Pro'sKit®

Optical Power Meter
MT-7603

English

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USER'S GUIDE

Optical Power Meter

English

WARNING

You are cautioned that changes or modifications not espressly approved in this document could void yout authority to operate this equipment.

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

NOTE

As the laser is harmful to the eyes, do not attempt to disassemble the cabinet.

CALSS I LASER PRODUCT

Precautions for Use

Use batteries

At the same time, can not use different style or different capacitance batteries.
And only charge the rechargeable batteries.

Avoiding condensation problems

As much as possible, avoid sudden temperature changes. Do not attempt to use the drive immediately after moving it from a cold to a warm location, to raising the room temperature suddenly, as condensation may form with in the drive. If the temperature changes suddenly while using the drive,

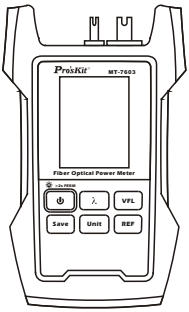
Stop using it and take out batteries for at least an hour.

Storage

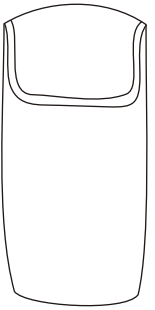
When long time no use, must take out the batteries to avoid destroying the device.

Contents

Standard



Host

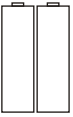


Bag

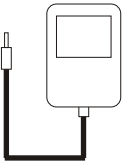
Manual

FC Fiber Adapter

Optional

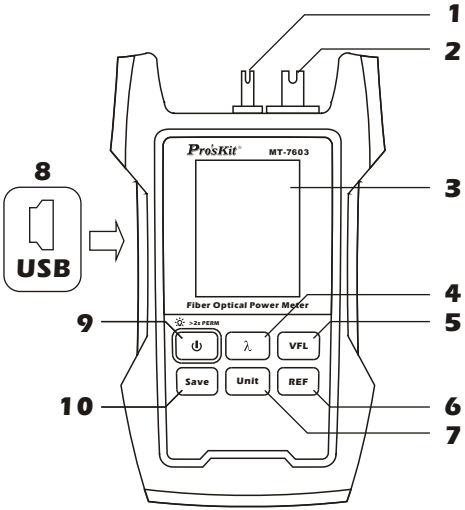


2x AA
LR6 1.5V or rechargeablebattery



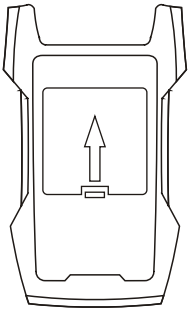
charger/
output：5V 500mA

Description

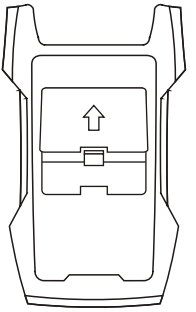


1-VFL connector
2-OPM connector
3-LCD
4-OPM wavelength shift key
5-VFL on/off key
6-Reference set/check key
7-Unit shift key
8-USB
9-Power key(Backlight key)
10-Data Save/Recall key

