



FX45 Series

Optical Power Meter (OPM)
Optical Light Source (OLS)
Optical Loss Test Set (OLTS)
Optical Return Loss Test Set (ORL)

Key Features

- · Singlemode and Multimode testing
- PON, Telecom, CATV and LAN/WAN applications
- Dual wavelength laser source and power meter
- · OPM, OLS, ORL, OLTS configurations
- High accuracy and wide dynamic range
- Save OPM measurements (> 1000 single results) with timestamp
- Transfer stored results to a PC via USB for report generation, printing and Fiberizer Cloud upload
- · Reference power level setup and recall
- Frequency detection for fiber identification
- Wave ID automatically detects incoming wavelength from compatible VeEX light source
- ORL and bidirectional loss testing with calibrated power meter coupled internally to fiber on light source port
- · Splash resistant keypad and chassis design
- High contrast display Visible outdoors and backlight for indoor or low light conditions
- · Alkaline or Rechargeable batteries with Auto power off
- Field interchangeable OPM adapters support multiple connector types and allow easy access for cleaning

Add value with Fiberizer Cloud www.fiberizer.com

Key Specifications

Optical Power Meter (OPM)

- Calibrated wavelengths: 850, 1300, 1310, 1490, 1550, 1625, 1650 nm
- Detector type: InGaAs
- Level measurement range:
 - -PM1 version: -65 to +10 dBm
 - -PM2 version: -50 to +25 dBm
- Accuracy: +0.2 dB or 5%
- Wave ID detection (compatible VeEX source): 850, 1300, 1310, 1490, 1550, 1625, & 1650 nm

Optical Light Source (OLS)

- Wavelengths: 1310/1490 nm or 1310/1550 nm
- Test Tone Generation: 270, 1 KHz, 2 KHz
- Stability: ± 0.03 dB for insertion loss measurements
- Laser Safety: Class 1

General

- Optional OLTS for bi-directional loss measurement (requires ORL option)
- Optional ORL meter for return loss measurements (requires APC Interface)
- Communication port: micro USB
- Connector or Adaptor types: FC/SC/ST/LC, Universal 1.25, Universal 2.5 mm
- CE compliance as per IEC 61326
- Battery operating time: approximately 80 hours (without backlight)

Fiberizer™

Fiberizer Desktop and Fiberizer Cloud boost efficiency and productivity for several optical test applications. OPM and OLTS test results can easily be transferred from the device to a PC running Fiberizer Desktop PC software. Full off-line analysis and report management in a controlled office environment is possible while Fiberizer Cloud provides superior centralized test data management and reporting capabilities on line allowing you to work from almost anywhere, at any time.

