

FPP-50

Multi-Functional PON Power Meter

FPP-50 series, the all-in-one instrument, are a new flagship of FibreOptica's PON Power Meter family. It is an updated version and specifically designed to meet the rapid growth of FTTx market with PON (Passive Optical Network) technologies. It is capable to measure all three signals (1310nm, 1490nm and 1550nm) that carry voice, data and video, so-called triple-play applications along a single fiber; it can detect and measure the upstream burst at 1310nm sent from an ONU while the ONU is in the idle mode. With the built-in individual optical power meter FPP-50 can be used for a normal optical power measurement and its VFL (650nm) for quick and efficient fault identification.

FPP-50 is an absolute ideal tool for PON installation/acceptance test to ensure that they meet required standards, and service activation and troubleshooting.

3 in 1

- **PON Power Meter**
- **Optical Power Meter**
- **Visual Fault Locator**



Key Features

- All-in-one, cost efficient palm size tester designed for field and lab testing
- Easy-to-use interface with LCD screen and backlight function
- Simply connect-and-display the results of all three wavelengths (1310/1490/1550nm) of PON signals
- Pass, Fail and Warning indicators for easy view of signal condition
- Detect and measure the upstream burst at 1310nm
- User definable threshold value (up to 10 sets)
- Storage PON test records up to 1000
- Data upload via mini USB cable
- Table stand – convenient for operating the unit on table, especially in lab environment
- VFL light source for quick and efficient visual inspection (FPP-50B only)
- CW optical power measurement is available with calibrated wavelengths of 850, 1300, 1310, 1490, 1550 and 1625nm
- User self-calibration function in software is used to calibrate the PON module or set the threshold value
- Factory Default function allows all the customers' setting back to the factory setting
- Power feeding and battery charging via mini USB
- Auto power shut off (10 minutes)
- Low battery warning.

Specifications

PON Measurement (FPP-50)

Calibrated Wavelength	1310nm	1490nm	1550nm
Measuring Range (dBm)	-40 ~ +10.0	-40 ~ +10	-40 ~ 20
Spectral Pass-band (nm)	1260 ~ 1360	1470 ~ 1505	1539 ~ 1570
Isolation of 1310nm band	--	>40dB	>40dB
Isolation of 1490nm band	>40dB	--	>40dB
Isolation of 1550nm band	>40dB	>40dB	--
Number of ports	2 (ONU and OLT)		
Connector Type	FC, SC or ST (Interchangeable)		
Detector Type	InGaAs		
Fiber Type	9/125μm		
Insertion loss	<1.5dB		
Accuracy	± 0.5dB		
Linearity	± 0.1dB		
Measurement Unit	dB, dBm, xW		
Resolution	0.01dB		
Threshold Value	10 sets (configured via PC-based software)		

Optical Power Meter (FPP-50A/FPP-50C)

Connatural uncertainty(dB)	±0.5
Linearity(dB)	±0.1
Measurement Range(dBm)	-70 ~ +6 (LO) or -50 ~ +26 (HI)
Measurement Unit	dB, dBm, xW
Resolution (dB)	0.01
Calibration Wavelength(nm)	850, 1300, 1310, 1490, 1550, 1625
Detector Type	InGaAs
Optical Connector	FC, SC or ST (Interchangeable)
Fiber Type	9/125um
Reference Value	Yes

Visual Fault Locator (FPP-50B/FPP-50C)

Output Power(mW)	0.5mw
Wavelength(nm)	650nm
Optical Connector	FC, SC or ST (Interchangeable)
Modulation Frequency	CW and 2Hz

General

Display	LCD 128 x 64
Auto Power Off	Yes (10 minutes)
Back-light	Yes
Operating Temperature	-10 ~ +60°C
Storage Temperature	-25 ~ +70°C
Relative Humidity	0% ~ 95% (non-condensing)
Power Supply	3 pcs AA 1.5V Battery Mini USB Power Feeding
Operating Voltage	DC 3.3 ~ 5.5V
Working Hours (PON)	> 90 hours on typical use without Backlight on
Working Hours (Power Meter)	>100 hrs on typical use without Backlight on
Working Hours (VFL)	>50hours on typical use without Backlight on
Dimension w/ rubber boot on	192 x 105 x 50(mm) without rubber boot
Net Weight	<425g without batteries and rubber boot

Note: Specifications subject to change without notice

Standard Package

- FPP-50 Main unit
- FC, SC or ST connector (Interchangeable)
- 3 x AA batteries
- Operating Manual
- Software CD
- USB Cable
- AC/USB Power Adapter
- Soft carrying case
- Rubber boot
- Table stand

Options

Part Number Descriptions

Connector-Set A connector set of FC, SC and ST

Hybrid Adapters

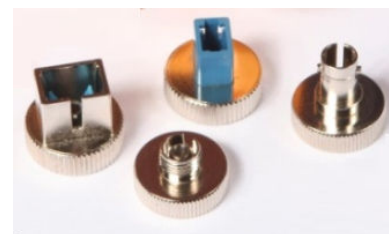
MFA-FCLC FC (Male) to LC (Female)

MFA-SCLC SC (Male) to LC (Female)

MFA-STLC ST (Male) to LC (Female)

Other types of connectors - upon request

Rechargeable Battery Set (Ni-MH or Li-ion)



Order Information

FPP-50X-YY-ZZ

- X – A (support OPM)
 – B (support VFL)
 – C (support both OPM and VFL)
 – None (PON measurement only)
- YY – FC (FC connector)
 SC (SC connector)
 ST (ST connector)
 SE (Set of FC, SC and ST)
- ZZ – LO (OPM -70 ~ +6dBm)
 HI (OPM -50 ~ +26dBm)

Related Products

FPP-40