PL-1000D Diagnostic and Monitoring Solution

Diagnostic device using OTDR to detect fiber quality and cut, and OSA for spectrum and OSNR analysis

Features Overview

- Monitoring up to 16 fibers simultaneously, 8 by the OTDR and 8 by the OSA
- Controlled with PacketLight web application or PacketLight's Lightwatch™ NMS
- Main Metro OTDR features:
  - Integrates 1:8 optical switch, OTDR, OADMs
  - 24dB fiber loss
  - Integrated with third party GIS tools
- Main Regional OTDR features:
  - Integrates 1:8 optical switch, OTDR, OADMs
  - 32dB fiber loss
  - Integrated with third party GIS tools
- Main OSA features:
  - Integrates 1:8 optical switch, OSA, splitters
  - Supports full C-band 50GHz/100GHz ITG grid
  - Measures the power, frequency and OSNR of the optical channels in the fiber
- 1U footprint 19"
- Dual redundant AC/DC power suppliers
- Hot swappable fan unit
- Low power consumption

How the PL-1000D Works

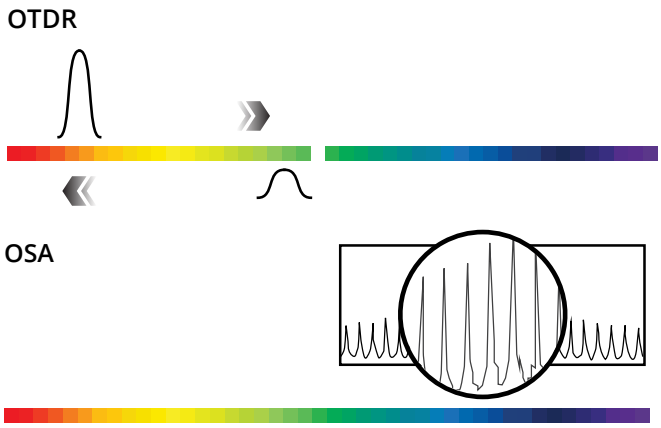
The PL-1000D consists of two technologies for non-intrusive monitoring live fiber optic networks. The OTDR locates fiber cut by sending high-powered diagnostic optical pulses into the fiber and creating Rayleigh back-reflections. The returning signals are measured and calculated, indicating the accurate location and intensity of the fault. The OSA presents for each fiber the optical spectrum and the OSNR of each wavelength, providing the operator with a full, accurate and detailed picture of the fiber.

Main Benefits

- **Simultaneous OTDR diagnostics of up to 8 fibers**
- **OSA monitoring of up to 8 fibers**
- **In-service fiber monitoring**
- **Can operate over dark fiber or over third party network**
- **Detection of fiber tapping attempts**
- **Provide alarm when the trace events are changed**
- **Graphical display of the OTDR and OSA in any browser**

Full Fiber Diagnostic Device

The PL-1000D conducts full non-disruptive monitoring and analysis of the network's fiber. The OTDR monitors up to 8 fibers simultaneously, identifying a break or degradation in each fiber and where the break is. The embedded OSA provides the full optical DWDM spectrum and OSNR of up to 8 fibers simultaneously. The solution provides high-level visibility of the fiber characterization and operating wavelengths and saves network managers time and OPEX expenses associated with identifying and repairing faults.



PL-1000D OTDR and OSA Solution

Recommended applications:

- Monitoring dark fibers service/infrastructure
- Monitoring lighted DWDM fibers
- In service OTDR measurements for DWDM networks
- In service OSA measurements for DWDM networks
- Detection of fiber tapping