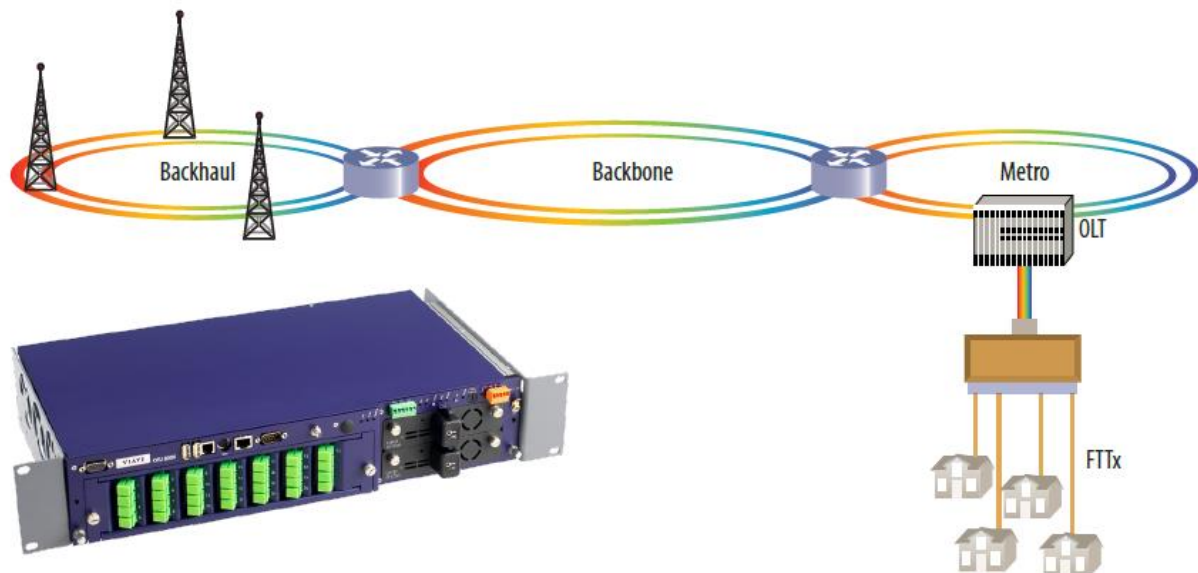


VIAVI ONMSi

OPTICAL NETWORK MONITORING SYSTEM

The RFTS from VIAVI, Optical Network Management System (ONMSi), increases workforce productivity and facilitates the management of fiber optic networks with fewer technicians through fiber remote testing and accurate fiber plant documentation. The system accurately detects and locates fiber degradation, alerting operators and managers with the details of faults. Measurement schedules allow network operators to assess long-term fiber performance to form the basis of efficient asset management.



ONMSi offers a comprehensive fiber monitoring solution: it supports metro, core, access, and PON networks

BENEFITS OF ONMSi RFTS

- **FAST:** ONMSi RFTS monitors the network 24/7 and alarms when there is a problem, automatically and accurately quantifies and locates the problem, then dispatches the technician right to the site – ALL within minutes!
- **SCALABLE:** ONMSi allows users to start small and then expand at any rate needed
- **COMPREHENSIVE:** ONMSi supports both P2P (Metro/Core/Access) & P2MP (PON) networks – all the way to the ONT
- **PROVEN:** ONMSi has a strong track record with over 250 optical networks currently being monitored
- **FLEXIBLE:** ONMSi is designed to be easily integrated within customer organization (web-enabled application, multiple API, domains architecture)

THE ONMSI REMOTE FIBER TEST SYSTEM

Key Benefits

- Saves OpEx, reducing mean-time-to-repair and network downtime by at least 30%
- Anticipates service disruptions before service is affected
- Simplifies SLA management
- Protects fiber assets with long-term performance monitoring
- Improves troubleshooting and demarcation between providers
- Detects fiber tapping, protecting valuable information from intrusion

Key Features

- Supports P2P (metro/core/access) and P2MP (PON) to the optical network terminal (ONT)
- Compact and reliable optical test unit (OTU) design
- Domain architecture enables maximum organizational flexibility
- Integrates geographical maps of the fiber network with OTDR trace cursor tracking
- Secures multiuser environments compatible with LDAP
- Supports web services (XML) and SNMP for easy integration with open-source software (OSS) and geographical information systems (GIS)
- High-availability solution with automatic failover between two servers
- Multiple dashboards showing current performance and diagnostics data

FIBER MONITORING WITH THE OTU-8000 OPTICAL TEST UNIT

The OTU-8000 — Compact, Reliable, and Versatile

The ONMSi OTU-8000 is a compact, 2U-high, rack-mounted unit housing both the OTDR and optical switch modules. A single OTU-8000 can house up to two OTDRs and up to 48 optical switch ports. Capacities of more than 1000 switching ports are achieved by adding multiple external switch units (1U high, 36 ports each). Intelligently managing power distribution between optical switches typically consumes 35 W independently from the number of external switches.

Installed in unmanned sites, the OTU-8000 uses dual power supply feeds and solid-state memory (no magnetic hard disk) for unprecedented reliability. It ensures that alarms will notify operators if the primary communication channel fails and will switch automatically to a backup channel. If communication cannot be established with the ONMSi server, the OTU-8000 will notify users by e-mail or SMS. With its multiple test capabilities, the OTU-8000 can accurately locate a fault within a span of 200 km or test 32 fibers in less than 1 minute. This versatility lets it fit applications where slow fiber degradation is researched. And, it quickly detects intrusion that threatens network integrity.

RFTS Applications

- Optical Network Troubleshooting for both P2P and P2MP networks
- SLA management (improves MTTR and proves results)
- Network security (detects intrusion)
- Network construction (reduces test time & staff, keeps track of test records)
- Instant view of optical network performance
- Fiber health (temperature and strain) and optical performance monitoring for Submarine Cable Networks



Key Features of ONMSi RFTS

- Large range of Test modules and Optical switches
- Scalable system from one to hundreds of test probes
- Multiple dashboards for instant network and system diagnostics
- Domain architecture for organizational flexibility
- Alarm notification by e-mail, SMS, Web Services or SNMP; compliant with OSS-J and ITU-X733
- 100% web based in a secure environment
- Single GUI (Graphical User Interface) for map and monitoring display
- Detects fiber faults all the way to the subscriber
- Locates faults smarter (associates network landmarks information)

What is an RFTS or a Remote Fiber Test System?

An RFTS is a centralized system that combines strategically placed fiber optic test heads in key network locations to constantly sweep the fiber with an OTDR test signal to identify and locate fiber faults and degradations. The RFTS can switch across the fiber plant and/or test on demand. On-demand test use cases include construction verification and post-repair verification after a fiber break.

What issues can be tracked with an RFTS like ONMSi?

Fiber degradation where fibers are becoming crushed or bent and signal impairment is a result. No outage will be present yet, but performance issues can arise. Because connectors are the number one issue affecting fiber plants, a dirty, damaged, or disconnected connector can be seen using the RFTS OTDR. Other on-demand use cases include switching the OTDR to a specific DWDM wavelength and conducting a troubleshooting test to see if there is a fiber problem vs. an active element problem where the OLT or ONT/ONU might not be performing to standard.