8PSK
- **Coding:** Turbo coding
- **FEC:** 1/2, 2/3, 3/4, 4/5, 6/7

Modem Interfaces

- **RF Input / Output:**
 - Two female F connectors, 75 Ω
 - RF in frequency - 950-2150MHz
 - RF out frequency - 950-2300MHz
- **Data interfaces:**
 - Ethernet 10/100BaseT RJ-45
- **Management interface:**
 - Web based local management
 - Full FCAPS management
 - Remote software upgrades over the air
 - SNMP

SkyEdge II-c system provides ISPs an automated and easy to use service provisioning system for simple creation, activation and management of end-to-end services with high level of flexibility.

Superior VSAT Technology

Aries is designed to support the latest High Throughput Satellites. Aries supports both DVB-S2 and DVB-RCS transmission standards, dynamic carriers and other advanced adaptive transmission technologies to maximize performance and improve service availability. Aries is based on Gilat's VSAT technologies with over a million terminals shipped worldwide.

Enhanced Features

- **IP Features:**
 - DHCP, NAT/PAT, DNS caching, IGMPv2, SIP, DiffServ, IPv6
- **Security:**
 - AES-256 bit encryption
 - ACL Firewall
 - x.509 Terminal Authentication
- **Application Acceleration and Protocol Optimization**
 - TCP acceleration
 - HTTP web pre-fetch acceleration
 - Embedded local caching scalable to 32 GByte with mSD
 - Payload compression

Environmental and Mechanical

- **Size:** 201x176x34 (WxDxH)
- **Operating Voltage:** 100V-240V AC
- **Operating Temperature:** 0°C to +50°C

Outdoor Unit (ODU)

- **Transmit Power:** IDU DC insertion up to 4 Watt
- **Antenna size:** 0.76m and higher
- **Operating temperature:** -40°C to +60°C



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