

# ECX Edge Indoor CMTS ECX-510 Series

### Description

The Electroline ECX Edge CMTS addresses the need for bi-directional broadband digital services in high-density environments such as in-building coverage or localized neighborhoods by extending the fiber to the edge of the specific service area, and connecting it to the ECX CMTS as the local gateway. Making it the ultimate 'coaxial last mile' solution!

It is compliant to DOCSIS 3.0 and C-DOCSIS. It is available in Euro-DOCSIS and backward compatible to previous version of DOCSIS and Euro-DOCSIS 2.0/1.x compliant modems.

#### Application

- Ethernet Distribution using CATV coax
- MDU's (Multi Dwelling Units)
- Institutional Networks
- Private Cable Networks
- Hospitality Networks
- Mining Industries

The ECX Edge CMTS is ideally suited in instances where there is a legacy coaxial infrastructure in place or the deployment of a coaxial network is the only cost effective technical alternative for transporting IP traffic.

Its high bandwidth capability in both upstream (**US**) and downstream (**DS**) will transport effortlessly IP based video, voice, and data traffic. This is augmented with a QoS policy based on defined service flows to ensure applications with latencies, high prioritization, fixed and bursty data rate packets etc... are accommodated accordingly to avoid congestions that can compromise throughput and performance.

Two-management way including CLI with Telnet and Web interface.

More importantly it is based on DOCSIS specifications, which implies continual industry support.



Indoor 1RU CMTS

#### Features

- Supports maximum 200 clients (CPE) online
- 16 downstream (DS) bonded Channel 64/256/1024 QAM modulation capable of data rate up to 1.0 Gb/s @1024
- 4 upstream (US) bonded Channels QPSK/8/16/32/64/256 QAM modulation with data rate up 160 Mb/s
- Supports Layer 3 routing, static route, policy route, VLAN,L2VPN, ACL
- 1 Gb RJ45 port and Optical SFP data port to connect to WAN
- Supports IPv6, multicast, remote-query, Flap (DOCSIS signal quality jitter diagnosis).
- Built-in DHCP/TFTP server
- Two-management way including CLI with Telnet and Web Interface.
- Automatically updates config files easy for large deployments

## Specifications

		DN Stream		UP Stream				
		Euro-DOCSIS	DOCSIS	ATDMA		S-CDMA		
Modulation Mode		64/256/1024QAM*		8~256QAM/QPSK				
Frequency Range (MHz)		88~1002 88~1002		5~65				
Channel Bandwidth (MHz)		8	6	Single Channel Bandwidth (MHz)		6.4	3.2	1.6
Bonding Channel Quantity		16		4				
Max. Total Data Rate (Mbps)		1000	858	1		50		
Single Channel Data Rate (Mbps)	64QAM	41.7	30.3	Single Channel Data Rate (Mbps)	256QAM	40.96	20.48	10.24
					128QAM	35.84	17.92	8.96
	256QAM	55.6	42.9		64QAM	30.72	15.36	7.68
					32QAM	25.60	12.80	6.40
			53.6		16QAM	20.48	10.24	5.12
	1024QAM*	69.5			8QAM	15.36	7.68	3.84
Single Channel Symbol Rate (Msymps)	64QAM	6.952	5.056941		QPSK	10.24	5.12	2.56
	256QAM	6.952	5.360537	Single Channe	l Symbol Rate	F 10	2.50	1.20
	1024QAM*	6.952	5.360537	(Msymps)		5.12	2.56	1.28
Output Level (dBmV)		10~48 (1dB step)		Receive Level(dBmV) -13~+23				
RF Port		F type Socket (Imperial)		F type Socket (Imperial)				
Return Loss		> 12dB		> 14dB				
Output Impedance		75Ω		Input Imedance 75Ω				
WAN Port	Fiber	1.25G SFP ×1		Uplink Data Rate		1Gbps		
	Electronic	1000/100/10Base-T		Console		1 RJ45		
Management Methods		CLI: after log in by telnet; NMS: based SNMP from third party; Embedded Web: by remote log in.						
Supported Protocols		Euro-DOCSIS/DOCSIS3.0/2.0, C-DOCSIS, TCP/IP, ARP, L2VPN, ICMP, ACL, VLAN, Multicast, DHCP-relay, SNMP, etc.						
Input Voltage		AC100~240V, 50/60Hz		Consumed Power		< 40W		
Status Display		LED		Failure Warming		LED Flashing		
Cooling Way		40mm Fan × 2		Working Environment		Temp: 0~40 ; Hum: <90%		
Net Weight		2.5 Kg		Dimensions 430			0×44 ×285mm	

\*Specifications are subject to change without notice.

For more information on our products, please visit: <u>www.electroline.com</u> or call: 800-461-3344