Introduction:

The purpose of this document is to provide a basic guideline for the structure, format and schedule of the Fiber SenSys Basic Fiber Defender Training Course. This training course covers everything from the basics of fiber optics to complete system installation for both our 300 and 500 Series Alarm Processing Units (APUs). Upon completion of the class, the instructor will provide attendees with certification credentials. Additionally, Fiber SenSys can custom tailor a class to your company's specific training needs.

Objective:

The objective of the Basic Fiber Defender Training Course is to provide information, including determining the best product solution for specific applications, installation and maintenance of Fiber SenSys products.

Course Material & Agenda:

Course material is subject to change based on location of training, requests of class attendees, and instructor.

Day 1:

1. Introduction
   a. Fiber advantage
   b. Fiber optic basics
   c. Basic principles of modal metric sensing (operational theory)
   d. Fiber Defender product Introduction
      i. 300 Series alarm processors
      ii. 500 Series alarm processors
      iii. Supporting products (accessories)
2. Site Design
   a. Basic system layouts, distance coverage
   b. Project planning and execution
   c. 500 Series site design example
      i. Cable design
      ii. Zone layout
      iii. Generating bill of materials (BOM)

Day 2:

1. System Installation
   a. Sensor installation (Fence)
      i. Cable routing
      ii. Installing wire ties
   b. Backbone installation
      i. Cable routing/layout options
   c. 500 Series installation
      i. Distribution box (DB 32)
         1. Location/function
         2. Construction and assembly
      ii. Breakout box
         1. Location/function
         2. Construction and assembly
      iii. End of line terminator (EOLT)
         1. Location/function
         2. Construction and assembly
   d. FD525-HALO™
      i. Theory of operation
      ii. HALO cable installation
      iii. HALO splice box assembly
2. Fiber Optic Connections
   a. Installation of epoxy connectors
   b. Arc fusion splicing

Day 3:

1. Tuning Process and Parameters
   a. Physical tuning process
   b. Signal processing and parameters
      i. Signal conditioning
      ii. Event qualification
      iii. Alarm qualification
   c. Calibration sequence
      i. What do I adjust first?

2. Tuning and Calibration Software
    a. SpectraView
    b. 500 Series Suite
    c. AutoTune
3. Network Connections
    a. XML & SDK
    b. Fiber Commander
4. Maintenance
5. Conclusion

Time:
The course begins at 8:30 AM at Fiber SenSys in Hillsboro, Oregon. Expected time of completion is approximately 4:30 PM every day, pending class questions and participation.

Location:
The training course takes place at Fiber SenSys located at 6175 NE Century Blvd, Hillsboro, OR 97124 USA. The nearest airport is the Portland International Airport (PDX), which is about 25 miles northeast of our office. This can be a 30 – 60+ minute drive depending on the time of day. The training course can also be modified and performed at the site of the company.

Please contact info@fibersensys.com for assistance locating local hotel or transportation.

What to Bring:
Laptop with Windows 7, 8, or 10.
USB to Serial Converter Kit P/N: 980-03542. Borrowing a converter may be arranged in limited quantities.