4TECT
Телефон: +7 (499) 685-4444
info@4test.ru
www.4test.ru

VIAVI Solutions

Data Sheet

VIAVI

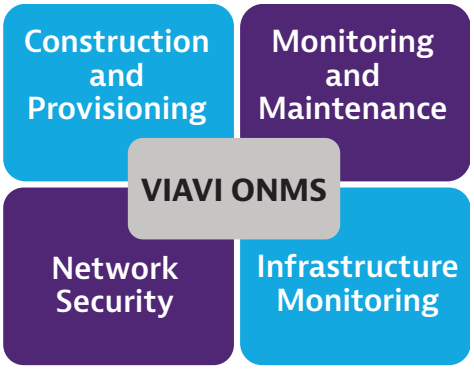
OTU-5000 Optical Test Unit

Deliver great service, faster revenue and reduced costs when you automate optical network monitoring with the most compact rack mounted, remote OTDR test unit on the market!

The OTU-5000 Optical Test Unit combines optical time-domain reflectometry (OTDR) and optical-switch technology to provide continuous OTDR monitoring of multiple fibers anywhere in the network. A single OTU-5000 unit, monitoring 72 fibers of 100km and more, occupies only 1RU!

The OTU-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 16 fibers of 100KM and more for a volume occupying only 1/3 of 1RU. The remaining 2/3 can be used by compact optical switches to achieve the capacity of 72 fibers. OTU-5000 promptly notifies users of any degradation affecting fibers with geographical coordinates of the fiber fault so that repairs can be made at the right location immediately.

The OTU-5000 is compatible with VIAVI ONMSi and SmartOTU software applications. The SmartOTU 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 OTUs concurrently.



Key Features

- Switch scalability up to 1080 ports
- Web-browser access
- E-mail notifications
- Small size: 72 ports in 1RU
- Dual power feeds
- Solid-state disk
- Low power consumption
- LAN-based firmware downloads

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

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)

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")
Operating temperature	-5 to 55°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
Optical Switch	
Number of ports	2, 4, 8, 12, 16, 24, 36, nx36 More than 1000 by cascading 36 ports
Insertion loss (excluding connectors) Up to 16 ports 24 and 36 ports	 1.2dB (1500-1660nm) 1.0 dB
Back reflection	–55 dB
Repeatability	±0.02 dB
Wavelength range	1260–1660 nm
Lifetime	100 million cycles
Housing Up to 72 ports Higher port counts	Included in 1 RU External 1 RU containing up to 108 ports
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 OTDR	**Medium Range OTDR**
Wavelength[1] (nm)	1625nm	1626nm
Wavelength accuracy[1] (nm)	±3	±3
Dynamic range[2] (dB)	37	40
Pulse width	5 ns to 20 µs	5 ns to 20 µs
Event dead zone[3] (m)	1	0.8
Attenuation dead zone[4] (m)	3.5	3

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

VIAVI Solutions