

Fiber Optical Multiplexer *Atrie FOM-34*



Atrie Fiber Optical Multiplexer FOM-34 is an interface equipment between optical and electrical line facilities to carry 16 asynchronous E1 over a pair fiber lines. The FOM-34 carries up to 16 E1s and multiplexes them into E3 signal (34.368Mb/s). This E3 signal is then encoded and transmitted to the far end over optical line by the optical signal. The FOM-34 also receives the optical signal then decodes it into E3 signal. The E3 is demultiplexed into up to 16 E1 signals. To test and monitor the performance and status of the E1 signal, the FOM-34 provides the local and remote loopback functions.

The FOM-34 provides 1 : 1 hot-standby or non protection system configuration. Also, one order-wire and one data port are provided. Atrie technology inc. adopt Digital Phase Lock Loop (DPLL) technology to implement the Digital clock recovery on its fiber optical multiplexer, FOM-8. The FOM-8 can be operated under high temperature and noisy environment. It is very convenience for the low capacity Applications, such as cellular base station, SOHO etc.

CHARACTERISTICS

- Multiple Codes Selectable
- Less Components Design, Low Power Consumption
- High Temperature Operation
- 1 : 1 Protection
- Order-wire and data channel Providing
- LCD Front Panel Display
- E1 Loop Back Capability
- Alarm Dry-relay Contact
- RS-232 Connection for System Management Application

Technical Specification

- **Transmission Specifications**

E1 INTERFACE		OPTICAL INTERFACE	
Line Rate	2.048 Mbps	Line Rate	34.368 Mb/s
Clocking	± 50ppm	Clocking	30ppm
Line Code	HDB3	Connector	FC/PC Type
Impedance	75 / 120 ohm 5%	Cable Type	9/125 Optical
Pulse Mask	ITU-T G.703	Operation	1280nm -1340nm
Input Jitter	Compliant with ITU-T G.823	Wavelength	Up to 60km(ITU-T G.652)
Output Jitter	HP1: <0.2UI HP2: <0.05UI	Range	Laser < 5nm
Span	Up to 12 dB	Spectrum Width	-60 ± 2dBm, Laser
		Output Power	- 33 dBm
		Receiver Sensitivity	BER=1E-10
		System Gain	27 dB Min.

- **General Specifications**

EMI

Compliant with class A of subpart B of part 15 of FCC

RELIABILITY

MTBF > 130,000 Hrs

SYSTEM MANAGEMENT

TBOS, AT&T CB149 - 3 Local Craft VT-1000/ANSI

Terminal

DIMENSION

Height 78 mm Width 435 mm Depth 344 mm

POWER REQUIREMENT

Voltage -36 to +72 VDC 85 ± 264 VAC

ENVIRONMENT

Temperature 0° C to 60° C

Relative up to 95%

Humidity (non-condensing)

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