# FTB-LTC/PSB/SPSB



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 150, 300, 500, 1000 and 2200 m

## PLATFORM COMPATIBILITY (FTB-LTC)





Platform FTB-200 Platform FTB-500



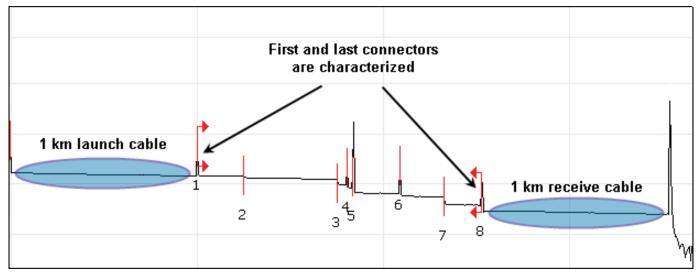


### **CHOICE OF CONFIGURATIONS**

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) $^{\rm b}$	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 25 mm x 269 mm x 146 mm Size (H x W x D) 96 mm x 25 mm x 285 mm 114 mm x 235 mm x 197 mm (3 <sup>3</sup>/4 in x 1 in x 11 <sup>1</sup>/4 in) (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) (1 in x 10 $^{5}/8$ in x 5 $^{3}/4$ 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.



	vv vv
FTB-LTC-X-XX-	<u>^^-^</u>
Models	Connectors
Singlemode	For singlemode models -B, the following connectors
FTB-LTC-B-300 = Launch test cable, single module for FTB platform,	are available:
singlemode fiber 9/125, 300 m	58 = FC/APC narrow key
FTB-LTC-B-500 = Launch test cable, single module for FTB platform,	88 = SC/APC narrow key
singlemode fiber 9/125, 500 m	89 = FC/UPC 90 = ST/UPC
FTB-LTC-B-1000 = Launch test cable, single module for FTB platform,	
singlemode fiber 9/125, 1000 m	91 = SC/UPC
	95 = E2000/UPC 96 = E2000/APC $101 = LC/UPC^{a}$ $104 = LC/APC^{a}$
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	For multimode models -C/-D, the following connectors
	are available:
	50 = FC/PC
	54 = SC/PC
	74 = ST/PC
Example: FTB-LTC-B-300-58-58	$98 = LC/PC^{a}$
PSB-XXX-	VV_VV
C 3D-	
Model	Connectors
PSB-B-500 = Stand-alone pulse suppressor box, singlemode	For singlemode models -B, the following connectors
fiber 9/125, 500 m	are available:
PSB-B-2200 = Stand-alone pulse suppressor box, singlemode	58 = FC/APC narrow key
fiber 9/125, 2200 m	88 = SC/APC narrow key
PSB-C-300 = Stand-alone pulse suppressor box, multimode	89 = FC/UPC
fiber 50/125, 300 m	90 = ST/UPC
PSB-D-300 = Stand-alone pulse suppressor box, multimode	91 = SC/UPC
fiber 62.5/125, 300 m	95 = E2000/UPC
	96 = E2000/APC
	$101 = LC/UPC^a$
	$104 = LC/APC^{a}$
	For multimode models -C/-D, the following connectors
	are available:
	50 = FC/PC 54 = SC/PC
	74 = SC/PC 74 = ST/PC
Example: PSB-B-500-58-91	98 = LC/PC <sup>a</sup>
SPSB-XXX-	XX-XX
Model	Connectors
SPSB-B-150 = Soft pulse suppressor bag, singlemode	For singlemode models -B, the following connectors
fiber 9/125, 150 m	are available:
SPSB-B-500 = Soft pulse suppressor bag, singlemode	58 = FC/APC narrow key
fiber 9/125. 500 m	88 = SC/APC narrow key
SPSB-C-300 = Soft pulse suppressor bag, multimode	89 = FC/UPC
fiber 50/125, 300 m	90 = ST/UPC
SPSB-D-300 = Soft pulse suppressor bag, multimode	91 = SC/UPC
fiber 62.5/125, 300 m	95 = E2000/UPC
1501 02.01 20, 000 m	96 = E2000/APC
	30 = 22000  APC $101 = \text{LC}/\text{UPC}^{a}$
	$104 = LC/APC^{a}$
	For multimode models -C/-D, the following connectors
	are available:
	50 = FC/PC
	50 = 10/10 54 = SC/PC
	74 = ST/PC
Example: SPSB-B-500-58-101	74 = 31/PC 98 = LC/PC <sup>a</sup>

a. LC connectors are not available for first connector.

EXFO Headquarters > Tel.: +1 418 683-0211 | Toll-free: +1 800 663-3936 (USA and Canada) | Fax: +1 418 683-2170 | info@EXFO.com | www.EXFO.com

EXFO serves over 2000 customers in more than 100 countries. To find your local office contact details, please go to www.EXFO.com/contact.

EXFO is certified ISO 9001 and attests to the quality of these products. EXFO has made every effort to ensure that the information contained in this specification sheet is accurate. However, we accept no responsibility for any errors or omissions, and we reserve the right to modify design, characteristics and products at any time without obligation. Units of measurement in this document conform to SI standards and practices. In addition, all of EXFO's manufactured products are compliant with the European Union's WEEE directive. For more information, please visit www.EXFO.com/recycle. Contact EXFO for prices and availability or to obtain the phone number of your local EXFO distributor.

For the most recent version of this spec sheet, please go to the EXFO website at www.EXFO.com/specs.

In case of discrepancy, the Web version takes precedence over any printed literature.

Printed in Canada 11/05

