SKYSTREAM NETWORKS®

SkyStream's MicroEMR-1600 is a compact yet richly featured satellite receiver and media router bringing cost-effective satellite connectivity to the small office/home office (SOHO). Like all SkyStream Edge Media Routers (EMRs), the MicroEMR-1600 is highly reliable and manageable as it captures rich content from broadcast data networks and delivers it to small office users residing on a local area network.

SkyStream now provides a full range of edge receivers/routers. In conjunction with SkyStream's satellite uplink products, the MicroEMR is part of a complete, end-to-end satellite Internet solution.

Major applications include:

- Cost-effective and secure multicasting of enterprise content to SOHO locations, including delivery of distributed databases, as well as CRM, ERP and other application updates
- Streaming video delivery to remote sites for LAN distribution
- Internet access

General Highlights

- Targeted for SOHO users including satellite receiving, Ethernet routing, remote and network management
- Excellent bandwidth economics
- Policy based routing

DVB Digital Video Broadcasting

MicroEMR-1600 Series

Edge Media Receivers/Routers

Customers can also take advantage of a variety of secure remote management schemes, including the proven SkyStream E-Manager™ software for managing multiple Edge Routers (bulk configurations, upgrades, remote monitoring with both in-band and out-band control options).

Applications

The MicroEMR-1600 has been optimized to handle a broad range of applications directed to the SOHO network edge.

Data over satellite services
- Broadcast content, file and data distribution
- Global Internet connectivity

Managed enterprise services
- Training, e-Learning and corporate communications
- Remote site quality video distribution and managed data delivery

Features and Benefits

Tailored, cost-effective SOHO functionality
- Optimized for up to 16 concurrent LAN-connected users
- 10Mbps throughput
- IP routing
- Unicast and Multicast traffic routing
- Small packet processing for efficient data forwarding
- Compact footprint for SOHO environments (1.75 x 8 x 8 in)

Reliable operations for remote sites
- Embedded Linux operating system
- 100% solid state—direct conversion digital tuners
- 16MB flash memory for software image
- Designed for non-computer/non-equipment room operation

Robust manageability options
- In-band and out-of-band remote management using E-Manager
- Standard SNMP
- HTTP server for configuring via web browser
- ASCII Command Line Interface for Telnet

Easy network connectivity (LAN)
- Single 10/100 Ethernet port
- RJ-45 jack

Variety of back-channels
- External modem
- External ISDN

Efficient utilization of bandwidth
- Section packing

Specifications

Platform
- Dimensions (H x W x D): 1.75 x 8 x 8 in (4.45 x 20.32 x 20.32 cm)
- One 10/100 Ethernet Port
- RJ-45 Jack
- RS-232 serial port with full modem control
- Serial 9-Pin D-Sub (Male)
- Embedded Linux Operating System

Satellite Receiver

RF Tuner
- L-Band receiver
- Receiving Frequency: 950 MHz – 2150 MHz
- DVB Compliant
- Universal LNB Compatible with US/Asia LNB
- Input Signal Level: -25 dBm to -65 dBm
- RF Input Impedance: 75 ohm

Demodulation and Error Correction
- QPSK and BPSK demodulator
- 1.5-45 MSymbols/sec
- Viterbi Inner Code: R=1/2, 2/3, 3/4, 5/6, 7/8, (auto sense)
- Reed-Solomon Outer Code (k+T,K,T): (204, 188, 8)

Data Handling Capability
- Protocols: RIP v1, IGMP, DVMRP (RFC 1075)
- PPP (RFC 1661) for external dial up connection including PAP and MS-CHAP security
- DHCP (RFC 2132)
- Tunneling:
  - PPTP (RFC 2637)
  - IPSec (RFC 2402, RFC 2406, RFC 2408)
  - Masquerading/NAT
- Rules and Filtering:
  - Address translation: Unicast to Unicast, Unicast <=> Multicast
  - UDP to TCP protocol conversion
  - 16 MAC address filtering
  - 32 PIDs filtering
  - TTL modification

LNB Power and Switching
- Supply voltage selectable: Off,13V or 18V
- Max LNB Current: 300mA
- Antenna Control: 22kHz signal
- DiSeqC: 1.1 Ready
- Over current and short circuit protection

Modes Of Operation at Transport Stream
- MPE Forwarding to 10/100 Ethernet (IP)

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