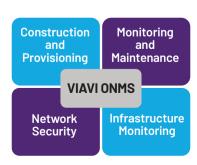# FTH-5000

Compact Remote Fiber Test Head

Deliver great service, faster revenue and reduced costs when you enable remote fiber test and automated monitoring with the most compact remote OTDR test head on the market.

The FTH-5000 Fiber Test Head combines optical time-domain reflectometry (OTDR) and optical-switch technology to provide continuous OTDR monitoring of multiple fibers anywhere in the network. A single FTH-5000 unit, monitoring 48 fibers of 100Km and more, occupies only a third of a Rack Unit!

The FTH-5000 offers all the features and performance of an OTDR and an optical switch in a small footprint. It has the capacity to test up to 48 point to point or point to multi-point fibers and more for a volume occupying only 1/3 of 1RU. The remaining 2/3 can be used by Test Access Point module to monitor fibers in service or to expand the switch capacity. FTH-5000 qualifies the network build then, detects and notifies users of any degradation affecting fibers when the network is in service.

The FTH-5000, formerly named the OTU-5000, is compatible with VIAVI ONMSi software application. The built-in FTH software allows the user to set up monitoring quickly with user friendly software and no training. The ONMSi software allows the user to institute a feature rich, network wide monitoring system while managing multiple FTH units concurrently.

Key Benefits

- Ensure continuously good service at construction, service activation and beyond
- Anticipate service disruptions by detecting fiber degradation before it affects service.
- Reduce MTTR by locating fiber optic faults in minutes instead of hours
- Reduce operational costs by eliminating multiple erroneous dispatches
- Protect investments by monitoring long-term fiber performance
- Reduce construction costs by accelerating test processes and empowering test staff
- Protect network integrity and security by detecting and locating fiber intrusion

Key Features

- Switch scalability up to 2304 ports
- Secured Web Browser Access (HTTPS)
- Ruggedized LINUX Operating System
- Small size: 48 ports in a third of RU
- Dual power feeds
- In service fiber monitoring
- Low power consumption
- PON Qualification tests with reflectors

Construction and Provisioning | Monitoring and Maintenance
VIAVI ONMS
Network Security | Infrastructure Monitoring

Applications

- Fiber monitoring for service providers, data centers, utilities, and dark-fiber providers
- FTTx construction, provisioning, and maintenance tests
- Fiber-tapping detection for critical applications
- Infrastructure monitoring (manholes, cabinets, etc.)

FTH-5000 with a 48 port (Test Access Point) TAP and 48 port MPO switch

Specifications – (typical at 25°C)

Base Unit	
Height	1 RU
Width	19, 21 (ETSI), or 23"
Depth	260 mm (ETSI) 280 mm (19 - or 23")
Standard Operating Temperature	–5 to 50°C
Extended Operating Temperature Option	–20 to 60°C
Storage Temperature	–20 to 60°C
Humidity	95% without condensing
EMI/ESD	CE compliant
Interfaces	1 RJ45 Ethernet 10/100/1000BaseT ports
Media	Solid-state disk
Power Supply Consumption	–36 to –59V 10W
Certifications	NEBS and AT&T ATT-TP-76200 Compliant. Contact VIAVI representative for more details about certifications.

Integrated Optical Switch	
Number of Ports	1, 4, 8, 16 or 48
Insertion Loss (excluding connectors)	< 1.2dB
Return Loss with connectors	> 50 dB
Repeatability	±0.02dB
Durability	> 2.5 Billions of cycles
Connector Type	LCAPC up to 16 ports, MPO-12 (male) for 48 ports

Specifications – (typical at 25°C) (continued)

Base Unit	
Height	1 RU
Width	19, 21 (ETSI), or 23"
Depth	260 mm (ETSI) 280 mm (19 - or 23")
OTDR (General)	
Laser Safety	Class 1
Number of Data Points	Up to 512,000
Sampling Resolution	From 4 cm
Distance Range	Up to 260 km
Distance Accuracy	±1 m ±sampling resolution ±distance x 1.10–5

	Short Range	Medium Range		Long Range
Wavelength (nm)	1625	1626	1650	1625
Wavelength Accuracy (nm)	±3[1a]	±3[1b]	±4[1b]	±20
Dynamic Range[2] (dB)	37	40	40	45
Pulse Width	5 ns to 20 µs	5 ns to 20 µs	5 ns to 20 µs	5 ns to 20µs
Event Dead Zone[3] (m)	1	0.8	0.8	0.8
Attenuation Dead Zone[4] (m)	3.5	3	3	3

1a. Laser at 25°C and measured at 10 µs.

1b. For the full temperature range and all the pulse width.

2. The one way difference between the extrapolated backscattering level at the start of the fiber and the RMS noise level, after 3 minutes averaging and using the largest pulse width.

3. Measured at ±1.5 dB down from the peak of an unsaturated reflective event using the shortest pulse width.

4. Measured at ±0.5 dB from the linear regression using a -55 dB type reflectance and using the shortest pulse width.

VIAVI

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