

OTDR - Optical Time Domain Reflectometer

- Description:** Determine Events and Termination of fiber cable using the OTDR
- Staffing:** One judge/timer per Fiber Test Module
- Time Limit:** Timed event - 5 minutes maximum
Answer questions and information listed on Scoresheet
- Equipment:** 1) Simulated Test Module with predetermined fiber lengths, Fiber Jumper, Fiber connectors, Fusion Splice and Macro bend and also includes a Fiber Launch Reel
Or a Stored Test Fiber Trace with events listed above and the OTDR parameters listed below.
2) OTDR
Parameters for OTDR
a) Single wavelength – 1310 nm
b) Acquisition time – 15 seconds
c) Pulse width – 30 ns
d) Distance – Kilo feet
e) Set Parameter for Fiber Launch Reel
- Note: The OTDR auto-test functions cannot be used during the competition.**
- Supplied:** Fiber Test Module with Fiber Launch Reel **or a Stored Test Fiber Trace**
Dual Wavelength OTDR
Fiber Connector Inspection Scope
Fiber connector cleaning Material
Scoresheets
Stackmat Timers
- Competition:** **Contestants who have not competed should NOT watch.**
- 1) Proper Cleaning of Fiber Jumper for test.
 - 2) Identify the Events.
 - 3) Answer questions regarding the test.
- One judge per contestant, usually two judges and two competitors at a time if additional Equipment and Test Modules are available.
- Scoring:** 100 points possible
Winner based on total points scored
Time is the tiebreaker

OTDR - Optical Time Domain Reflectometer Scoresheet

Objective: 1) Inspect and clean the provided test fiber jumper.
 2) Analyze and Evaluate the Fiber from the Fiber Test box or Stored Test Trace
 3) Answer the questions listed below.

Supplied: Fiber Test Module Box # _____
 OTDR Manufacturer _____
 Stackmat Timer

Scoring: 5 points for each **correct** Event measurement.
 20 points for **proper** Cleaning of Fiber Jumper.
 15 points for **correct** answer on Fiber Connector type.
 15 points for **correct** answer to each question about the test.
 Winner based on total points scored.
 Time is tiebreaker.

Clean Jumper–Identify Event Listed-Answer Questions	Score
Proper Cleaning of Fiber Jumper	_____ (20pts.)

Event 1 is defined as the first Junction of the Fiber being tested that is connected to the Fiber Launch Reel.

Event#____: Good Connector – Macrobend – Bad Splice – Good Splice – Bad Connector _____ (5pts.)

Event#____: Good Connector – Macrobend – Bad Splice – Good Splice – Bad Connector _____ (5pts.)

Event#____: Good Connector – Macrobend – Bad Splice – Good Splice – Bad Connector _____ (5pts.)

End Connector – Angle or Flat Connector _____ (5pts.)

Question 1. What is the Splice loss of Event #___ @ 1310 nm? _____ dB _____ (15pts.)

Question 2. What is the end-to-end loss of the fiber-under-test @ 1310 nm (not including launch reel)? _____ dB _____ (15pts.)

Question 3. What is the end-to-end length of the fiber-under-test (not including launch reel)?
 _____ kft _____ (15pts.)

Question 4. Was a Launch Reel used for this Test. Yes/ No _____ (15pts.)

Name _____
 Team _____
 Judge _____

Total Points _____
Time _____:_____:_____
Minutes Seconds Thousands