FTBx-2150

OPTICAL LIGHT SOURCE

Exceptional selection of single- or multi-wavelength, multimode light-emitting diodes (LEDs) and singlemode distributed feedback (DFB) lasers, perfect for IL and ORL testing, as well as FTTx component verification.

SPEC SHEET

KEY FEATURES

- Single-, dual- or multi-wavelength LEDs or IL/ORL optimized DFB lasers
- Individual output port for DFB lasers
- Combines two sources on a single output for LED
- Continuous-wave or modulated output power
- Variable output power over a 5 dB range for singlemode fiber

RELATED PRODUCTS

Optical switch
FTBx-9150

Power meter
FTBx-1750

Variable attenuator
FTBx-3500

HIGH-PERFORMANCE OPTICAL LIGHT SOURCES

Advanced testing environments require a high-performance, stable light source to guarantee accurate and reliable test results. Designed for optimal stability, the modular FTBx-2150 offers this and more. Steady drive circuitry maximizes optical output power and maintains excellent stability, while precision optical components ensure low-loss, narrow-beam, truly efficient output coupling.

The FTBx-2150 Optical Light Source features variable output power over range of 5 dB for singlemode to simulate power losses with precision.

APPLICATIONS

- Insertion loss measurements
- Return loss measurements
- Spectral attenuation measurements in fibers
- FTTx component characterization
- Splicing test stations
- Stability measurements
- Polarization-dependent loss measurements

ENCIRCLED FLUX COMPLIANCE

Using the FTBx-2150-0012C-1 (50 µm output) with EXFO's 50 µm output mode conditioner will guarantee Encircled-Flux compliance as per IEC-61280-4-1 Ed.2.

Compatible part numbers:
FTBx-2150-0012C-1-EI-EUI-89 with MC-FC-50-N
FTBx-2150-0012C-1-EI-EUI-91 with MC-SC-50-N
FTBx-2150-0012C-1-EI-EUI-91 with MC-SC-LC-50-N
FTBx-2150-0012C-1-EI-EUI-89 with MC-FC-62-N
FTBx-2150-0012C-1-EI-EUI-91 with MC-SC-62-N
FTBx-2150-0012C-1-EI-EUI-91 with MC-SC-LC-62-N

ORL MEASUREMENTS

Since the FTBx-2150 singlemode light sources have been designed using DFB lasers which have narrow spectral width, ORL optimized modulation needs to be used when performing ORL measurements.

SPECIFICATIONS

TECHNICAL SPECIFICATIONS [a, b]

IL/ORL Optimized DFBs	
Model	**0023B-2**
Wavelength (nm)	1310 ± 10 1550 ± 10
Spectral width (nm)	<1
Output power (dBm)	≥0
Stability (dB) [c]	
15 minutes	±0.1
Attenuation range (dB)	5
Modulation	None, 270 Hz, 330 Hz, 1 kHz, 2 kHz, ORL optimized
LED Light Sources	
Model	**0012C-1**
Wavelength (nm)	850 ± 30 1300 –20/+50
Spectral width (nm)	
850 nm	30 to 60
1300 nm	100 to 140
Output power (dBm)	≥–26.0
Stability (dB) [c]	
15 minutes	±0.1
Modulation	None, 270 Hz, 330 Hz, 1 kHz, 2 kHz
Launching conditions (typical)	Controlled condition at the output connector

GENERAL SPECIFICATIONS

Size (H x W x D)		25 mm X 159 mm X 185 mm (1 in X 6 1/4 in X 6 7/8 in)
Temperature	operating	5 °C to 35 °C (41 °F to 95 °F)
	storage	–30 °C to 70 °C (–22 °F to 158 °F)
Relative humidity		0% to 80% non-condensing

LASER SAFETY

Class 1 Laser Product and
Class 1 LED Product

Notes

a. Specifications are valid at 23 °C ± 1 °C at maximum power after warm-up time.

b. Typical value.

c. Stability is expressed as ± half the difference between maximum and minimum values measured during the period.

