EoC Coax MDU Master Bridge

May 2013

Coax MDU Master Bridge
With In-Building Coax
Last Meters Distribution
Providing a Managed
700Mbps / 350Mbps
Ultra High Speed Service

Triple Play by QoS and IPv6 Support

High Throughput Ideally for IPTV Service

The Most Powerful and Cost-Effective Coax MDU Solution with Remote Management.

Introduction

THE COAX MDU MASTER, CEM-738/739, ENABLES CABLE OPERATORS TO START THE TRIPLE-PLAY SERVICES TO A BUILDING OR COAX SEGMENT.

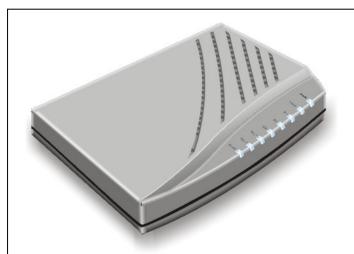
NO ADDITIONAL NETWORK WIRING IS NECESSARY.

CABLE OPERATORS MAY JUST USE THE EXISTING COAX WIRING OF CABLE OPERATORS OR IN THE MDU BUILDING, THEN BE READY TO PROVIDE THE BROADBAND TRIPLE-PLAY SERVICES TO SUBSCRIBERS.

LOW INITIAL DEPLOYMENT COST. THE LOW INITIAL COST CAN EXPAND THE SERVICE TO SMALL SCALE BUILDING WITH HIGHER SPEED THAN CMTS. DUAL SUPPORT OF IPV4 AND IPV6 PROVIDE THE FLEXIBILITY FOR OPERATORS.

WITH CEM-738/739 HIGH THROUGHPUT AND QOS, IT CAN OPTIMIZE IPTV SERVICE.

AUTO PROVISIONING AND REMOTE MANAGEMENT. IT MINIMIZES THE INSTALLATION AND SUPPORT COST. THE UNIQUE ENDPOINT SERVICE CONTROL SUPPORTS SERVICE PROVIDERS WITH DIFFERENT SERVICE LEVELS AND SERVICE SCHEMES.



Model: CEM-738 / CEM-739

FEATURES

- Design for Operators Providing High Speed Service over Coax Network
- ➤ EoC up to 700/350 Mbps PHY/Throughput Rate as Distribution Backbone over Coax
- Two 100/1000M Gigabit Ethernet Ports with One Port 100/1000Mbps SFP Support
- Up to 90dB Attenuation on Coax Network
- Support up to 253 Endpoints with Isolation
- Line Power Feeding by Coax or PoE
- IPv4 and IPv6 Support
- Endpoint Service Control and Bandwidth Control
- Endpoint Ethernet Loop Detection and Isolation
- Online Diagnosis Support
- > 802.1p QoS and 802.1Q Tag VLAN Support
- > IGMP Snooping Control

SPECIFICATIONS

> Network Standards

- EoC (Ethernet over Coaxial Cable)
- IEEE 802.3u 100M Fast Ethernet
- IEEE802.3ab 1000M Gigabit Ethernet
- IEEE 802.3az Energy Efficiency Ethernet

> Connectors

- LAN: Two RJ-45 Connectors, One SFP Slot
- Coax: Two F-Type Female Coax Connectors,
 One for EoC, the Other for TV or Antenna

Modulation, TX Power and Spectrum

- OFDM, 15 +/- 1 dBm, 7.5–67.5MHz (CEM-738);
 7.5 47MHz (CEM-739)
- Filter: 76MHz (CEM-738), 47MHz (CEM-739, CATV Ch1)

> Transmission Speed and Range

- PHY/Throughput 700/350Mbps for CEM-738; 500/250Mbps for CEM-739
- 90dB Max Attenuation, High Speed within 50dB

> Ethernet and Fiber Interface

- 10/100/1000 Mbps, MDI/MDI-X Auto Crossover
- SFP interface: 100/1000Mbps, 3.3V TTL

> Network Management

- Web, Telnet and SNMP Support
- Firmware Upgrade for Master and Endpoints
- DHCP Client, Option 82 and Snooping
- Auto Configuration/Provision Support
- IPv4 and IPv6 Dual Stack Support
- Priority Based on 802.1p, TOS, TCP/UDP Port
- 802.1Q Tag VLAN Support
- Online Diagnosis of Coax Interface
- Bandwidth Control and Host Number Control
- IGMP v3 Snooping Control
- Endpoint Ethernet Statistics, Status, Loop Detection and Isolation

> Indicators

- "Power" LED, "Line Power" LED
- EoC "Link/Act", "Quality", "Diag" LED
- LAN "Link/Act" LED x 2

> Reset Button

- Reset
- Force to Factory Default Settings

> Environmental Conditions

- Operating Temperature : -10° C ~ 55° C (14° F ~ 131° F)
- Storage Temperature : -10° C ~ 65° C (14° F ~ 149° F)
- Operating Humidity: 10% ~ 95%, Non-condensing

> Power Requirement

- External Power Supply: 12V DC
- Line Power Feeding from Coax I/F: 60VAC +/- 20%
- Line Power Feeding by IEEE802.3af PoE (37~57V)
- Switch to Select External Power or Line Power
- Power Consumption : < 5 Watts</p>

> Physical Dimension

• 178mm (W) x 136mm (D) x 35mm (H)

> Unit Weight

• 430 g

RELATED PRODUCTS

- > Products of EoC Coax MDU Solution
 - CES-730/731, Coax MDU Ethernet Endpoint
 - CEV-740/741, Coax MDU Voice Endpoint
 - CEM-7038/7039, Coax MDU Outdoor Master Bridge
 - CEM-7138/7139, Coax MDU Master Bridge Module