

FMT 16 Channels DWDM Dual Fiber End-to-End Transport Platform

Up to 160Gbps 120KM Dual Fiber BIDI End-to-End Transport



DESCRIPTION

Confronted with unpredictable traffic requirements, increasing bandwidth demands, and changing applications, network operators rely on the highly flexible capabilities of the widely deployed FMT Series Optical Transport Platform to respond to these conditions.

The FMT-1600E supports a broad range of applications including business Ethernet services, data center interconnect, mobile and fixed broadband backhaul, SAN and native video transport, private enterprise networks, and the migration of SONET/SDH, OTN, or WDM. Each shelf provides fabricless switching of packet, OTN, and SONET/SDH with up to 160G of packet interface capacity and support for Ethernet Bridging.

Offering a future-proof 4U platform for long haul transport, the FMT-1600E has a heritage of low power

and compact products and solutions, fitting ideally in metro deployments.

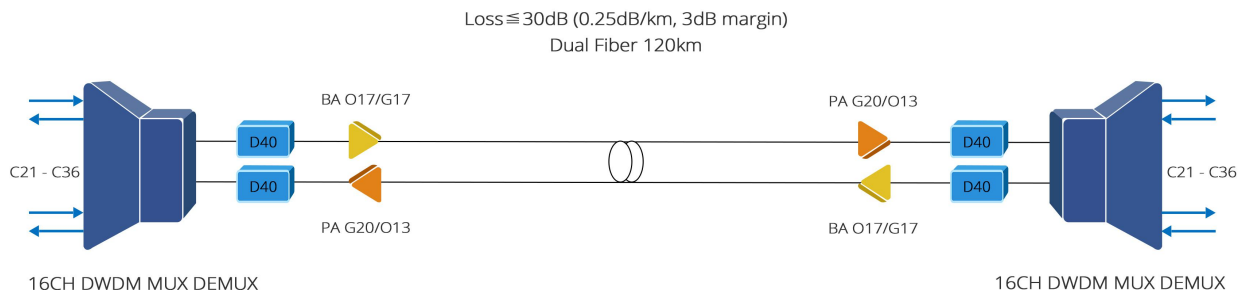
And the FMT-1600E is a 16 DWDM channels member of the FMT series intelligent DWDM multiplexer family which can achieve 120km @ 10G 80KM DWDM transceiver end-to-end dual fiber bi-directional transport when the fiber link loss is 0.25dB/km and the fiber type is G.652D. Optical layer modules and a wide range of intelligent services modules, including high-density 10G modules, can be installed in the 16 full size slots of the 4U chassis with controller cards and OSC. The AC powered version of the chassis is default and optimized for data center environments.

FMT-1600E IN SHORT

- **Flexible Networking:** Embedded intelligent DWDM MUX/DEMUX. Integrated DWDM EDFA, DCF-based DCM and system management.
- **Robust:** Redundant hot pluggable power supply units (PSUs). Field serviceable network management board without traffic interruption.
- **Channel Density:** System capacity up to 16 DWDM channel.
- **Compact Building Practice:** 4U x 19" form factor with OSC.
- **Standardization:** Already configured system and purchased directly.
- **Maximum Reach:** 120km@10Gbps end to end transport.

Up to 120 KM for 10 Gbps End-to-End Dual Fiber BIDI Transport

Depending on the type of connectivity required, it can be configured with combination of EDFAs and DCM modules to handle all protocols up to 160Gbps.



Standard Configuration

- 4U 16 Slots Managed Chassis Unloaded, Dual 100V-240VAC
- 16CH C21-C36 DWDM Mux with MON and EXP, 5.2dB, LC/UPC
- 16CH C21-C36 DWDM Demux with MON and EXP, 5.2dB, LC/UPC
- O17/G17 OBA, -23dBm~+12dBm, AGC
- G20/O13 OPA, -30dBm~+5dBm, AGC
- 40KM DCM, -680 ± 3% ps/nm, 3.5dB, LC/UPC

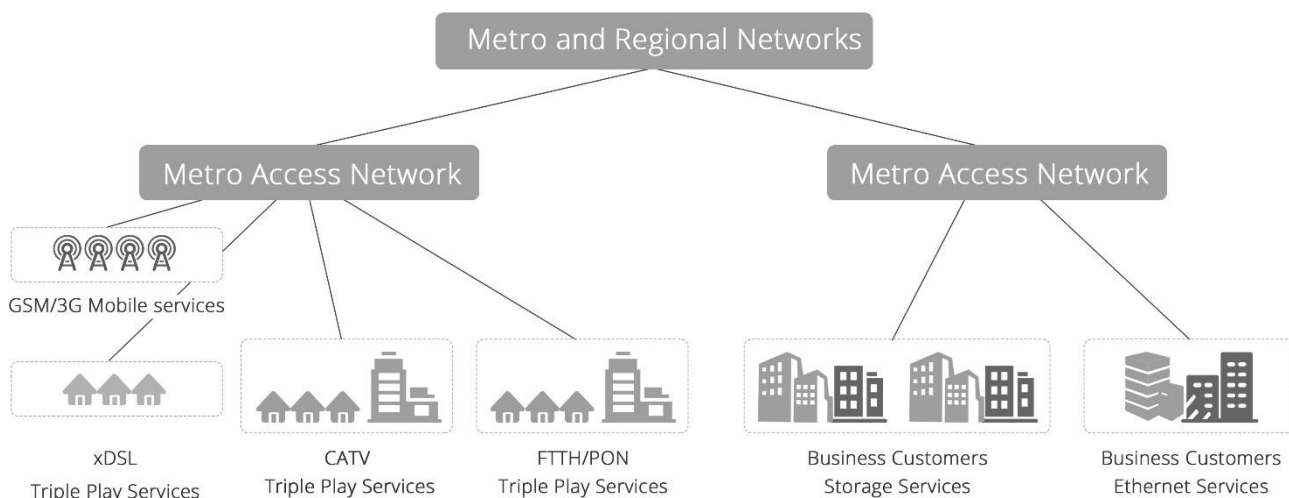
FMT 1600E Long Haul-Optical Transport Access