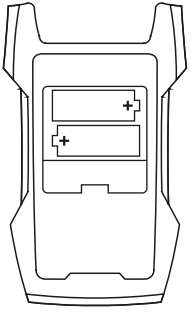
Set batteries



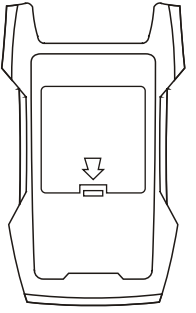
1.Press and push down



2.Open the lid

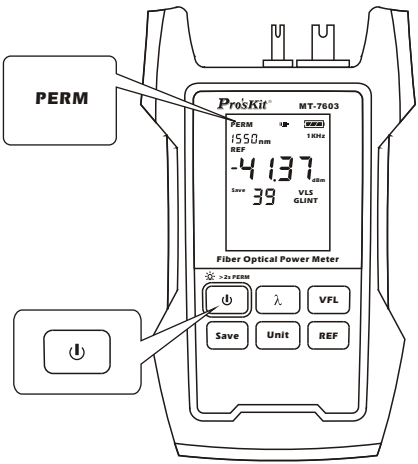


3.Place the batteries



4.Place the batteries

Power on/off, auto power off

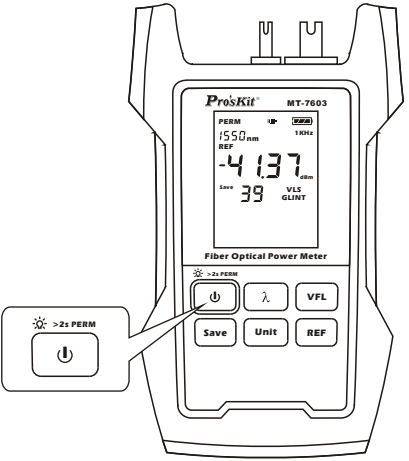


Press the Power key to turn on the device with auto power off. （After 10 minutes no key pressed, it will auto power off.）

Press Power key for 2 seconds when turn on the device, the auto power off will be cancelled, and the LCD will show "PERM".

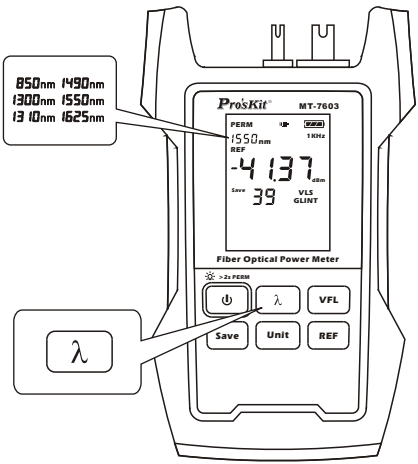
Also press it for 2 seconds to shut the device.

Backlight



When the device power on, press the power key to turn on or turn off the backlight.

Wavelength select

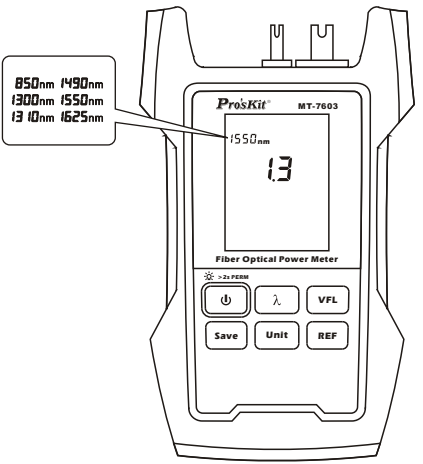


When testing, you must select the right wavelength.

Press the "λ" key for shifting the wavelength from:

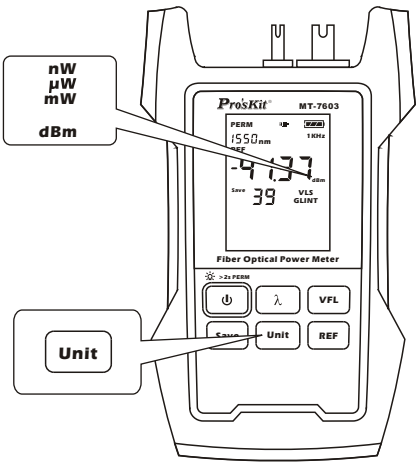
850nm,1300nm,1310nm,1490nm,1550nm,1625nm.

Wavelength calibrate



The device has wavelength calibration function. During the device is booting on, press " Save " and " REF " key to enter this function. Press " λ " key to select wavelength, and press " VFL " key or " REF " key to select the calibration value, which range is -3dB~+3dB. After setting, long press " Save " key to save and exit wavelength calibration function.

