

ADVANCED FIBER OPTIC TESTING AND MEASUREMENTS

2-Day Training
\$795 Two Days
\$495 (Day Two Only)

DAY ONE:

You will receive an in depth understanding of the technology and how it has evolved to its present state, nearly at the limits of speed and distance. Learn how fiber is made, how it can be made stronger than steel and how it handles today's incredible bandwidths. You will understand the causes of insertion and return losses and what determines connector performance. Most importantly you will receive hands-on training in the proper methods for field testing of installed networks and equipment.

Day one will include the following hands on training

- Learn hands on how to inspect and clean connectors in the field.
- Learn how to repair damaged connectors
- Select the right light source for the fiber being tested.
- When to use a mandril wrap with your light source
- Measure patchcord losses and identify problem connectors
- Understanding connector endface geometry and how it effects return loss
- Measure system end to end loss
- Learn to identify a singlemode fiber from a multimode fiber

CLASS SIZE IS LIMITED:

Due to class size limit, registrations are not refundable. They can be transferred. There is a 10% discount for three or more registrants from the same company. If you have any questions or would like to register for this course, please contact Susan McCann at susan@b2bphotonics.com.

DAY TWO:

Optical Time Domain Reflectometry (OTDR)

The focus will be on OTDR theory and measurements. Students will be presented a thorough overview of current OTDR technology and equipment available. In addition you will learn how to optimize each adjustment of the OTDR to obtain the best possible trace for the desired measurement. Valuable hands-on training will simulate all aspects of OTDR trace analysis with actual network simulation and real life testing situations.

You will get to do the following hands on experiments:

- Simulate a 50Km network with various faults.
- Learn to recognize a catastrophic break from an unmated connector.
- See the difference between a contaminated connector and a clean one.
- Identify a fusion splice from a mechanical splice.
- Visualize Return loss at each event.
- Observe ghost spikes after a reflective event
- Measure fiber attenuation at various wavelengths
- Locate faults or problem areas in a system.
- Understand non-reciprocal losses in systems.

Theory of operation
 Fresnel reflections
 Rayleigh Scattering
 The backscatter coefficient
 Trace analysis w/live demonstration
 Measuring Attenuation
 Measuring Connector and splice loss
 Non-reciprocal Losses
 Understanding The dead zone
 Optimizing the pulse width
 Optimizing averaging time
 Ghost Spikes
 Fault location
 System Documentation

To learn more about MPS products and services, contact us today.

Microwave Photonic Systems

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