

VIAVI

DWDM Test Solutions for MSOs

OTDR and spectrum analysis test solutions to deploy, maintain and troubleshoot fiber deep and DAA networks

The VIAVI DWDM OTDR Module, OCC-56C channel checker, and OSA-110 solutions enable cable operators and contractors to perform complete end-to-end link verification and troubleshooting of DWDM networks.

Easy to use

Whether it's Fiber Deep, Node+0, Remote PHY, Distributed Access Architecture (DAA), RFoG, or PON, cable MSOs are pushing fiber deeper into their networks to meet customers' demands for more bandwidth. More often, they are turning to dense wavelength division multiplexing (DWDM) to get the most out of their fiber investment. DWDM allows an MSO to increase bandwidth and users by adding wavelengths to already existing fiber.

The VIAVI E41DWDMC OTDR module, OCC-56C DWDM channel checker, and OSA-110 Full-spectrum OSA module are very portable, easy-to-use tools for technicians in the headend, hubs, or out at the nodes. Whether constructing, provisioning, or maintaining the network, the VIAVI DWDM portfolio has what you need.

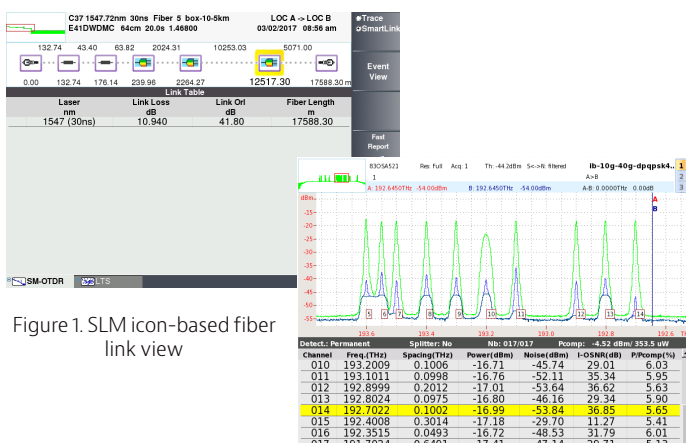


Figure 2. OSA screenshot

Benefits

- High performance single-ended test tools to qualify and troubleshoot Access DWDM networks through MUX(s) and DEMUX(s)
- Deliver right-first-time deployment during construction
- Tunable laser source at DWDM wavelengths always standard
- Mainframes supported by StrataSync, a VIAVI asset and data management Cloud application

Applications

- Validating new WDM routes for new nodes or capacity increases
- Verifying end-to-end continuity prior to service turn-up
- Troubleshooting faulty links without disrupting services
- Verifying presence, power levels, and OSNR of DWDM channels



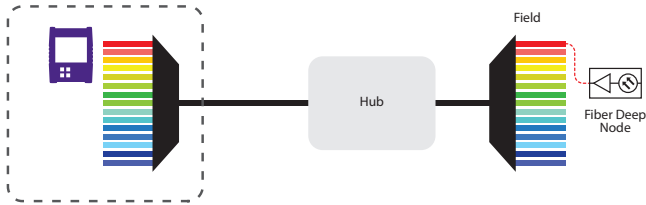
OCC-56C
DWDM Channel
Checker

T-BERD 6000A
with OSA-110
Module

T-BERD 2000
with DWDM
OTDR Module

Right tools for the Job

Whatever phase in the life of the network, the ability to measure link loss, channel strength or OSNR, and identify and locate fiber events is crucial. The job must be quick to do and easy to interpret, as well as easy to carry around.

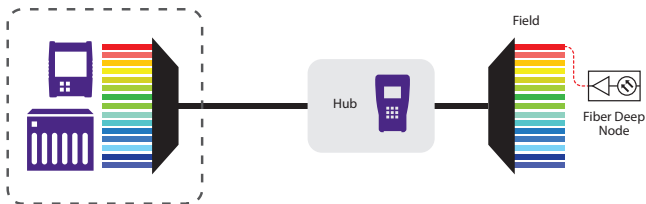


Construction

Perform a complete end-to-end link characterization through MUX/DEMUX for all wavelengths to certify the network build and validate performance criteria

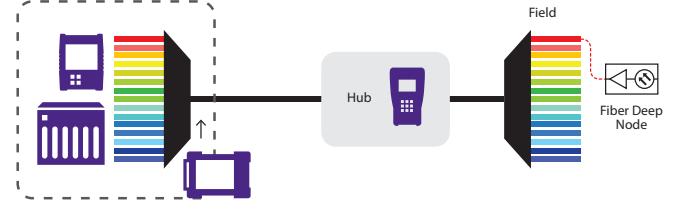
Wavelength Provisioning

Test and verify specific DWDM wavelengths and routes without interrupting existing services to ensure network and service performance. Turn on channels and verify their signal strength to ensure maximum QoS for your new customers.



Troubleshooting

Avoid incurring SLA penalties; investigate and fix faulty links without disrupting traffic on active channels and avoid excessive network downtime or maintenance windows. Identify weak channels on the link.



Part Number	Description
E41DWDMC-PC/-APC	DWDM OTDR Module with tunable laser source, PC/APC connector C-Band tunable from channels 12-62 (1567.95nm - 1527.99nm) – 50GHz/100GHz/200GHz channel spacing. Requires TB2000 or TB4000 mainframe.
OSA-110M/H	Full-band compact OSA modules +23 dBm (-110M) or +30 dBm (-110H) versions. Requires TB6000 mainframe.
OCC-56C (2277/44)	Handheld DWDM channel checker covers channels 16-61 (1564.68nm -1528.77nm), 100/200 GHz spacing

For more information on T-BERD-2000, -4000, -6000 test platforms or individual modules, refer to their respective data sheets