# FTB-LTC/PSB/SPSB

## LAUNCH TEST CABLE/PULSE SUPPRESSOR BOXES



Used in conjunction with an OTDR, the FTB-LTC/PSB/SPSB covers the OTDR's dead zone, enabling loss measurement on the first and last connections of a fiber under test.

### **KEY FEATURES**

Installation/troubleshooting/OTDR testing essential

Increase the life of the OTDR connector by reducing the number of matings on the OTDR connector

Singlemode and multimode fiber models

Wide selection of connectors for quick connection to most OTDR and patch panel ports

Modular FTB-LTC, portable SPSB and stand-alone PSB: available in lengths of 15, 150, 300, 500, 1000 and 2200 m

Contiguous fiber design for the most accurate connector loss

## PLATFORM COMPATIBILITY (FTB-LTC)



Platform FTB-200



Platform FTB-500



Platform FTB-2

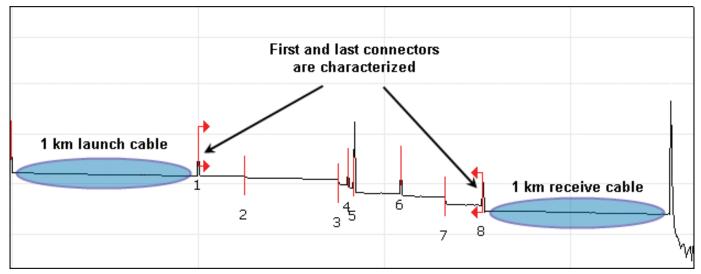


## **CHOICE OF CONFIGURATIONS**

Typically, the length of an OTDR's dead zone is equivalent to that of the optical pulse plus a few meters. The chosen launch test cable should therefore be longer than the pulse dead zone used for the tests. For instance, a 1 µs pulse is approximately 100 m long; selecting a 150 m SPSB or a 300 m LTC/PSB would therefore be appropriate.

EXFO offers three types of launch cables:

- > The FTB-LTC module combines with an FTB-7000 series OTDR module in the FTB-500 or FTB-200 platform
- > The stand-alone PSB comes in a rugged, compact carrying case
- > The portable SPSB comes in a soft, easy-to-carry-everywhere pouch



OTDR trace with launch and receive cables, characterizing the first and last connectors of the link.

### **How It Works**

Link characterization is often performed using an OTDR. But even though an OTDR has the shortest dead zones, because of the way loss is measured in a link, it does not allow the characterization of the first and last connectors without using a launch test cable, also called a pulse suppressor box. Here's why.

The loss value associated with an event is the difference between the backscattering levels measured before and after the event. To account for the OTDR's dead zone, obtaining a backscattering level before the first connector requires inserting a certain length of fiber between the OTDR port and the first connector of the fiber under test. At the other end of the link, the same length of fiber is added after the last connector of the "receive" cable.

In order to obtain an accurate, complete picture of the system's loss—which is a critical aspect of fiber commissioning—a launch test cable should always be used at both ends of the fiber link.



SPECIFICATIONS		
Model	FTB-LTC/PSB/SPSB	
Connector insertion loss (dB) <sup>a</sup>	< 0.5	
Connector reflectance (dB) <sup>b</sup>	UPC: < -50 APC: < -60	
Fiber type	Wavelength	Typical attenuation
Multimode fiber 50/125 μm (OM2)	850 nm 1300 nm	3.0 dB/km 1.2 dB/km
Multimode fiber 62.5/125 μm (OM1)	850 nm 1300 nm	3.2 dB/km 1.0 dB/km
Singlemode fiber 9/125 μm (G.652D)	1310 nm 1550 nm	0.37 dB/km 0.25 dB/km

GENERAL SPECIFICATIONS			
	FTB-LTC	PSB	SPSB
Size (H x W x D)	96 mm x 25 mm x 285 mm (3 <sup>3</sup> /4 in x 1 in x 11 <sup>1</sup> /4 in)	114 mm x 235 mm x 197 mm (4 <sup>1</sup> / <sub>2</sub> in x 9 <sup>1</sup> / <sub>4</sub> in x 7 <sup>3</sup> / <sub>4</sub> in)	25 mm x 269 mm x 146 mm (1 in x 10 <sup>5</sup> /s in x 5 <sup>3</sup> /4 in)
Weight	325 g (0.72 lb)	2.72 kg (6 lb)	1.36 kg (3 lb)
External patchcord length	2 x 1.5 m (2 x 5 ft)	2 x 2 m (2 x 6.6 ft)	2 x 2 m (2 x 6.6 ft)

#### Notes

- a. Bidirectional OTDR, singlemode 1310 nm and 1550 nm, multimode 850 nm and 1300 nm.
- b. Singlemode bidirectional OTDR 1310 nm and 1550 nm.



#### ORDERING INFORMATION FTB-LTC-X-XX-XX Models ■ Connectors Singlemode For singlemode models -B, the following connectors FTB-LTC-B-500 = Launch test cable, single module for FTB platform, are available: singlemode fiber 9/125, 500 m 58 = FC/APC narrow key FTB-LTC-B-1000 = Launch test cable, single module for FTB platform, 88 = SC/APC narrow key singlemode fiber 9/125, 1000 m 89 = FC/UPC 90 = ST/UPCMultimode 91 = SC/UPCFTB-LTC-C-300 = Launch test cable, single module for FTB platform, 95 = E2000/UPC multimode fiber 50/125, 300 m 96 = E2000/APC FTB-LTC-D-300 = Launch test cable, single module for FTB platform, 101 = LC/UPCmultimode fiber 62.5/125, 300 m 104 = IC/APCFor multimode models -C/-D, the following connectors are available: 50 = FC/PC54 = SC/PC74 = ST/PC Example: FTB-LTC-B-500-58-58 98 = LC/PC PSB-XXX-XX-XX Model Connectors PSB-B-2200 = Stand-alone pulse suppressor box, singlemodeFor singlemode models -B, the following connectors fiber 9/125, 2200 m are available: 58 = FC/APC narrow key 88 = SC/APC narrow key 89 = FC/UPC90 = ST/UPC91 = SC/UPC95 = E2000/UPC 96 = E2000/APC 101 = LC/UPC104 = LC/APCFor multimode models -C/-D, the following connectors are available: 50 = FC/PC54 = SC/PC74 = ST/PCExample: PSB-B-2200-58-91 98 = LC/PC SPSB-XXX-XX-XX Connectors Model ■ SPSB-B-15 = Soft pulse suppressor bag, singlemode 9/125, 15 m For singlemode models -B, the following connectors SPSB-B-150 = Soft pulse suppressor bag, singlemode fiber 9/125, 150 m are available: SPSB-B-500 = Soft pulse suppressor bag, singlemode fiber 9/125, 500 m 58 = FC/APC narrow key SPSB-C-300 = Soft pulse suppressor bag, multimode fiber 50/125, 300 m 88 = SC/APC narrow key SPSB-D-300 = Soft pulse suppressor bag, multimode fiber 62.5/125, 300 m 89 = FC/UPC90 = ST/UPC91 = SC/UPC95 = E2000/UPC a 96 = E2000/APC 101 = LC/UPC 104 = LC/APCFor multimode models -C/-D, the following connectors are available: 50 = FC/PC54 = SC/PC74 = ST/PCExample: SPSB-B-500-58-101 98 = LC/PC

#### Note

a. E2000 connector not available for SPSB-B-15 model.

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