Optical Specifications

Parameter Singlemode Multimode Wavelength (nm) 1310/1490 or 1310/1550 ± 20 nm 850/1300 ± 20 nm Output power (dBm) > 5 Power Stability (dB) ≤ ± 0.03 (15 min), ≤ ± 0.1 (8 hrs) < ± 0.05 (15 min) Modulation CW, 270, 1 kHz, 2 kHz, WaveID Spectral width (nm) CW, 270, 1 kHz, 2 kHz, WaveID Optical Connector Types Fixed or Universal adptors (FC, SC, LC) Optical Interface UPC or APC (optional) Power Meter Calibration wavelengths (nm) 850/1300/1310/1490/1550/1625/1650 Wavelength Range (nm) 800-1700 Power ange (dBm) options -65 to +10 -1 standard (PM1), InGaAS (1 mm) -65 to +10 -1 stip (PM2), InGaAS (1 mm) -65 to +10 -1 stip (PM2), InGaAS (1 mm) -50 to +25 Power measurement accuracy, % (dB) ± 5 (± 0.22) ± 8 (± 0.33) Linearity, % (dB) ± 2, 5 (± 0.11) ± 4 (± 0.17) Display Resolution (dB) 0.01 0.1 Optical Return Loss (ORL) To +10 + 65 dB ORL Uncertainty (dB) ± 0.5 dB (-5 to -14 dB) ± 1 dB (-	Light Source			
Output power (dBm) > -5 Power Stability (dB) ≤ ± 0.03 (15 min), ≤ ± 0.1 (8 hrs) < ± 0.05 (15 min) Modulation CW, 270, 1 kHz, 2 kHz, WaveID Spectral width (nm) < 10 Optical Connector Types Fixed or Universal adaptors (FC, SC, LC) Optical Interface UPC or APC (optional) Power Meter Calibration wavelengths (nm) 850/1300/1310/1490/1550/1625/1650 Wavelength Range (nm) 800-1700 Power range (dBm) options -55 to +10 - Standard (PM1), InGaAS (1 mm) -65 to +12 - High (PM2), InGaAS (1 mm) -50 to +25 Power measurement accuracy, % (dB) ± 5 (± 0.22) ± 8 (± 0.33) Linearity, % (dB) ± 2, 5 (± 0.11) ± 4 (± 0.17) Display Resolution (dB) 0.01 Optical Adaptors (interchangeable) Optical Return Loss (ORL) The Company of the C	Parameter	Singlemode	Multimode	
Power Stability (dB) ≤ ± 0.03 (15 min), ≤ ± 0.1 (8 hrs) < ± 0.05 (15 min) Modulation CW, 270, 1 kHz, 2 kHz, WaveID Spectral width (nm) < 10	Wavelength (nm)	1310/1490 or 1310/1550 ± 20 nm	850/1300 ± 20 nm	
Modulation CW, 270, 1 kHz, 2 kHz, WaveID Spectral width (nm) < 10	Output power (dBm)	>-5		
Spectral width (nm) < 10	Power Stability (dB)	≤ ± 0.03 (15 min), ≤ ± 0.1 (8 hrs)	< ± 0.05 (15 min)	
Optical Connector Types Fixed or Universal adaptors (FC, SC, LC) Optical Interface UPC or APC (optional) Power Meter Calibration wavelengths (nm) 850/1300/1310/1490/1550/1625/1650 Wavelength Range (nm) 800-1700 Power range (dBm) options - 55 to +10 - High (PM2), InGaAS (1 mm) - 65 to +25 Power measurement accuracy, % (dB) ± 5 (± 0.22) ± 8 (± 0.33) Linearity, % (dB) ± 2, 5 (± 0.11) ± 4 (± 0.17) Display Resolution (dB) 0.01 Optical Adaptors (Interchangeable) \$T/\$SC/FC/LC, Universal 2.5/1.25 mm Optical Return Loss (ORL) Wavelength (nm) 1310/1550 or 1310/1490 ORL Range (APC) (dB) -14 to -65 dB ORL Uncertainty (dB) ± 0.5 dB (-50 to -14 dB), ± 1 dB (-65 to -50 dB) Resolution (dB) 0.1 Visual Fault Locator (VFL) Emitter Type Laser Wavelength (nm) 650 Laser Safety 60825-1:2001, Class 2 Output Power (mW) 1 Modulation CW, 1 Hz, 2 Hz	Modulation	CW, 270, 1 kHz, 2 kHz, WaveID		
Optical Interface UPC or APC (optional) Power Meter Calibration wavelengths (nm) 850/1300/1310/1490/1550/1625/1650 Wavelength Range (nm) 800-1700 Power range (dBm) options - Standard (PM1), InGaAS (1 mm) -65 to +10 -65 to +25 - High (PM2), InGaAS (1 mm) -50 to +25 Power measurement accuracy, % (dB) ± 5 (± 0.22) ± 8 (± 0.33) Linearity, % (dB) ± 2, 5 (± 0.11) ± 4 (± 0.17) Display Resolution (dB) 0.01 Optical Adaptors (Interchangeable) ST/SC/FC/LC, Universal 2.5/1.25 mm Optical Return Loss (ORL) 3130/1550 or 1310/1490 ORL Range (APC) (dB) -14 to -65 dB ORL Uncertainty (dB) ± 0.5 dB (-50 to -14 dB), ± 1 dB (-65 to -50 dB) Resolution (dB) 0.1 Visual Fault Locator (VFL) Laser Emitter Type Laser Wavelength (nm) 650 Laser Safety 60825-1:2001, Class 2 Output Power (mW) 1 Modulation CW, 1 Hz, 2 Hz	Spectral width (nm)	< 10		
