

Workshop: Advanced Fiber Optic Testing using OTDRs

Course Number	Delivery Method	Course Length	Language of Instruction
TT-OTDR-WS	Blended Course at Customer Site	2 two-hour Virtual Sessions Plus 1 Day On-Site	English

Synopsis

This course reviews basic fiber tests and introduces the theory and use of OTDR's in the virtual classroom in order to prepare students for extensive hands on training in a face to face lab environment. The participants will perform basic to advanced OTDR tests to qualify Fiber Optic links using a variety of optical test sets. Student will work with other students as a team to perform various tests to ensure the Fiber link meets industry standards. The students will perform a range of tests which progress from basic fiber qualification to testing and troubleshooting. This is the third course in the JDSU Fiber Series designed to prepare a student for the ETA FOT (Electronics Association Technician - Fiber Optics Technician) certification.

Prerequisites

Intro to Fiber Testing Workshop (TT-Fiber-Intro-WS) or industry experience in fiber care/cleaning and basic fiber optic tests.

Who Should Attend

Technicians, engineers, and technical support personnel who are directly or indirectly responsible for installing and troubleshooting Fiber Optic networks.

Course Goals

Upon completion of this course, participants will be able to use an OTDR to:

- Isolate service affecting faults on optical networks
- Perform acceptance testing
- Identify events occurring in a fiber system
- Measure Distance to events within the fiber system
- Identify Microbends and Macrobends

Course Outline

Review (VC Session 1)

- Fiber Safety
- Care and Cleaning
- Handheld fiber instruments
- Performing basic fiber tests

- Pulse Width and how it Affects Dynamic Range
- Launch Cable
- Storing Traces, Naming Traces and Transferring Traces to a PC

Theory and Use of an OTDR (VC Session 2)

- Single Wavelength Systems
- OTDR Event Definition
- OTDR Trace Information
- Fiber End Location
- Event Dead Zone
- Dynamic Range
- Attenuation Dead Zone
- Acquisition Time

Hands-On Workshop

- Introduction to Training Stations
- Measurements and Results Overview

Training Station # 1 – Acceptance Testing

Fiber Link Loss

- OTDR Setup
- Use of Launch Cables
- Dual Wavelength Testing
- Measure Fiber Length
- Bidirectional Testing
- Measure Total Fiber Link Loss

To order and schedule training, call toll free 1-866-228-3762
Or visit www.jdsu.com/training.

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Virtual Classroom session breakouts are approximate.

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Training Station # 2 - Troubleshooting Locating Fiber Anomalies

- Fiber Breaks
- Microbends
- Macrobends
- Splice Gain
- Ghosts
- Bad Splices
- Fusion Splices
- Mechanical Splices
- Bad Patch Panel Connections

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