

TDM Over Ethernet Access Multiplexer



ECAT-01L

ECAT-01L is an entry level 4-channel EI-over-Fiber optical transport multiplexer device, suited for point to point optical circuits. In addition to various optical distances support, the **ECAT-01L** provides rich diagnostic features with DIP switches to ease installations.

Key Features

- 4EI channels over Fast Ethernet fiber port
- Link and port status of local and remote units
- DIP switches for loopback diagnostics
- Alarm monitoring Indication
- Built-in auto-ranging AC-DC power supply
- Supports multimode or single mode fiber
- SC connector for Optical network port
- Support for long haul transmission upto 100Kms
- Conforms to ITU G.703, G.823, G.824, GR-499 core jitter requirements and IEEE Ethernet standards

Description

- The **ECAT-01L** is a low cost 'TDM' Access Multiplexer which multiplexes up to 4 E1 channels over single 100Base FX Fast Ethernet fiber link.
- **ECAT-01L** provides simple, flexible and cost-effective solution for transporting 4 E1 channels transparently over single Fast Ethernet fiber for point-to-point applications at distances upto 100 km / 62 miles.
- **ECAT-01L** transmits each of the E1 channels independently offering clear channels maintaining high throughput for E1 channel over fast Ethernet optical link without any traffic performance degradation.
- To ease system diagnostics, **ECAT-01L** provides the Link and Port Status of local and remote units. This feature coupled with the Loopback support for diagnostics provides exhaustive monitoring capabilities for easy maintenance and support. The Alarm monitor provides easy trouble-shooting to ensure high uptimes.

Application

The **ECAT-01L** unit permits improved utilization of Fiber links, due to its capability to multiplex 4E1 channels over 100Base FX Fast Ethernet Fiber link. **ECAT-01L** can be utilized by Telcos, Carriers & Service Providers to transport E1 channels over long haul fiber links. The E1 channels are transmitted as packets and are de-multiplexed and reconstructed at the remote end. **ECAT-01L** deployment benefits Carriers & Service Providers in reducing their operational and maintenance cost considerably.



Technical Specifications

- **100BASE-FX port :**
SC Connector(1 port)
- **E1 channels (G.703 balanced)**
RJ45 (4 ports)
Data Rate : 2048 Kbps
Framing : G.703
Line Coding : HDB3
- **LED Indications**
PWR(Green) - Power Status
Fiber LED(Green) - Fiber link Status
LOS(Red) - Error Detection
AIS(Yellow) - Alarm Indication
TEST(Green) - Test Status
- **DIP switches :**
4 nos to Enable / Disable loopbacks
Local (LLB) & Remote (RLB)
- **Power :**
90V to 270 VAC, 10W
-40V to -60 VDC, 5W (max)
- **Operating Temperature :**
0°– 50°C / 32°– 122°F
- **Humidity :**
10% to 90%, non-condensing
- **Physical Dimensions :**
192*172*44mm

Fiber optic specifications

Module Type	Wavelength (nm)	Fiber Type (μm)	Typical Tx Power (dBm)	Typical Rx Sensitivity (dBm)	Typical Range (Kms)
MM	850	62.5/125 Multimode	-6.5	-20	2
MM	850	50/125 Multimode	-6.5	-20	2
SM40	1310	9/125 Single mode	-2.5	-29	40
SM75	1550	9/125 Single mode	-2.5	-29	75
SM100	1550	9/125 Single mode	0	-30	100
SF40	1310/1550	9/125 Single mode SF	-2.5	-28	40

Ordering ECAT-01L

#	ECAT-01L/SA/#	E1-over-100BaseFx CPE for point-to point connectivity
	MM for MM fiber 2km	
	SM40 for SM fiber 40Km	
	SM75 for SM fiber 75Km	
	SM100 for SM fiber 100Km	
	SF40(1310Tx/1550Rx) for SM (1310Tx/1550Rx) fiber 40Km	
	SF40(1550Tx/1310Rx) for SM (1550Tx/1310Rx) fiber 40Km	



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