TheFibers

CREATIVE FIBERS

User Manual

mPM-100B

mini Power Meter

INTRODUCE

mPM-100 (mini Power Meter) is a very small and lightweight optical power meter. mPM can be operated as a stand-alone power meter with LCD, battery, buttons and LED indicators. Also it has a micro USB 2.0 port to communicate with PC/Laptop and Android Smartphone. Also it is communicated with iPhone and Android phone by Bluetooth. Its universal 2.5mm adapter is used to accept FC, SC, ST, E2000 connectors for applications such as FTTH, PON and CATV network. The multiple pre-calibrated wavelengths can meet any testing requirement for the variety applications. mPM has a built-in rechargeable battery which can be easily charged by usual smartphone charger (micro USB 2.0 type).

AVAIABLE APPLICATIONS

▪ Fiber To The Home (FTTH), PON and CATV Network
▪ Fiber Optic Installation and Maintenance
▪ Fiber Optic Product Manufacturers and Installers
▪ Fiber Optic Service Activation & Troubleshooting

STANDARD PACKAGE

a. Power Meter (included Battery)
b. Smart USB Cable (Smartphone to mPM-100)
c. PC USB Cable (PC to mPM-100)
d. Necklace
e. Manual
f. Case

WARRANTY

mPM-100 you bought is passed our all inspection and then is shipped to the customers. TheFibers give you a warranty for one year from the buying date. During the warranty period, the returned product by freight prepaid from the customer, TheFibers will provide repair and replacement for any defective product without additional charge which is needed to repair or replacement.

However please careful that the following are expressly NOT COVERED under warranty:

▪ Any loss, damage by using un-approved Battery Charger
▪ In case the serial or warranty sticker is removed
▪ Failure to use products under abnormal operating conditions
▪ Any loss, damage by user fault
▪ Any damage by disassembly without permission

KEY FEATURES

• Very small and lightweight optical power meter
• Communicate with PC/Laptop as well as Smartphone (iPhone and Android) via micro USB 2.0 and Bluetooth included Smartphone Application Software and PC Software
• Calibrated multi wavelengths included 980nm and 1625nm
• Internal data storage upto 100 measurements (unlimited storage via Smartphone)
• Pass/Fail indication for in-field compliance
• Universal 1.25mm Adapter could be added optionally
• Built-in rechargeable Battery
• Usual Smartphone Charger (micro USB 2.0 type) could be used

HARDWARE SPECIFICATIONS

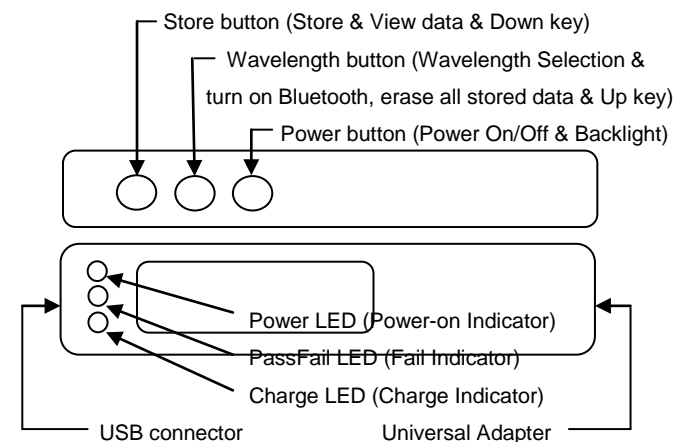| Model	mPM-100B
Calibrated Wavelength (nm)	
mPM-100B-7	850, 980, 1300, 1310, 1490, 1550, 1625
mPM-100B-5	850, 1300, 1310, 1490, 1550
Measurement Range	-60dBm ~ 10dBm
Accuracy	+/-0.5dB @-20dBm
Resolution	0.01dB
Display unit	dBm, nm
Adapter type	Universal 2.5mm Adapter[1] for SC,FC,ST,E2000
Display	LCD (with LED backlight), 3 LED indicators
Bluetooth	Bluetooth 4.0 BLE (4m) for Android phones and higher than iPhone 4S (IOS7.0)[4]
Battery	3.7V Rechargeable Lithium Ion Polymer Battery[2]
Battery Life	3 hours (continuous usage)
Data Storage	100 measurements[3]
External interface	micro USB 2.0
Dimension	102 (W) x 32 (H) x 24 (D) mm
Weight	70g

[1] Universal 1.25mm Adapter could be added optionally.
[2] Usual Smartphone Charger (micro USB 2.0 type) is option.
[3] Unlimited storage capacity via Smartphone.
[4] Bluetooth spec is for mPM-100B version only.

