



# **Measurement Tool for Live Fiber testing of FTTX**

# LBT-101 SHORT RANGE OPTICAL TESTER





1610nm light source and built-in **Optical Filter realized the test of** live fiber of PON system. First in the industry!

# **FEATURE**

# ■ Live Fiber Testing \*1

Enabled live fiber testing by launching 1610nm wavelength, with optical filter which block the current wavelength (1310 / 1490 / 1550nm).

# ■ Portable

LBT-101 is a lightweight, handheld, user-friendly tool. Easily held in one hand.

# **■** Easy Operation

Just pressing "START" button and it will start. Easy to operate for less experienced user.

# ■ High Resolution

5cm distance resolution. 2m dead zone.

## ■ Built-in Fiber

Measurable from the first connector.

# ■ Real Time Sweeping

Real time sweeping to identify target fiber.

# Data Storage

Internal storage is 40MB (up to 800 traces). Also supported by external USB memory.

# ■ Wide Screen

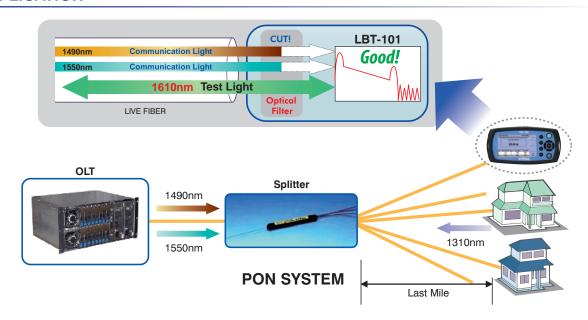
Full color 4.3" wide screen which provides high visibility, both indoor and outdoor.

# ■ Long Battery Life

Typically 3.5 hours by single charge.

\*1 : The confirmation that there is no influence on the actual communication system is necessary.

# **APPLICATION**



# SHORT RANGE OPTICAL TESTER

# **LBT-101**



### STANDARD PACKAGE

Product Name	Code	Note
Main Unit (LBT-101)		
AC Adapter	LBT-101-C	Standard Accessory
Battery Pack		Standard Accessory

# **SPECIFICATIONS**

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Item	Specifications	
Wavelength *1	1610±5 nm	
Fiber Type	SMF (ITU-T G.652)	
Optical Filter	Cut 1310 to 1550nm	
Built-in Fiber	10m	
Distance Range *2	1.0 km (3,000 ft) or 2.5 km (8,000 ft) set automatically	
Pulse width	15 ± 3 ns	
Dynamic Range	≥ 6 dB	
Deadzone	Fresnel: ≤ 2 m *3, Backscatter: ≤ 7 m *4	
Sampling Resolution	5 cm (Distance range 1.0km), 10 cm (Distance Range 2.5 km) (IOR=1.50000)	
Sampling Points	20001 (Distance range 1.0km), 25001 (Distance Range 2.5 km)	
Data Storage	Internal memory: 40MB (up to 800 traces), External (USB): up to 20,000 traces with 1GB	
IOR Setting	1.3000 to 1.7000 (0.0001 steps)	
Unit	ft, m	
Fiber Event Analysis	Automatic, displayed in table format on user defined PASS/FAIL thresholds	
Loss Modes	2 point loss, dB/km	
OTDR Trace Format	Telcordia universal (.SOR), issue 2 (SR-4731)	
Other Functions	Integrated launch fiber: 10 m (30 ft)	
	Connection check: Automatic check of OTDR to FUT connection quality	
	Real time sweep: <1 sec (typical)	
Dimensions / Weight	190 (W) mm x 96 (H) mm x 48 (D) mm (7.5" x 3.8" x 1.9") / < 800g (< 2 lbs)	
Display	4.3 inch TFT-LCD (480 x 272, with backlight, transparent type)	
Interface	USB 1.1, Type A x 1 (memory), Type Mini-B x 1 (USB mass storage)	
Power Supply	9 VDC, 100 to 240 VAC, Allowable input voltage: 80 to 264 V, 50/60 Hz	
Battery Pack	NiMH, Operating Time: 3.5 hours (typical) *5, Recharge Time: < 3 hours *6	
Laser Safety	IEC 60825-1:2007 Class1 This product complies with 21 CFR1040.10 and 1040.11 except	
	for deviations pursuant to Laser Notice No.50, dated June 24, 2007	
Environmental Conditions	Operation: 0 to +40°C, $\leq$ 80% (non-condensing) *7, Storage: -20 to +60°C	
	Vibration: MIL-T28800E Class 3, Dust and Drip proof: IP 51	

<sup>\*1:</sup> at 25°C

IEC 60825-1 2007 **CLASS 1 LASER PRODUCT** 

# Furukawa Electric Co., Ltd.

http://www.furukawa.co.jp/foam/english/

# **Head Office:**

2-3, Marunouchi 2-chome Chiyoda-ku, Tokyo, 100-8322 Japan TEL: +81 3 3286 3227 FAX: +81 3 3286 3978 www.furukawa.co.jp comsales@ho.furukawa.co.jp

# **China:**

# Furukawa Shanghai Ltd.

Room 1006, Hongyi Plaza, 288 jiujiang Road, Shanghai 200001, P. R. China TEL: +86 21 3366 5301 FAX: +86 21 3366 5308 www.furukawa.co.jp sales@furukawa-sh.com

# **South East Asia:**

Furukawa Electric Singapore Pte. Ltd. 10 Anson Road, #25-07/09, International Plaza, Singapore 079903 TEL: +65 6328 9896 FAX: +65 6224 2362 www.furukawa.com.sg

## **Europe:**

## Furukawa Electric Europe Ltd.

admin@furukawa.com.sg

3<sup>rd</sup> Floor, Newcombe House 43-45 Notting Hill Gate, London W11 3FE U.K. TEL: +44 20 7313 5320 FAX: +44 20 7313 5310 www.furukawa.co.uk sales@furukawa.co.uk

# **North & South America:**

**OFS Fitel, LLC** 

417 Dividend Drive Peachtree City, GA 30269, U.S.A TOLL FREE: + 1 866 452 9516 TEL: +1 678 783 1090 FAX: +1 678 783 1093 www.ofsoptics.com Splicers@ofsoptics.com



<sup>\*2:</sup> Averaging: 10 seconds, SNR=1, 25°C

<sup>\*3:</sup> Return loss 45 dB, Deviation ±0.5 dB, 25°C

<sup>\*4:</sup> Return loss: 45 dB, 25°C (1.5 dB down from the peak of Fresnel)

<sup>\*5:</sup> back light low, sweeping halted at 25°C

<sup>\*6: 10</sup> to +30°C, Power OFF

<sup>\*7: 10</sup> to +30°C (During Recharging battery, Power OFF)