Saratota

FlexGain FOM16E, V2

TDM and Ethernet
Convergence Fiber Multiplexer

Features

- 8/16 E1 120 Ohm interfaces. 75 Ohm is available upon request

- Four Ethernet 10/100 Base-TX ports with VLAN capability

- Engineering Order Wire connection for maintenance purposes

- LCD with buttons for local management as well as CLI, Telnet, SNMP for remote management

- 2 slots for SFP modules. Transceivers for 15, 40 and 80 km available

- 1 + 1 protection as well as Automatic Laser Shut Down system

The FlexGain FOM product family contains a range of compact and cost-effective multiplexer modems, transmitting 4, 8, 12 or 16 E1 streams as well as IP traffic (Ethernet) over two single-mode optical fibers.

The FlexGain FOM16E, V2 is the flagship of FlexDSL's FOM product family with capacities of up to 16 E1s, providing 1+1 protection, LCD configuration, built-in SNMP management, performance monitoring and history. For more flexibility it is using state of art SFP transceiver technology that allow user, from one side to select transceiver according to the line budget, and from the other side to save spare parts cost. The four-port Ethernet switch is mandatory and carry on VLAN packets even with double tag (Q in Q) function. IEEE 802.1p priority is realized as well. The internal switch fabric operates in wire speed non-blocking mode, while auto MDIX function is supported by each Ethernet port.

Especially for easy maintenance of remote stations the EOW (Engineering Order Wire) function has been implemented. It allows operator to call remote station by out band channel. Remote management via Telnet and SNMP also can be used.
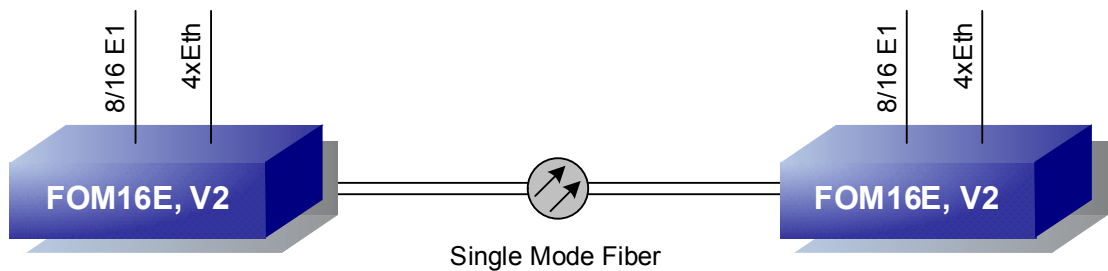
All FlexGain FOM products are available in a space saving minirack version.

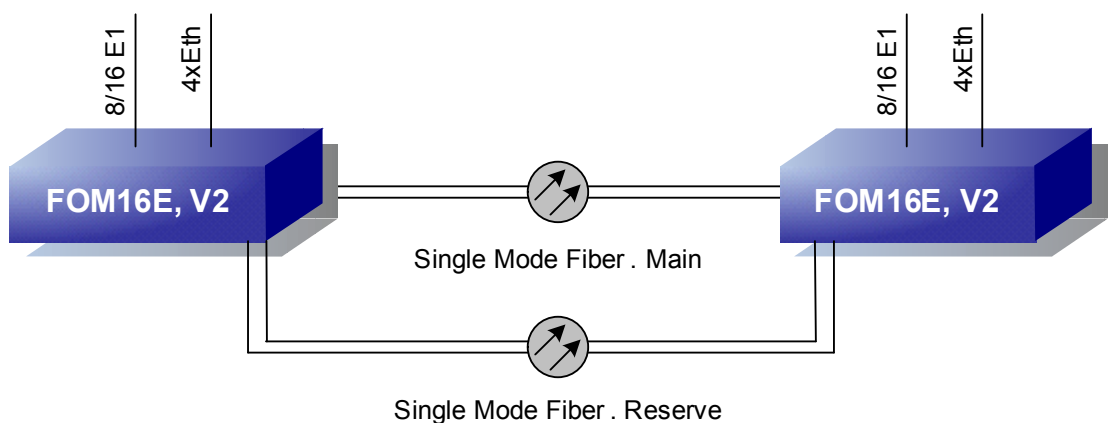Specifications are subject to change without notice

Due to its Class 1 Laser Diode (1310nm or 1550nm) as an optical emission source, the FlexGain FOM has an extremely long reach and can be effectively used in both metropolitan and rural area networks. E1 interfaces are available as 120Ohm-balanced or 75Ohm-unbalanced versions and are therefore fully compliant with ITU-T G.703 and G.823 standards.