Application

FMT-1600E is designed to support for metro/regional networks, such as GSM/3G mobile services, xDSL, CATV, FTTH/PON triple play services, business customers storage services and Ethernet services.

And FMT-1600E is a highly integrated extending multiplexing platform that can be used in financial institutions, universities, service providers, enterprises, dark fiber providers.

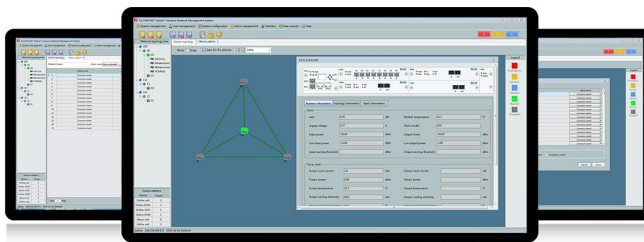


Optical Transport Network Management System

The FS.COM Network Management Unit (NMU/NMS) module is the central management hub of the FMT system. Configuration and monitoring of integrated transponder are performed by SNMP or Command Line Interface. Using the corresponding MIB table, the transponder can be integrated into existing SNMP based management systems. In addition, an “Active Alarms List” is available which shows an overview of all the critical states. All alarms are stored in an alarm history file.

Features of Monitor Online

- 1) Email notification
- 2) Performance monitoring
- 3) Alarm and event management
- 4) User and security administration
- 5) Local and remote network management



TECHNICAL SPECIFICATIONS

System	Description
Topology	End-to-End DWDM networks using FMT-1600E efficient DWDM connect
Networking Modes	Dual fiber bi-directional transport
Transport Network	Metro WDM/dark fiber
Approvals	CE, FCC, RoHS
Dimensions (HxWxD)	4U managed chassis, 16 slots, 7"x19"x11.81" (178x482.6x300mm)
Channel Count	16 DWDM channel (C21 to C36)
Supported Protocols	SDH/SONET, PDH, OTN, Ethernet, SAN
Eye Safety	Automatic laser shut down
Power Supply	100V-240VAC 1.7A, 100W
Redundancy	Dual feeding, hot swappable
Operating Temp	-5~60° C
Storage Temp	-40~80° C
Heat Dissipation	1* fan module, hot swappable
Ingress Protection	Non-waterproof
Optical Specification	Description
Fiber Distance	120km@10Gbps end to end (default)
Fiber Link Loss	0.25dB/km
Fiber Types	G.652D
Network Management	Description
Management Ports	2*10/100/1000Base-T RJ-45 2*100Base-FX SFP 1*Console port
Management Protocols	SNMP, monitor online, simple management tool
Management Channel	Optical supervisory channel (OSC) at 1510nm (standard)
DCN	OSC
Visual Indicators	LED status indicators for client ports, line interfaces, power

FMT-1600 Extending DWDM Connect Packing List

ID	Description	Qty
35952	4U 16 slots Managed Chassis with NMS/NMU and Dual Power 100V-240VAC for Pluggable Module	2 pcs
74537	16CH C21~C36 100Ghz Active DWDM Mux&Demux, LC/UPC, Occupies 2 slots	2 pcs
72283	O17/G17 Multi-channel BA C-band(1529~1564nm), AGC, LC/UPC, Occupies 1 slot	2 pcs
72284	G20/O13 Multi-channel PA C-band(1529~1564nm), AGC, LC/UPC, Occupies 1 slot	2 pcs
65781	40KM DCM C Band, G652D Fiber, LC/UPC, Occupies 2 slots	4 pcs

Note: Free Accessory: 1*Software CD, 1*User Manual, 1*Test Report, 4*M6/Screws M6, 4*Floating Nuts.

Options & Spare Parts

ID	Description
30515	4CH Multi-Rate WDM OEO
66010	1+1 Optical Line Protection Switch (OLP)
73281	OTDR (Optical Time Domain Reflectometer)
71586	OPM (Optical Performance Monitoring)
70941	OPD (AIU) Optical Power Detection
73287	1x16 Multi-Channel Opto-Mechanical Optical Switches

Do you have any questions about our Access + Metro products? Just contact our expert consultant directly: otn@fs.com



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