SPEC SHEET

FTBx-5235

OPTICAL SPECTRUM ANALYZER (OSA)



- Compact OSA for DWDM, CWDM, and DWDM over CWDM networks.

PART OF THE
EXFO|FTB ecosystem

EXFO Connect compatible

KEY FEATURES AND BENEFITS

- Compact, entry-level OSA for any type of WDM rollout
- Handheld OSA with the largest screen in the industry
- Portable and lightweight
- Ideal for cable operators
- Intuitive user interface
- Housed in the FTB-1v2 DC, FTB-1 Pro DC, FTB-2/FTB-2 Pro and FTB-4 Pro platforms
- Highly reliable (made by No.1 handheld OSA vendor worldwide)[a]

COMPATIBLE PLATFORMS



Platform
FTB-1v2/FTB-1 Pro
dual carrier



Platform
FTB-2/FTB-2 Pro



Platform
FTB-4 Pro

a. Frost & Sullivan, Fiber Optic Test Equipment Market study

NEW FTBx-5235: A SINGLE OSA FOR ALL WDM TECHNOLOGIES

The FTBx-5235 is a compact, entry-level optical spectrum analyzer that is ideal for a variety of field applications, including DWDM and CWDM network commissioning and troubleshooting. It includes all the typical OSA capabilities:

- Power and wavelength measurements
- WDM and drift mode
- OSNR testing according to IEC 61280-2-9 (interpolation method)
- Offline post-processing

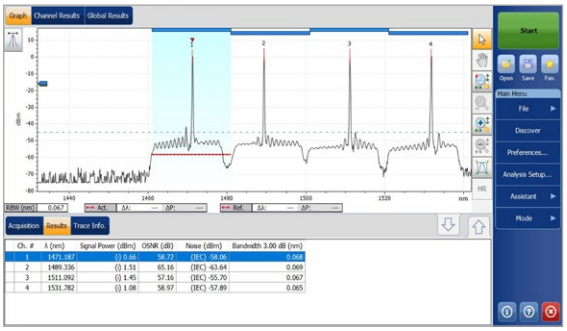
Users can quickly learn to operate the FTBx-5235 because it features an intuitive Windows interface. The FTBx-5235 can also handle a lot of power, up to 23 dBm per channel, ideal for modern cable operator networks.

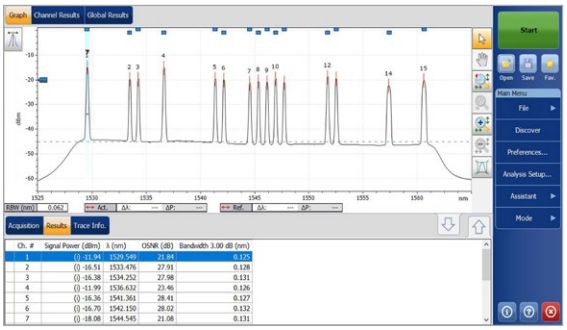
THE FTBx-5235: A CABLE OPERATOR'S BEST FRIEND

Cable operators are not just rolling out CWDM and DWDM, they are deploying hybrid networks, where DWDM wavelengths are overlaid onto CWDM wavelengths, as well as Remote PHY. EXFO's new and compact FTBx-5235 addresses all these applications with a single product, for maximum convenience.

CFP POWER MEASUREMENT

100 GigE deployments are now commonplace, triggering a transition from 10G and lower rate service (SFP/SFP+XFP) to 40G/100G using CFPs and QSFP28. This is in turn leading to multiwavelength client-side communications instead of single-wavelength transmissions. Since CFPs/QPSF28 have longer reaches (up to 10 km for LR4), meeting the loss budget is more challenging than ever before. Moreover, CFPs and QPSP28 greatly vary in quality, and sizable quantities of pluggables are simply defective. All these trends are calling for CFP/QPSF28 power measurements at the network element, where the client-side signals are converted to line-side signals. The FTBx-5235 is perfectly designed to assess the quality of pluggables in today's context of rapid network transformation.





The FTBx-5235 displays channel power, channel wavelength and OSNR. Above: example of CWDM network OSA display. Below: example of DWDM network OSA display.

SPECIFICATIONS [a]

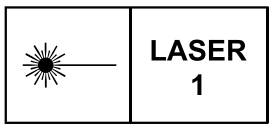
SPECTRAL MEASUREMENT	
Wavelength range (nm)	1250 to 1650
Wavelength uncertainty (nm) [b]	±0.06 [d] ±0.02 [c, d]
Reference	Internal [e]
Resolution bandwidth (FWHM) [f] (nm)	≤ 0.10 [d, g]
Wavelength repeatability 2σ (nm)	±0.005 [h]
Analysis modes	WDM and drift

POWER MEASUREMENT	
Dynamic range (dBm) (per channel) [b]	−65 [d, i] to 23 dB
Maximum total safe power (dBm)	29
Absolute power uncertainty (dB) [j]	±0.6
Power repeatability 2σ (dB) [h]	±0.1

OPTICAL MEASUREMENT	
Optical rejection ratio at 1550 nm (dB) at 0.2 nm (25 GHz) at 0.4 nm (50 GHz)	 31 (35 typical) 40 (45 typical)
Channel spacing	33 to 200 GHz CWDM
PDL (dB) [k]	±0.1 [d]
ORL (dB)	>40
Measurement time (s) [d, l] (includes scanning, analysis and display)	<1.2

GENERAL SPECIFICATIONS [d]		
Size (H x W x D)		51 mm x 159 mm x 185 mm (2 in x 6 1/4 in x 7 5/16 in)
Weight		1.2 kg (2.6 lb)
Temperature	Operating Storage	0 °C to 40 °C (32 °F to 104 °F) −40 °C to 50 °C (−40 °F to 122 °F)
Relative humidity		< 95% non-condensing
Connectors		EI (EXFO UPC universal interface) EA (EXFO APC universal interface)

LASER SAFETY



a. All specifications are for a temperature of 23 °C ± 2 °C with an FC/UPC connector unless otherwise specified, after warm-up.
b. From 1520 to 1610 nm.
c. After user calibration in the same test session within 10 nm from each calibration point.
d. Typical.
e. Integrated and wavelength-independent self-adjustment.
f. Full width at half maximum.
g. From 1300 to 1590 nm.
h. At 1550 nm, in drift mode. Single scan every 2 seconds, over 2 minutes. With DFB laser.
i. With averaging.
j. At 1550 nm, −10 dBm input power.
k. At 1550 nm, with narrow monochromatic light source.
l. 45 nm span, full resolution, 20 peaks. On FTB-1v2 DC.

ORDERING INFORMATION

FTBx-5235-XX

Connector adapter
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
EA-EUI-89 = APC/FC narrow key
EA-EUI-91 = APC/SC
EA-EUI-95 = APC/E-2000
EA-EUI-98 = APC/LC

Example: FTBx-5235-EI-EUI-89

MHz MEGA HERTZ

Provided by: Mega Hertz | 800-883-8839 | info@go2mhz.com | www.go2mhz.com

https://www.go2mhz.com/product/ftbx-5235-optical-spectrum-analyzer-2/

EXFO serves over 2000 customers in more than 100 countries.

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