

FX40 Series

**Optical Power Meter (OPM)
Optical Light Source (OLS)**



Key Features

Platform

- Telecom, CATV and LAN/WAN applications
- Singlemode or Multimode configurations
- High contrast, backlit LCD - visible indoors and outdoors
- Handheld, lightweight rugged design
- Splash and dust resistant design
- Non-volatile memory for test result storage
- USB interface for tethering or test result transfer
- Alkaline battery or optional rechargeable NiMH battery with micro-USB, 5 Volt DC adaptor/charger
- Battery operating time: Approximately 100 hours (without backlight)

Software

- Windows PC software (LT-Sync) for transferring test results and generating basic pdf or Excel reports
- Fiberizer™ Desktop Plus and Fiberizer Cloud software for advanced analysis/post-processing and reporting
- Fiberizer Mobile for USB tethering (Android™ only)

Key Specifications

Optical Power Meter (OPM)

- Calibrated wavelengths: 850, 1300, 1310, 1490, 1550, 1625, 1650 nm including 650 nm (uncalibrated, read only)
- Power Level Range:
 - PM1 version: -65 to +7 dBm
 - PM2 version: -50 to +25 dBm
- Accuracy^{1,2}: Up to ± 0.2 dB or 5%
- Modulation and Wave ID detection: Not supported

Optical Light Source (OLS)

- Wavelengths: 1310/1490 nm or 1310/1550 nm
- Source type: FP/DFB laser or FP/FP laser
- Test Tone Generation: 270 Hz, 1 KHz, 2 KHz
- Stability: ± 0.03 dB for accurate loss measurement

General

- Test Results: 100 without time stamp
- Field interchangeable optical adaptors for OPM and OLS
- Adaptor types: FC/SC/ST/LC/E2000, Universal 1.25/2.5 mm
- Universal 2.5 mm sleeve allows for easy access/cleaning
- Communication port: Micro USB
- CE compliant



Optical Specifications

Light Source		
Parameter	Singlemode	Multimode
Wavelength (nm)	1310/1490 or 1310/1550 \pm 20 nm	850/1300 \pm 20 nm
Output power (dBm)	>-5	
Laser Safety	Class 1 per 60825-1:2014, edition 3	
Power Stability (dB)	\leq \pm 0.03 (15 min), \leq \pm 0.1 (8 hrs)	$<$ \pm 0.05 (15 min)
Modulation	CW, 270, 1 kHz, 2 kHz	
Spectral width (nm)	$<$ 5	$<$ 10
Optical Connector Types ⁴	Universal adaptors (FC, SC, ST, LC, E2000 and universal 1.25 and 2.5 mm)	
Optical Interface	UPC or APC (fixed connector only)	
Power Meter		
Calibration wavelengths (nm)	650/850/1300/1310/1490/1550/1625/1650	
Power range (dBm) options - Standard (PM1), InGaAs - High (PM2), InGaAs	-65 to +7 -50 to +25	
Power measurement accuracy, % (dB) ^{1,2}	\pm 5 (\pm 0.22) or \pm 10% (\pm 0.45)	\pm 8 (\pm 0.36) or \pm 13 (\pm 0.60)
Linearity, % (dB)	\pm 2.5 (\pm 0.11)	\pm 4 (\pm 0.17)
Display Resolution (dB)	0.01	
Optical Adaptors (Interchangeable) ⁴	Universal 2.5 mm standard; FC, SC, ST, LC, E2000 and Universal 1.25 mm available	
Visual Fault Locator (VFL)		
Emitter Type	Laser	
Wavelength (nm)	650	
Laser Safety	Class 2 per IEC 60825-1:2014, edition 3	
Output Power (mW)	1	
Modulation	CW, 1 Hz, 2 Hz	
Connector Type	Universal 2.5 mm sleeve	

Notes:

- PM1: SM \pm 5% at -50 to +7 dBm; \pm 10% -65 to -50 dBm; MM \pm 8% at -50 to +7, \pm 13% at -65 to -50 dBm. Applies only with OPM fitted with SC or FC adaptor.
- PM2: SM \pm 5% at -35 to +25 dBm; \pm 10% -50 to -35 dBm; MM \pm 8% at -35 to +25 dBm; \pm 13% -50 to -35 dBm. Applies only with OPM fitted with SC or FC adaptor.
- FX40 can be configured as an OPM + VFL or as an OLS + VFL. Refer to ordering guide.
- Conversion adaptor adds additional 0.3 dB insertion loss. Applies to converters FC-LC, FC-E2000 and FC-Universal 1.25 mm.

General Specifications

Size:	129 x 61 x 38 mm (H x W x D)	PC connection:	Micro USB interface, OPM remote control and data transfer via LT-Sync PC software
Weight:	$<$ 310 g ($<$ 0.7 lbs.) OPM configuration	Storage:	$>$ 100 results without timestamp
Construction:	Rugged, Polycarbonate chassis, 1 meter drop tested	Display:	$>$ Monochrome LCD with backlight
Battery:	Standard Alkaline AA Optional Rechargeable NiMH, 2 AA cells in series, 3100 mAh	Operating Temp:	-10 °C to +50 °C
Power Supply:	Micro USB interface, 5 VDC charger	Storage Temp:	-20 °C to +70 °C
		Humidity:	0% to 95%, non-condensing



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