INSTRUMENT DRIVERS

IVI Drivers, LabVIEW™ drivers and SCPI commands

REMOTE CONTROL (AUTOMATION)

With LTB-8: GPIB (IEEE-488.1, IEEE-488.2) Ethernet and RS-232.

SAFETY

Class 1 Laser Product and Class 1 LED Product

STANDARD ACCESSORIES

User guide and Certificate of Compliance.

ACCESSORIES

MC-FC-50-N	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 50/125 µm FC connector at both ends of mode conditioner
MC-FC-50-N-CERT	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 50/125 µm FC connector at both ends of mode conditioner Certificate of conformance, attached to ModCon Serial Number
MC-FC-50-N-TEST	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 50/125 µm FC connector at both ends of mode conditioner Certificate of conformance and test report, attached to ModCon Serial Number
MC-SC-50-N	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 50/125 µm SC connector at both ends of mode conditioner
MC-SC-50-N-CERT	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 50/125 µm SC connector at both ends of mode conditioner Certificate of conformance, attached to ModCon Serial Number
MC-SC-50-N-TEST	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 50/125 µm SC connector at both ends of mode conditioner Certificate of conformance and test report, attached to ModCon Serial Number
MC-SC-LC-50-N	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 50/125 µm SC connector at input of mode conditioner & LC connector at output of mode conditioner
MC-SC-LC-50-N-CERT	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 50/125 µm SC connector at input of mode conditioner & LC connector at output of mode conditioner Certificate of conformance, attached to ModCon Serial Number
MC-SC-LC-50-N-TEST	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 50/125 µm SC connector at input of mode conditioner & LC connector at output of mode conditioner Certificate of conformance and test report, attached to ModCon Serial Number
MC-FC-62-N	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 62.5/125 µm FC connector at both ends of mode conditioner
MC-FC-62-N-CERT	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 62.5/125 µm FC connector at both ends of mode conditioner Certificate of conformance, attached to ModCon Serial Number
MC-FC-62-N-TEST	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 62.5/125 µm FC connector at both ends of mode conditioner Certificate of conformance and test report, attached to ModCon Serial Number
MC-SC-62-N	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 62.5/125 µm SC connector at both ends of mode conditioner
MC-SC-62-N-CERT	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 62.5/125 µm SC connector at both ends of mode conditioner Certificate of conformance, attached to ModCon Serial Number
MC-SC-62-N-TEST	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 62.5/125 µm SC connector at both ends of mode conditioner Certificate of conformance and test report, attached to ModCon Serial Number
MC-SC-LC-62-N	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 62.5/125 µm SC connector at input of mode conditioner & LC connector at output of mode conditioner
MC-SC-LC-62-N-CERT	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 62.5/125 µm SC connector at input of mode conditioner & LC connector at output of mode conditioner Certificate of conformance, attached to ModCon Serial Number
MC-SC-LC-62-N-TEST	Condition output of FTBx/FTB-2150-0012C-1 to be EF compliant with fiber diameter of 62.5/125 µm SC connector at input of mode conditioner & LC connector at output of mode conditioner Certificate of conformance and test report, attached to ModCon Serial Number

ORDERING INFORMATION

FTBx-2150-XX-XX

Model

0012C-1 = Single output LED source, 850/1300 nm, 50/125 µm fiber type
0023B-2 = Dual output IL/ORL optimized DFB, 1310/1550 nm, 9/125 µm fiber type, one wavelength per output

Connector

EI-EUI-28 = UPC/DIN 47256
EI-EUI-89 = UPC/FC narrow key
EI-EUI-90 = UPC/ST
EI-EUI-91 = UPC/SC
EI-EUI-95 = UPC/E-2000
EI-EUI-98 = UPC/LC
EA-EUI-28 = APC/DIN 47256 [a]
EA-EUI-89 = APC/FC narrow key [a]
EA-EUI-91 = APC/SC [a]
EA-EUI-95 = APC/E-2000 [a]
EA-EUI-98 = APC/LC [a]

Example: FTBx-2150-0023B-2-EI-EUI-89

Note

a. Available for singlemode models only.

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