Cable Router

FEATURES

- DOCSIS 1.0 qualified and upgradeable to DOCSIS 1.1 (S/W)
- Integrates proprietary Motorola CyberSURFR cable modems
- Supports multicast of IP Datagram traffic
- Provides Quality of Service (QoS) with minimum and maximum rate service levels
- Offers link layer encryption and key management protocol on all data communications
- Independent scaling of upstream and downstream channels
- Dynamic load balancing and frequency agility
- Supports 16 QAM modulation on upstream channels

The Motorola Cable Router acts as the Cable Modem Termination System (CMTS) and integrates Motorola DOCSIS standard-based CMTS Adapter Module and Motorola Cable Data Link Protocol (CDLP)-based current generation of RF upstream and downstream card set. Our Cable Router controls bandwidth and spectrum usage in the Hybrid Fiber Coax(HFC) network and manages Motorola's SURFboard® and CyberSURFR® family of cable modems as well as all certified vendors' DOCSIS cable modems. With Motorola's proven headend technology, cable operators experience a seamless migration from CDLP to DOCSIS while maintaining their constant revenue stream. The Cable Router, designed to offer a cost-effective solution now and in the future, provides a robust and flexible architecture. The Motorola CMTS, which is based on a remote access server (RAS) model, offers anti-spoofing functions, resulting in greater subscriber privacy and higher system availability. Features such as per subscriber filters, per cable modem HCP assignments and per cable modem maximum number of subscribers are examples of the level of flexibility the Cable Router offers. Additional features such as dynamic frequency agility and load balancing optimize system throughput by reducing cable plant disruptions like ingress noise. The Motorola Cable Router also provides easier modem manageability by collecting statistics centrally within the CMTS, and queries that reduce complexities with traffic and management. The CMTS Adapter Module, with four (4) upstream receivers, one (1) downstream transmitter and an on-board 100BaseT Ethernet interface, offers flexible scaling and optimal use of upstream and downstream channels. The CMTS Adapter Module is housed in the Motorola Cable Router, a rack-mountable enclosure with an on-board 10BaseT port, redundant power supplies, and hard disk storage device. The Cable Router connects standard network interfaces such as 10/100Base T and ATM to the backbone network. A single Cable Router is capable of supporting up to six (6) CMTS adapter modules. A 4-port upstream expansion module will provide additional scalability, enabling cable operators to expand their HFC network as their subscriber base grows. Our Cable Router offers a rich feature set with support for DOCSIS functionality, e.g., superior reservation-based MAC protocol, baseline privacy, 64/256 QAM downstream transmission forward error correction (FEC), QPSK/16 QAM upstream transmission FEC. Multiple simultaneous upstream and downstream channels, multiple data rates, and tiered Quality of Service (QoS). The Motorola DOCSIS Adapter Module supports the RF Interfaces MIB, Baseline Privacy MIB, Cable Device MIB and the Motorola enterprise MIB. An SNMP manager communicates with the CMTS to manage the CMTS. The Motorola MIB Management for DOCSIS enables a smooth migration from current back office systems to DOCSIS capable systems.