

Course Name: Passive Optical Networks (PON)

Course Overview: This training course will focus on passive optical networks. Time will be spent talking about driving factors and network topologies.

Course Length: 1 day

Who should Attend:

- Field service technicians
- Design engineers
- Managers/field supervisors
- Field engineers
- Installers
- Telecom technician

You will Learn:

- Basics of the Passive optical industry
- The functions of PON Components
- PON Network Topologies
- Basics of Designing a PON

Prerequisites: Basic knowledge of Fiber Optics

Customizable Course: Yes



Course Content:

PON Overview:

- Description
- Origins and Development
- PON Specifications, Standards & Work Groups

Implementation of PON

- FTTP
- FTTH
- FTTB

PON Communication Basics

- Common Terms used in Networking
 - TDM / TDMA
 - Voice (APON)
 - Video (Broadband/APON)
 - Data (APON/EPON)
 - SONET

PON Variations

- A-PON
- B-PON
- E-PON
- G-PON
- T-PON

PON Components

- OLT
- ONT
- ONU
- NT

Transmitters and Receivers

- ODN
 - Fiber/Cable
 - Closures
 - Pedestals and cabinets
 - Splices
 - Connectors
 - Splitters
 - Attenuators

PON Topologies

- Point to Point
- Point to Multipoint
- Star
- Bus
- Ring

Fiber Testing

- OTDR
- OLTS
- ORL
- Fiber identifier and laser fault locator

Designing the PON

- Fiber distribution hub
- Loss Budgets
- Fiber Optic Counts
- Passive and Active Components

