

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

Up to 160Gbps 60KM 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 2U platform for metro-regional transport, the FMT 1600E has a heritage of low power

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

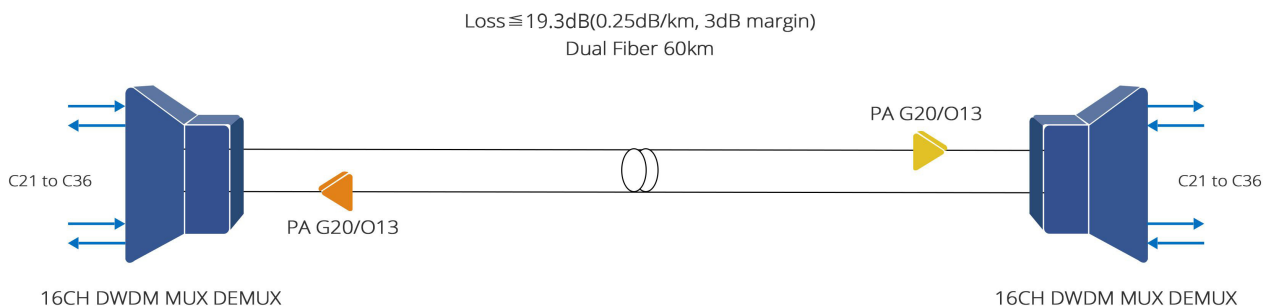
And the FMT 1600E is a 16 DWDM channels member of the FMT series intelligent DWDM multiplexer family which can achieve 60km @ 10G 80KM DWDM transceiver end-to-end dual fiber bi-directional transport when the fiber link loss is 0.25dB/km and the fiber type is G.652. Optical layer modules and a wide range of intelligent services modules, including high-density 10G modules, can be installed in the 8 full size slots of the 2U 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:** 2U x 19" form factor with OSC.
- **Standardization:** Already configured system and purchased directly.
- **Maximum Reach:** 60km@10Gbps end to end transport.

## Up to 60 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

- 2U 8 Slots Managed Chassis Unloaded, Dual 100V-240VAC
- 16CH C21-C36 DF DWDM Mux with MON and EXP, LC/UPC
- 16CH C21-C36 DF DWDM Demux with MON and EXP, LC/UPC
- G20/O13 OPA, -30dBm~+5dBm, AGC
- LC/UPC Singlemode Fixed Fiber Optic Attenuator, Male-Female, 5dB

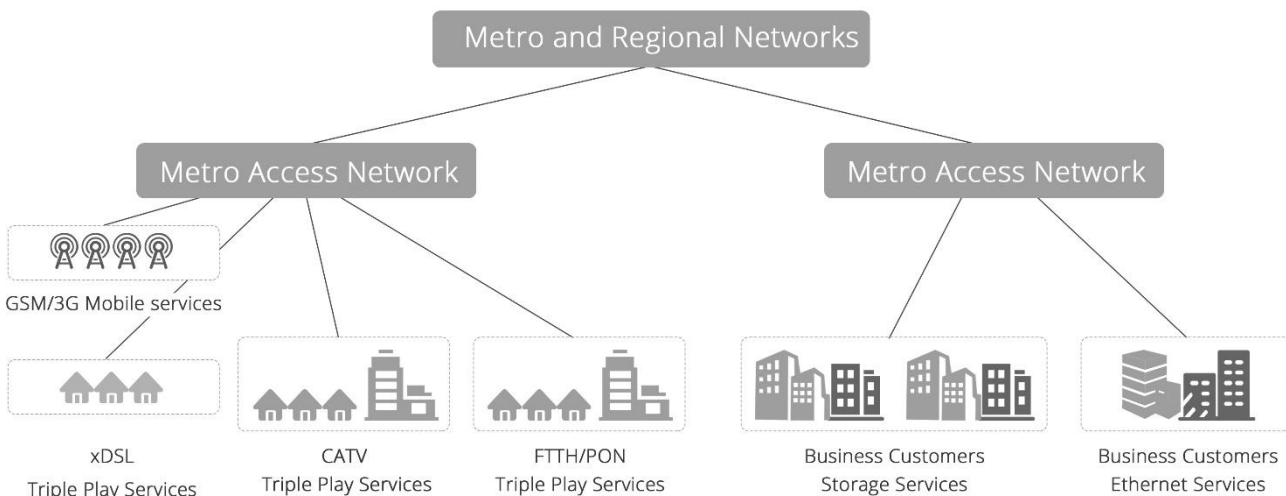
### FMT 1600E Metro-Optical Transport Access



