

## FTH-5000

### **Compact Remote Fiber Test Head**

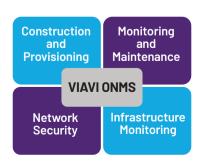
Deliver great service, faster revenue and reduced costs when you enable remote fiber test and automated monitoring with the most compact remote OTDR test head on the market.

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

## **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	1RU		
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	1RU		
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	
Wavelength (nm)	1625	1626	1650
Wavelength accuracy (nm)	+/-3 <sup>1a</sup>	+/-3 <sup>1b</sup>	+/-4 <sup>1b</sup>
Dynamic range <sup>2</sup> (dB)	37	40	40
Pulse width	5 ns to 20 μs	5 ns to 20 μs	5 ns to 20 μs
Event dead zone <sup>3</sup> (m)	1	0.8	0.8
Attenuation Dead Zone <sup>4</sup> (m)	3.5	3	3

- 1a. Laser at 25°C and measured at 10  $\mu$ s.
- 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 -55dB type reflectance and using the shortest pulse width.



Contact Us: +1 844 GO VIAVI | (+1 844 468 4284). To reach the VIAVI office nearest you, visit viavisolutions.com/contact