

# EoC Coax MDU Master Bridge

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## **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**

**T**HE 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.

**W**ITH 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

### ➤ 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**