

# 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)

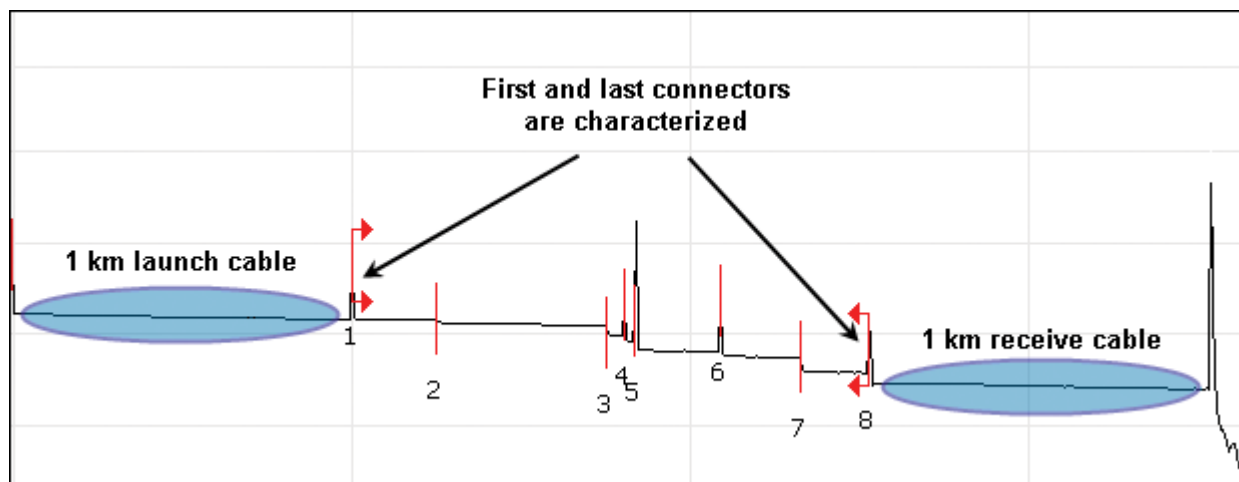


## CHOICE OF CONFIGURATIONS

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  $\mu$ s 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 $\mu$ m (OM2)	850 nm 1300 nm	3.0 dB/km 1.2 dB/km
Multimode fiber 62.5/125 $\mu$ m (OM1)	850 nm 1300 nm	3.2 dB/km 1.0 dB/km
Singlemode fiber 9/125 $\mu$ m (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> / <sub>4</sub> in x 1 in x 11 <sup>1</sup> / <sub>4</sub> in)	114 mm x 235 mm x 197 mm (4 1/2 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> / <sub>8</sub> in x 5 <sup>3</sup> / <sub>4</sub> 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)

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-XX-XX

**Models****Singlemode**

FTB-LTC-B-500 = Launch test cable, single module for FTB platform, singlemode fiber 9/125, 500 m  
 FTB-LTC-B-1000 = Launch test cable, single module for FTB platform, singlemode fiber 9/125, 1000 m

**Multimode**

FTB-LTC-C-300 = Launch test cable, single module for FTB platform, multimode fiber 50/125, 300 m  
 FTB-LTC-D-300 = Launch test cable, single module for FTB platform, multimode fiber 62.5/125, 300 m

**Connectors**

**For singlemode models -B, the following connectors are available:**

58 = FC/APC narrow key  
 88 = SC/APC narrow key  
 89 = FC/UPC  
 90 = ST/UPC  
 91 = SC/UPC  
 95 = E2000/UPC  
 96 = E2000/APC  
 101 = LC/UPC  
 104 = LC/APC

**For multimode models -C/-D, the following connectors are available:**

50 = FC/PC  
 54 = SC/PC  
 74 = ST/PC  
 98 = LC/PC

Example: FTB-LTC-B-500-58-58

## PSB-XX-XX

**Model**

PSB-B-2200 = Stand-alone pulse suppressor box, singlemode fiber 9/125, 2200 m

**Connectors**

**For singlemode models -B, the following connectors are available:**

58 = FC/APC narrow key  
 88 = SC/APC narrow key  
 89 = FC/UPC  
 90 = ST/UPC  
 91 = SC/UPC  
 95 = E2000/UPC  
 96 = E2000/APC  
 101 = LC/UPC  
 104 = LC/APC

**For multimode models -C/-D, the following connectors are available:**

50 = FC/PC  
 54 = SC/PC  
 74 = ST/PC  
 98 = LC/PC

Example: PSB-B-2200-58-91

## SPSB-XX-XX

**Model**

SPSB-B-15 = Soft pulse suppressor bag, singlemode 9/125, 15 m  
 SPSB-B-150 = Soft pulse suppressor bag, singlemode fiber 9/125, 150 m  
 SPSB-B-500 = Soft pulse suppressor bag, singlemode fiber 9/125, 500 m  
 SPSB-B-1000 = Soft pulse suppressor bag, singlemode fiber 9/125, 1000 m  
 SPSB-C-300 = Soft pulse suppressor bag, multimode fiber 50/125, 300 m  
 SPSB-D-300 = Soft pulse suppressor bag, multimode fiber 62.5/125, 300 m

**Connectors**

**For singlemode models -B, the following connectors are available:**

58 = FC/APC narrow key  
 88 = SC/APC narrow key  
 89 = FC/UPC  
 90 = ST/UPC  
 91 = SC/UPC  
 95 = E2000/UPC<sup>a</sup>  
 96 = E2000/APC<sup>a</sup>  
 101 = LC/UPC  
 104 = LC/APC

**For multimode models -C/-D, the following connectors are available:**

50 = FC/PC  
 54 = SC/PC  
 74 = ST/PC  
 98 = LC/PC

**Call for configuration and pricing on all models.**

**Some models available:**

[880x679](tel:880x679) / [SPSB-B-1000-88-89](#)

[880x683](tel:880x683) / [SPSB-B-500-88-101](#)

[880x684](tel:880x684) / [SPSB-B-500-88-91](#)

Example: SPSB-B-500-58-101

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