

EVR CMTS

Scalable Cable Modem Termination System

Features

- DOCSIS & Euro-DOCSIS
- Scalable Architecture
- Up to 8 Upstream Channels
- Advanced CLI Operations
- Bridge Mode Operation
- Security Tools
- PPPoE and Radius Support
- Remote Management
- Telnet Access
- Remote Upgrades
- 1U Chassis Case



Cable Modem Termination System

The EVR-CMTS is a fully integrated, cable modem termination system (CMTS) which is designed to meet the increasing demand placed on broadband over cable systems from new subscribers, and to handle the dynamic loads from existing subscribers. EVR-CMTS allows cable operators to install scalable systems that can increase subscriber capacity quickly and within budget.

The scalable hardware design of the EVR-CMTS using DOCSIS 1.1 and Euro-DOCSIS 1.1 standards offers a single downstream channel using 64 or 256QAM and up to 8 upstream channels supporting QPSK and 16QAM.

EVR-CMTS flexible architecture allows the cable operator to make maximum use of their capital budget. Additional investment is only made with the growth of the subscriber base and its associated revenues. The cost of operation is lower from reduced training time and maintenance spares associated with using a common platform that supports the smallest to the largest networks.

The EVR-CMTS connects to the Wide Area Network (WAN) or head-end Ethernet backbone using a 100BaseT Ethernet port. Traffic forwarding is handled in layer-2 as a transparent bridge. EVR-CMTS supports for Syslog, Radius, PPPoE authorizations and network protocol services.

Subscriber satisfaction during peak usage times is maintained through the control of upstream traffic with dynamic load balancing algorithms and support for upstream frequency reuse. Security on the internet affects all subscribers and operators. The EVR-CMTS provides tools such as DOCSIS BPI and BPI+ packet filtering, DHCP and ARP monitoring to prevent unauthorized access.

Excellent support tools make installation and maintenance of the EVR-CMTS simple. The Cisco compatible command line interface (CLI) with context sensitive help and variable prompts can be accessed locally through a serial port on the front panel or remotely through the built-in network secure Telnet server supporting multiple clients.

EVR-CMTS remote download feature supports TFTP and FTP server delivery of new software. The -20 dB IF test port for the downstream IF signal on the front panel allows convenient access for maintenance. EVR-CMTS configuration file editor supports remote file download and uploads which dramatically reduces the complexity and time required for installation.

EVR's Network Management and Control System is an end to end web based management and provisioning package for the whole cable modem network. EVR Management System implements a SNMP based architecture to provide a complete, easy to use solution for CMTS configuration, service provisioning, performance analysis, QoS accounting and subscriber access authentication.



Specifications:

Downstream	DOCSIS 1.0/1.1	EuroDOCSIS 1.0/1.1
IF Output	44 MHz	36.125 MHz
RF Channel Spacing	6 MHz channel	8 MHz channel
Modulation Type	64QAM and 256QAM	64QAM and 256QAM
Bandwidth	6 MHz	8 MHz
Output Impedance	75 Ohms	75 Ohms
Output Return Loss	>14 dB	>14 dB
Output Level	+40 dBmV	+40 dBmV
Connector	F connector	F connector
Upstream		
Frequency Range	5 MHz up to 42 MHz	5 MHz up to 65 MHz
Carrier-to-noise Ratio	Not less than 22 dB	Not less than 22 dB
Level Range	-4 to +26 dBmV	-4 to +26 dBmV
Modulation Type	QPSK and 16QAM	QPSK and 16QAM
Symbol Rate (nominal)	160, 320, 640, 1280 and 2560 ksym/s	160, 320, 640, 1280 and 2560 ksym/s
Bandwidth	200, 400, 800, 1600, 3200 KHz	200, 400, 800, 1600, 3200 KHz
Connector	F connector	F connector

LAN and Maintenance Interfaces

LAN Interface 10BaseT/100BaseT Fast Ethernet full duplex, Serial Port - EIA-232 9 pin D

System Standards and Protocols

DOCSIS/EuroDOCSIS 1.0 RF Specification, SNMP, Radius, PPPoE, Telnet

Physical

Size	435mm (W) x 44mm (H) x 500mm (D) (EIA rack mount)
Weight	Fully equipped 19.8lbs (9kg) Shipping weight: 27lbs (12.2kg)
HFC Configuration	1 Downstream, 8 Upstream channels
LEDs	AC Power, WAN Link, WAN Traffic, Downstream Traffic, Downstream Module Installed, Downstream Module activated, Upstream Traffic, Upstream Module Installed, Upstream Module Activated

Environmental

Operating Temperature	0° to 40°C
Storage Temperature	-10° to 60°C
Humidity	10% to 90% non-condensing
Power Consumption	34 watt
Voltage Range	Rated, automatic selection 100-240V, 47-63 Hz
Safety Compliance	UL, CE

Models

Model No.	Description
CMTS5210	DOCSIS 1 upstream, 100 modems
CMTS5211	DOCSIS 1 upstream
CMTS5212	DOCSIS 2 upstreams
CMTS5214	DOCSIS 4 upstreams
CMTS5218	DOCSIS 8 upstreams
CMTS1210	EuroDOCSIS 1 upstream, 100 modems
CMTS1211	EuroDOCSIS 1 upstream
CMTS1212	EuroDOCSIS 2 upstreams
CMTS1214	EuroDOCSIS 4 upstreams
CMTS1218	EuroDOCSIS 8 upstreams
UCM1000	EuroDOCSIS 8 upstreams Upstream Channel Module