Unit select

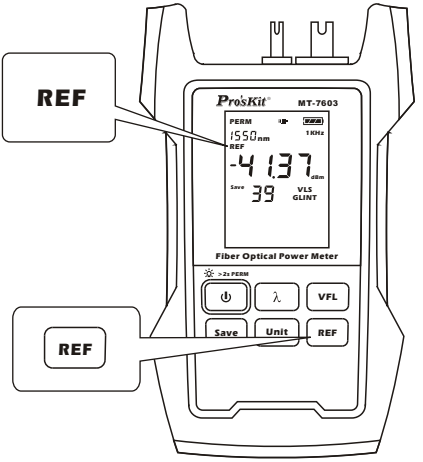


Press the " Unit " key for shifting the unit from: dBm, mW/uW/nW.

mW/uW/nW: 1mW=1000uW, 1uW=1000nW

dBm: (dBm)=10*log(mW)

Reference



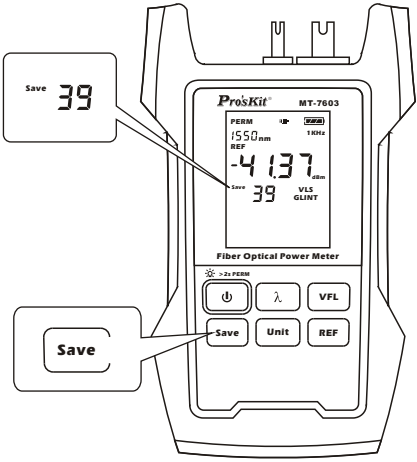
Press " REF " key to check the reference value you set last time.

And if keep pressing for 2 seconds, you can store the current dBm as a new reference value. Then it automatically shift to dB.

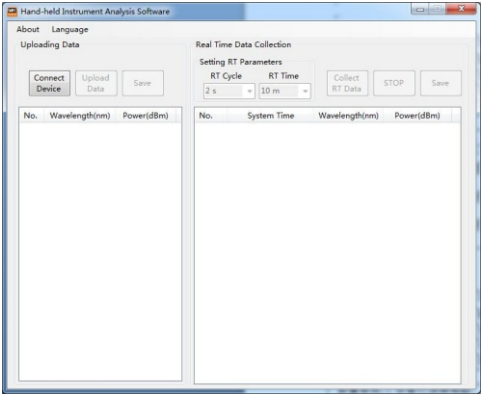
dB=dBm-REF

You can store the REF value for each wave.

Data Storage



When in testing interface, user can press " Save " key to the History interface. And press the " Save " key for 2 seconds to save current value.



Feature

1.The data collection can save as ".xls" file.

2.Collecting real-time data automatically(0.2 seconds to 10 minutes), and save as ".xls" file.

3.Saving real-time data automatically(every 10 minutes).

Basic Operation

A. Read the recorded data

1. Turn on the device, and connect with PC.

2. Click on "Connect Device" button to identify the device.

3. Click "Upload Data" button to read the recorded data.

4. Click "Save" button to save the read data.

Communication and data processing

B. Collect real-time data

1. Connect the device with PC, and turn it on.

2. Click "Connect Device" button to identify the device.

3. Click "Collect RT Data" button to collect real-time data. You should set parameters before collecting, including real-time cycle and acquisition time. More information in Table below.

4. Click "Pause" button, data collection pauses.

5. Click "Continue" button, data collection continues.

6. Click "Save" button to save the result.

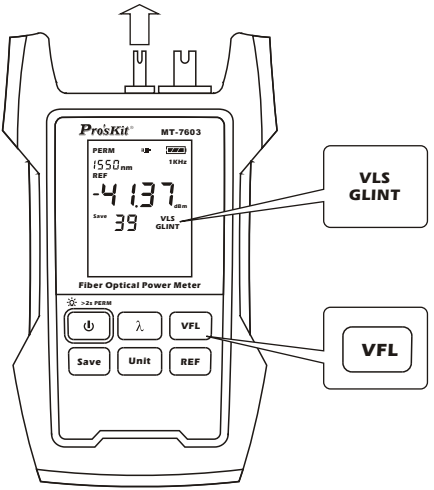
7. Click "Stop" button to end data collection.