FlexGain FOM16E, V2 Applications

Point-to-Point Application

Point-to-Point Application with Fiber protection

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Technical Specification

Optical Interface	
FG-FOM4-SFP15	
Optical Source:	FP Laser
Wavelength:	1310 nm
Optical Connector:	2 x SC
Output Power:	-15 ~ -8 dBm
Minimum Receive Sensitivity:	-34 dBm
Damage Threshold for Receiver	0 dBm
System Gain:	19 dB
FG-FOM4-SFP40	
Optical Source:	FP Laser
Wavelength:	1310 nm
Optical Connector:	2 x SC
Output Power:	-5 ~ 0 dBm
Minimum Receive Sensitivity:	-34 dBm
Damage Threshold for Receiver	4 dBm
System Gain:	29 dB
FG-FOM4-SFP80	
Optical Source:	DFB Laser
Wavelength:	1550 nm
Optical Connector:	2 x SC
Output Power:	-5 ~ 0 dBm
Minimum Receive Sensitivity:	-34 dBm
Damage Threshold for Receiver	4 dBm
System Gain:	29 dB
Protection:	1 + 0, 1 + 1
E1 Interface	
Bit Rate:	2.048Mbps ±50ppm
Line Code:	HDB3
Pulse Shape:	Conforms to ITU-T G.703
Impedance:	120 Ohm Balanced, or 75 Ohm Unbalanced
Jitter:	Conforms to ITU-T G.823
E1 Connector:	RJ-45 connector (120Ohm) / BNC connector (75Ohm)
Ethernet Interface	
Switching Capability:	Up to 3,2 Gbps
MAC Address Table Size:	2048
Protocol:	IEEE 802.3, IEEE 802.3u, IEEE 802.3x
VLAN Number:	64
VLAN Type:	IEEE 802.1q Port-based, Q in Q
Ethernet QoS:	IEEE 802.1p, DSCP, Bandwidth Control
Power Supply	
DC:	-36 ~ -72 V
AC:	90 ~ 260 V ; 47 ~ 63 Hz
Power Consumption:	Less then 30W
Alarms and External Inputs	
Alarms:	2 sets of Minor and Major audible and visible alarm
External Alarm Input:	2 sets
Alarm voltage and current:	0 ~ 60 VDC, 1 ~ 5 mA
Environment and EMI/EMC	
EMI/EMC Compliance:	FCC Class A part 15B, EN55082-1, EN55022, CE, RoHS
Operation Temperature:	0 to 60 Cº
Relative Humidity:	5 to 90%, non-condensing
Dimensions and Weight	
Dimensions:	436mm x 44.5mm x 320mm (W x H x D)
Weight:	3.5 kg

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Ordering

FG-FOM16, V2	
FG-FOM16E/16,V2	FlexDSL Fibre Optic Modem, modular (4x slot), 19"/1U, 2*SFP slots (1+0/1+1), 16x (4x4) E1 (120 Ohm or 75 Ohm), 4x Ethernet 10/100Base-TX, 48VDC/220VAC power, console port, Telnet, and limited SNMP management.
	FlexDSL Fibre Optic Modem, modular (4x slot), 19"/1U, 2*SFP slots (1+0/1+1), 8x (2x4) E1 (120 Ohm or 75 Ohm), 4x Ethernet 10/100Base-TX, 48VDC/220VAC power, console port, Telnet, and limited SNMP management.

SFP Transceivers	
FG-FOM4-SFP15	SFP module for FG-FOM4/Eth, FG-FOM16E/x,V2, Single Mode 1310nm, 155Mbps, 15km
	SFP module for FG-FOM4/Eth, FG-FOM16E/x,V2, Single Mode 1310nm, 155Mbps, 40km
FG-FOM4-SFP80	FG-FOM4-SFP80SFP module for FG-FOM4/Eth, FG-FOM16E/x,V2, Single Mode 1550nm, 155Mbps, 80km

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