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Calibration wavelengths (nm) 850/1300/1310/1490/1550/1625/1650 Wavelength Range (nm) 800-1700 Power range (dBm) options - Standard (PM1), InGaAS (1 mm) - High (PM2), InGaAS (1 mm) -65 to ±10 -50 to ±25 Power measurement accuracy, % (dB) ± 5 (± 0.22) ± 8 (± 0.33) Linearity, % (dB) ± 2, 5 (± 0.11) ± 4 (± 0.17) Display Resolution (dB) 0.01 Optical Adaptors (Interchangeable) ST/SC/FC/LC, Universal 2.5/1.25 mm Optical Return Loss (ORL) Wavelength (nm) 1310/1550 or 1310/1490 ORL Range (APC) (dB) -14 to -65 dB ORL Uncertainty (dB) ± 0.5 dB (-50 to -14 dB), ± 1 dB (-65 to -50 dB) Resolution (dB) 0.1 Visual Fault Locator (VFL) Laser Wavelength (nm) 650 Laser Safety 60825-1:2001, Class 2 Output Power (mW) 1 Modulation CW, 1 Hz, 2 Hz	Optical Interface	UPC or APC (optional)		
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Optical Adaptors (Interchangeable) ST/SC/FC/LC, Universal 2.5/1.25 mm Optical Return Loss (ORL) Wavelength (nm) 1310/1550 or 1310/1490 ORL Range (APC) (dB) -14 to -65 dB ORL Uncertainty (dB) ± 0.5 dB (-50 to -14 dB), ± 1 dB (-65 to -50 dB) Resolution (dB) 0.1 Visual Fault Locator (VFL) Laser Wavelength (nm) 650 Laser Safety 60825-1:2001, Class 2 Output Power (mW) 1 Modulation CW, 1 Hz, 2 Hz	Linearity, % (dB)	± 2, 5 (± 0.11)	± 4 (± 0.17)	
Optical Return Loss (ORL) Wavelength (nm) 1310/1550 or 1310/1490 ORL Range (APC) (dB) -14 to -65 dB ORL Uncertainty (dB) ± 0.5 dB (-50 to -14 dB), ± 1 dB (-65 to -50 dB) Resolution (dB) 0.1 Visual Fault Locator (VFL) Laser Wavelength (nm) 650 Laser Safety 60825-1:2001, Class 2 Output Power (mW) 1 Modulation CW, 1 Hz, 2 Hz	Display Resolution (dB)	0.01		
Wavelength (nm) 1310/1550 or 1310/1490 ORL Range (APC) (dB) -14 to -65 dB ORL Uncertainty (dB) ± 0.5 dB (-50 to -14 dB), ± 1 dB (-65 to -50 dB) Resolution (dB) 0.1 Visual Fault Locator (VFL) Emitter Type Laser Wavelength (nm) 650 Laser Safety 60825-1:2001, Class 2 Output Power (mW) 1 Modulation CW, 1 Hz, 2 Hz	Optical Adaptors (Interchangeable)	ST/SC/FC/LC, Universal 2.5/1.25 mm		
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Emitter TypeLaserWavelength (nm)650Laser Safety60825-1:2001, Class 2Output Power (mW)1ModulationCW, 1 Hz, 2 Hz	Resolution (dB)	0.1		
Wavelength (nm) 650 Laser Safety 60825-1:2001, Class 2 Output Power (mW) 1 Modulation CW, 1 Hz, 2 Hz	Visual Fault Locator (VFL)			
Laser Safety 60825-1:2001, Class 2 Output Power (mW) 1 Modulation CW, 1 Hz, 2 Hz	Emitter Type	Laser		
Output Power (mW) 1 Modulation CW, 1 Hz, 2 Hz	Wavelength (nm)	65	650	
Modulation CW, 1 Hz, 2 Hz	Laser Safety	60825-1:20	60825-1:2001, Class 2	
	Output Power (mW)	1	1	
Connector Type Universal 2.5 mm	Modulation	CW, 1 H	CW, 1 Hz, 2 Hz	
	Connector Type	Universal	Universal 2.5 mm	

General Specifications

Size: 129 x 61 x 38 mm (H x W x D) PC connection: Micro USB interface, data transfer via

Weight: < 310 g (< 0.7 lbs.) OPM configuration Fiberizer software

Construction: Rugged, Polycarbonate chassis, Storage: > 1000 single wavelength results

1 meter drop tested Display: High contrast, monochrome LCD with

1 meter drop tested Display: High cont

Standard Alkaline AA

Rechargeable NiMH,

Decklight

Operating Temp: -10 °C to +50 °C

2 AA cells in series, 2000 mAh Storage Temp: -20 °C to +70 °C

Power Supply: Micro USB interface, 5 VDC charger Humidity: 0% to 95%, non-condensing



Battery:

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