8. Click "Clear" button to delete last recorded data.

Real-time cycle	Acquisition Time									
	10 m	30 m	1H	8H	24H	3D	7D	30D	120D	360D
0.2s	√	√	√	√						
2s	√	√		√	√					
15s			√		√	√	√			
60s			√		√		√	√		
3m					√		√	√	√	
10m					√		√	√		√

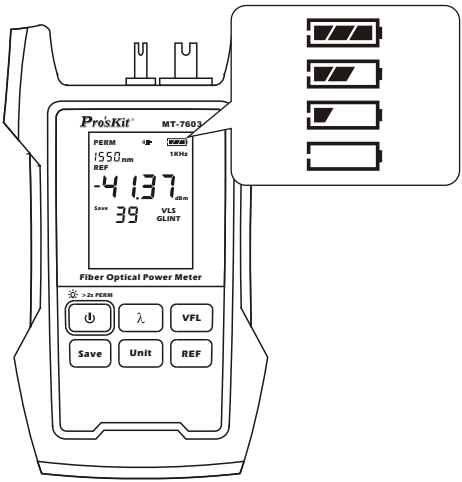
*Unit: second, minute, hour, day

Visual Fault Locator (optional)



The device can build in a optional VFL module, press the VFL key to shift the conditions: on-> glint->off

Battery energy detect



Remain80%---100%

Remain40%---80%

Remain20%---40%

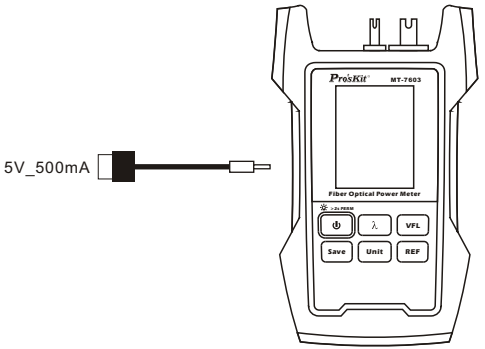
Remain less than20%

If the energy is too low, the beep will be on and device will auto power off.

Battery charge

First you must use the rechargeable batteries. When the energy is less than 20%, you should charge the batteries.

Long time low energy, the life of the batteries will be short. When charging, the battery indication on LCD will flash. After charging fully, the indication will stop flashing and show full. Don't charge for more than 24 hours. If charging while using the device, the time will be longer. The rechargeable batteries must be in device when you use the AC/DC adaptor for charging. And do not charge the non-rechargeable batteries, or the device will be destroyed and also lose the guarantee.



Detailed

	MT-7603
Measurement range	-70~+8dBm
Measurement wavelengths	850nm,1300nm,1310nm,1490nm,1550nm,1625nm
Resolution	0.01dB
Accuracy	±0.2dB
Linearity	±2.0%
Detector type	InGaAs
Optical Connector	FC & 2.5mm UPP
Display Resolution	+8~ -60dBm: 0.01dB ; -60~ -70dBm: 0.1dB
Power Display Units	dBm, mW, uW, nW,
Communication connector	USB
Data storage	39 groups
Modulation Detection	270Hz,1kHz, 2kHz
VFL	1mW
Reference Comparison Value	Yes
Auto power Off	10 min(can be cancelled)
Low Battery Warning	Low battery energy
Operation Voice Prompts	Yes
Body Protection	Yes
Back Light	Yes
Battery Life	>160 hours
Storage Temperature	-20℃~+70℃; <90%RH
Operation Temperature	-10℃~+60℃; <90%RH
Power Source	AA/LR6 1.5V X2 PCS (not include)
Size	170mm×97mm×38mm
Weight	330g
Optional Accessory	LC adaptor (5MT-7601-LC）; SC adaptor (5MT-7601-SC)
Individual packing	Color box