PRODUCT EXTERIOR OVERVIEW

Store button (Store & View data & Down key)
Wavelength button (Wavelength Selection & turn on Bluetooth, erase all stored data & Up key)
Power button (Power On/Off & Backlight)

Power LED (Power-on Indicator)
PassFail LED (Fail Indicator)
Charge LED (Charge Indicator)
USB connector   Universal Adapter

OPERATION

1) Stand-Alone

a. Power on / off

Press the Power button for 2 seconds or longer.

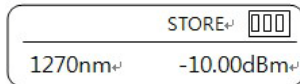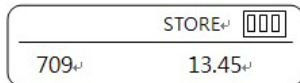The LCD and Power LED are turned on / off.

b. Change Wavelength

Press the Wavelength button, and then wavelength are changed sequentially.

c. Store the measured data

Press the Store button, and then the measured data is stored and the number of stored data is displayed on the LCD.

d. Check the stored data

Press the Store button for 2 seconds or longer, and then mPM-100 enters into the 'Stored data View Mode'. Date/Time and Wavelength/Power are displayed

by turns at 1 second intervals.   Press the Store button to go to the previous data and Wavelength button to the next data. To erase all stored data, press Wavelength button for 2 seconds or longer. To exit the 'Stored data View Mode', press the Store button for 2 seconds or longer.

2) Operation with Smartphone

Download and install the dedicated App to your Smartphone in advance.

a. By Bluetooth: Press Wavelength button for 2 seconds or longer and turn on Scanner switch for searching "mPM-100B" and click Skip button

b. By USB cable: Connect Smart USB cable between mPM-100 and Smartphone and power on. Smartphone will recognize mPM-100

automatically and will display a pop-up window. Press OK button to enter into the operating mode.

c. To change the wavelength, touch the wavelength indicator. And select the wavelength you want on the appeared "Select Wavelength" window.
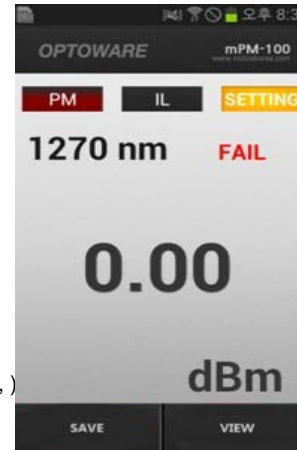
d. PM button (measure power)

e. IL button (To do Insertion Loss Reference SET, touch the value indicator and then measure I/L of your materials.

f. SETTING button (set Username,) Measure Area, Threshold, Unit of dBm/dB, etc.)

g. SAVE button (save the measured data)

h. VIEW button (To check the saved data, touch the VIEW button and then the "VIEW - SAVE LIST" window will appear. To view the detail information of the measured data, touch each data list in the "VIEW - SAVE LIST"

i. SHARE button (share the stored data)

j. DELETE button (delete the stored data)

k. SEND SMS (send the detailed data by SMS)

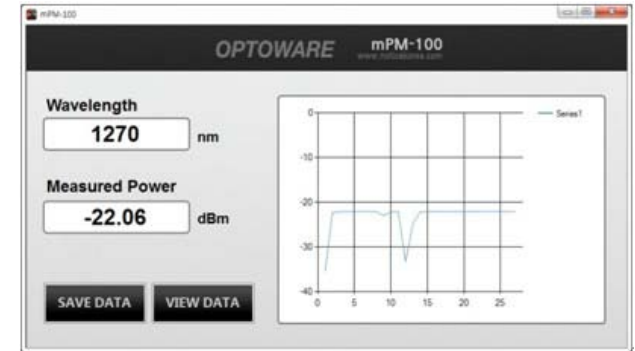l. SEND PC (send the detailed data to PC)
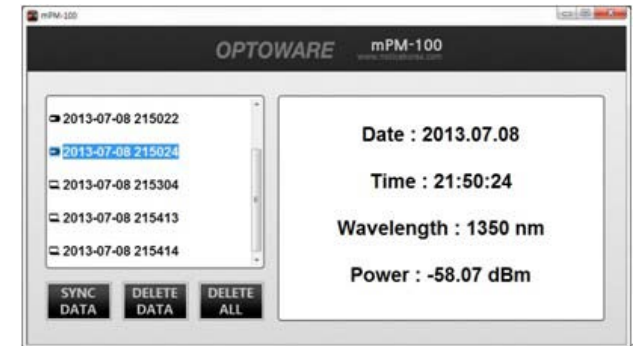
3) Operation with PC

Download the dedicated program to your PC.

Install DRIVER first and then Software before use.

a. Run the Software and connect PC USB cable between mPM-100 and PC, and power on mPM-100. To save the measure data, click 'SAVE DATA' button. To check the saved data, click 'VIEW DATA' button.

b. To view detail information of the measured data, click each data in the list.