

Fiber Ring (150 m)



Fiber Box (1 km)

OTDR Fiber Rings and Fiber Boxes

OTDRs require launch and receive test cables to measure the end-to-end loss of optical fiber links. A launch cable, which connects the OTDR to the link under test, reveals the insertion loss and reflectance of the near-end connection. A receive cable, which is connected to the far-end of the link, reveals the insertion loss and reflectance of the far-end connection. Noyes OTDR test cables are available in two forms. Fiber Rings, which provide 150 m of 50 μm , 62.5 μm , or single-mode fiber in a compact, light-weight ring, are ideal for testing optical fiber links (up to about 2 km) in premises networks. Fiber Boxes, which are available in standard lengths up to 1 km, are ideal for testing single-mode fiber spans (up to 50 km or longer) in Telco and Broadband networks. Please call or email for information about other length OTDR fiber boxes and Network Simulators, which are fiber boxes with customer-specified splices, connections, or other events.

Fiber Rings (FR) Specifications

Model	Configuration	Fiber Type	Fiber Length
FR1-M5-150- x1- x2	Standard, one fiber	Multimode, 50 μm	150 m (492 ft)
FR1-M6-150- x1- x2	Standard, one fiber	Multimode, 62.5 μm	150 m (492 ft)
FR1-SM-150- y1- y2	Standard, one fiber	Single-mode	150 m (492 ft)
FR3-M5-x1-MTRJ	MT-RJ near-end, A and B fibers	Multimode, 50 μm	150 m (492 ft)
FR3-M6-x1-MTRJ	MT-RJ near-end, A and B fibers	Multimode, 62.5 μm	150 m (492 ft)
FR3-SM-x1-MTRJ	MT-RJ near-end, A and B fibers	Single-mode	150 m (492 ft)

fiber boxes (FB) specifications

FB1-SM-500-y1-y2	Standard, one fiber	Single-mode, SMF-28	500 m (1640 ft)
FB1-SM-1000-y1-y2	Standard, one fiber	Single-mode, SMF-28	1000 m (3281 ft)

x1, x2 — connectors for multimode cables, specify type (e.g. ST, SC)

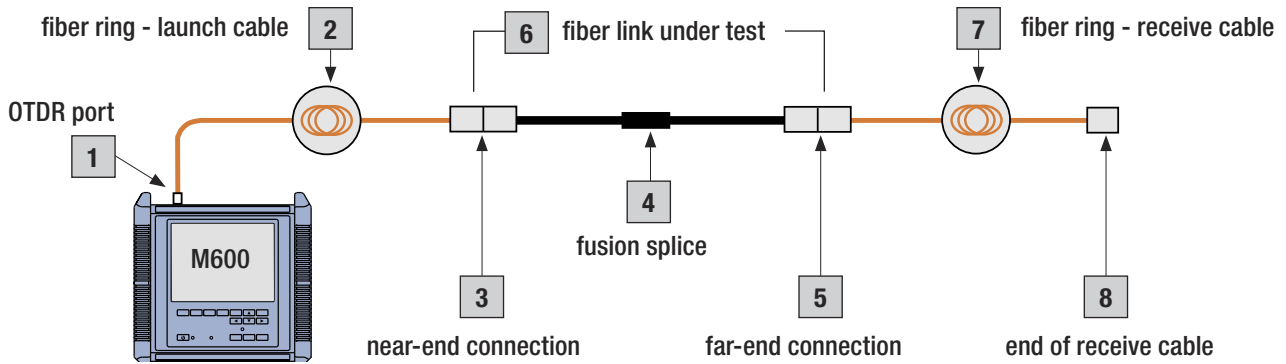
y1, y2 — connectors for single-mode cables, specify type (e.g. ST, SC, FC)

Other connector types, fiber types, and fiber lengths are available.

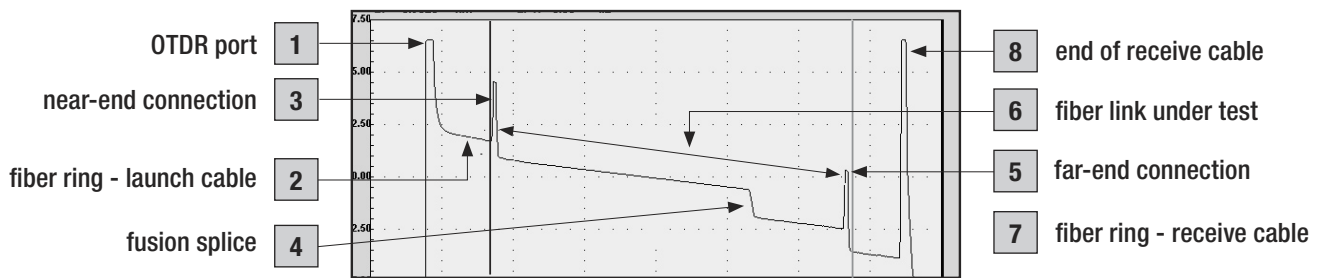
OTDR Fiber Rings and Fiber Boxes

How to Generate a Baseline Trace Using Fiber Rings (Boxes)

- To use the Fiber Ring (Box) as a launch cable, connect the Fiber Ring (Box) between your OTDR and the fiber link under test. This will allow you to measure the loss of the near-end connection.
- To use the Fiber Ring (Box) as a receive cable, connect the Fiber Ring (Box) to the far-end connector of your fiber link under test. This will allow you measure the loss of the far-end connection.
- By using Fiber Rings (Boxes) as both launch and receive cables, as shown in the diagram below, you can measure total insertion loss of the fiber link under test.



Example OTDR Test Configuration With Launch And Receive Cables.



OTDR Trace Made Using Launch And Receive Cables.