

ACMC L2 Ethernet Switch with E1 e-wire Pass-Thru



Four Channel Fast Ethernet L2 Switch with E1 MEF e-wire

The ACMC-GBEAS/X is an IEEE802.3ah OAM compliant two copper plus one optical fibre port and E1 MEF compliant e-wire. Gigabit Ethernet solution designed to route data in L2 between 10/100/1000BASE-TX and 100/1000BASE-FX. The addition of an E1 e-wire port allows the transparent transmission of an E1 channel between a pair of GBEAS/X over the Ethernet network. The outgoing pseudowire packets are assigned a dedicated VLAN ID according to 802.1Q and marked for priority using 802.1p bits.

By offering advanced features like bandwidth control, this Gigabit Ethernet Media Converter/Switch provides an outstanding performance as Customer Premises Equipment in Metro LAN, Campus and FTTx applications. With SNMP and Web-based Management in the IEEE 802.3ah, the network administrator can easily carry out from the Central Office 'carrier-class' Operation, Administration and Maintenance of every remote ACMC GBEAS/X Board installed in the Customer Premises. This Line of Gigabit Ethernet switches and media converters is completely transparent to Layer 2 and Layer 3 protocols, including IEEE 802.1q, VLAN tag, Q in Q, STP, IPX, IP, etc.

Features

- Local / Remote IEEE 802.3ah OAM / IP In-band management
- Auto-Negotiation or forced mode
- Auto MDI/MDIX
- Forwards 10K bytes (max.) packets in switch mode
- Forwards 9K Jumbo packets in converter mode
- Supports Q in Q double tagged frame transparent
- Supports IEEE 802.1q Tag VLAN pass thru
- Bandwidth control (Nx32Kbps or Nx512Kbps)
- Flow control (Pause)
- Supports remote CPE power fail detect (dying gasp)
- Far End Fault functionality
- Supports Link Fault Pass through (LFPT)
- Supports Loop Back Test
- Supports RMON counter
- D/D function for supported SFP fibre transceiver
- Auto Laser Shutdown (ALS)
- Fibre Hardware Reset (FHR)
- Online local/remote f/w upgrade
- RADIUS Client
- Supports Far End Fault Indication (FEFI)
- Spanning Tree Protocol
- Port Trunking
- Default port and 802.1p tag priority QoS
- Fixed or weighted priority QoS
- TDM circuit emulation over a packet-switched network (PSN) with CESoPSN (RFC 5086) and SAToP (RFC 4553) payload encapsulation
- Advanced clock distribution mechanism, including synchronous Ethernet (Sync-E)

ACMC GBEAS/X Specifications

Ethernet Electrical Interface

- Connector: RJ45
- Data rate: 10Mbps, 100Mbps and 1000 Mbps
- Duplex mode: Half / Full duplex
- Cable: 10 Base T UTP Cat.3, 4, 4, 5; 100Base-T UTP Cat. 5, and 1000Base-TX UTP Cat.5, 5e or higher

Standard: IEEE 802.3, IEEE 802.3u, IEEE 802.1Q, IEEE 802.3ah

Optical Interface

- Connector: SFP LC
- Data rate: 100Mbps
- Duplex mode: Full duplex
- Fibre: MM 50/125µm, 62.5/125 µm; SM 9/125 µm
- Distance: MM 2km, SM 15/30/50/80/120km
- Single fiber, WDM 20/40/60/80km
- Wavelength: MM 1310nm, SM 1310,1550nm and CWDM
- Wavelength Single fiber WDM: 1310Tx/1550Rx (type A) and 1550Tx/1310Rx (type B)

E1 Interface

- Data Rate: 2.048 Mbps
- Line Code: HDB3, AMI
- Jitter and Wander: ITU-T G.823
- Framing: Framed and Unframed
- Line Impedance: 120 Ω Balanced
- Cable type: UTP Cat. 5
- Cable Length: Up to 2500m max. over 22 AWG wire
- Connector: RJ45

Standard: G.703, G.704, G.823, G. 775, RFC 5086, RFC 4553

Power Input: Card : 12VDC
Standalone : Single or dual supply; 100—250 VAC; 48 VDC

Power Consumption < 6W

Dimension 155 x 88 x 23mm (D x W x H)

Weight: 125g

Temperature: 0 ~ 60°C (Operating), -10 ~ 70°C (Storage)

Humidity: 10 ~ 90% non-condensing

Certification: CE, FCC, LVD, RoHS, MEF

MTBF >65,000 hrs (25°C)