## 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.

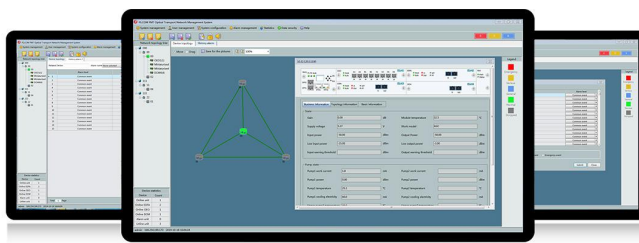


## Optical Transport Network Management System

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
<b>Topology</b>	End-to-End DWDM networks using FMT 1600E extending DWDM connect
<b>Networking Modes</b>	Dual fiber bi-directional transport
<b>Transport Network</b>	Metro WDM/dark fiber
<b>Approvals</b>	CE, FCC, RoHS
<b>Dimensions (HxWxD)</b>	2U managed chassis, 8 slots, 3.39"x19"x11.81" (86x482.6x300mm)
<b>Channel Count</b>	16 DWDM channel (C21 to C36)
<b>Supported Protocols</b>	SDH/SONET, PDH, OTN, Ethernet, SAN
<b>Eye Safety</b>	Automatic laser shut down
<b>Power Supply</b>	100V-240VAC 1.7A, 100W
<b>Redundancy</b>	Dual feeding, hot swappable
<b>Operating Temp</b>	-5~60° C
<b>Storage Temp</b>	-40~80° C
<b>Heat Dissipation</b>	1* fan module, hot swappable
<b>Ingress Protection</b>	Non-waterproof
Optical Specification	Description
<b>Fiber Distance</b>	60km@10Gbps end to end (default)
<b>Fiber Link Loss</b>	0.25dB/km
<b>Fiber Types</b>	G.652D
Network Management	Description
<b>Management Ports</b>	2*10/100/1000Base-T RJ-45 2*100Base-FX SFP 1*Console port
<b>Management Protocols</b>	SNMP, monitor online, simple management tool
<b>Management Channel</b>	Optical supervisory channel (OSC) at 1510nm (standard)
<b>DCN</b>	OSC
<b>Visual Indicators</b>	LED status indicators for client ports, line interfaces, power

## FMT 1600E Efficient DWDM Connect Packing List

ID	Description	Qty
<a href="#">73580</a>	2U 8 slots Managed Chassis with NMS/NMU and Dual Power 100V-240VAC for Pluggable Module	2 pcs
<a href="#">74537</a>	16CH C21~C36 100Ghz Active DF DWDM Mux&Demux, LC/UPC, Occupies 2 slots	2 pcs
<a href="#">72284</a>	G20/O13 Multi-channel PA C-band(1529~1564nm), AGC, LC/UPC, Occupies 1 slot	2 pcs
<a href="#">70009</a>	LC/UPC Singlemode Fixed Fiber Optic Attenuator, Male-Female, 5dB	1 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
<a href="#">30515</a>	4CH Multi-Rate WDM OEO
<a href="#">66010</a>	1+1 Optical Line Protection Switch (OLP)
<a href="#">73281</a>	OTDR (Optical Time Domain Reflectometer)
<a href="#">71586</a>	OPM (Optical Performance Monitoring)
<a href="#">70941</a>	OPD (AIU) Optical Power Detection
<a href="#">73287</a>	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](mailto:otn@fs.com)



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