

## 7. Faults & Solutions

Faults	Reasons	Solutions
LCD display is dark.	Low voltage.	Replace battery or charge.
Big error for test result.	Sensor's surface is dirty. Low voltage	Clean sensor, Replace battery or charge.
There is nothing displayed when switch on this meter.	The battery is under voltage/other reasons.	Replace battery or charge

# XtendLan

## XL-FM133 Optical Power Meter

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**User Manual**

# Contents




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## 6. Maintenance

1. Please keep the sensor surface clean, do not use the dirty or nonstandard adapter tie-in, do not insert into the port which is poorly polished, otherwise, it will damage the sensor end.
2. Please operate carefully to replace adapter for different linkers. The spare adapter should be stored hermetically to avoid the dust.
3. Please cover the dustproof cover to keep the interface clean when the optical power meter is not used. Please do not put the sensor in the air, or something of test error will be caused because of the dust.
4. Please clean the sensor end regularly.
5. In order to make the service time of battery as long as possible. Please take out the battery if it is not used for long.

## 5. Operation

### 1. Turn on/turn off

You can realize turn-on function when pressing the  key for 3 seconds. This meter defaults auto off function is available when you turn on the meter. When this meter is on, long pressing  key can close 10 minutes Auto-off function. Long press  key again to open 10 minutes Auto-off function.

Press  button shortly, you can turn off this meter.

### 2. dBm key

Press this key can show absolute optical power measurement value and realize the unit conversion between log power and linear power.

### 3. $\lambda$ key: wave length choice key

You can choose one kind of six wave length, namely 850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm, by pressing  $\lambda$  key and the wave length which is chosen will be displayed on LCD screen. The default wavelength is 1310nm; others are 1310nm, 1490nm, 1550nm, 1625nm, 850nm, 1300nm.

### 4. REF key

Do the relative power value. Press “dbm” key to back to the absolute optical power test.

### 5. key: open/off backlight

## 1. Summary

XL-FM133 Optical Power Meter, a new generation of high-performance optical network test meter, with the characteristics of excellent performance and fast filed-test, has adopted the latest laser exploration and processing technology. It is an integrated optical power meter aimed at optical network operation, maintenance, equipment research and development.

It can be used to test optical power within the range of 800~1700nm wave length, with the unit as nW,  $\mu$ W, mW, dB, dBm. Its display resolution level and test accuracy are high. There are 850nm, 1300nm, 1310nm, 1490nm, 1550nm, 1625nm, six kinds of wavelength calibration points. It can be used for linearity and non-linearity test and display both direct and relative test of optical power.

The meter is small, light and easy to carry with large LCD screen. It can be widely used in the test of LAN, WAN, metropolitan network, CATV net or long-distance fiber net and other situations. It can be used to test fiber loss accurately, to check the fiber continuity and to help to evaluate the transmission quality of fiber chain with the laser source.

## 2. Functions

- 2.1 Multi-wavelength precise measurement
- 2.2 Absolute power measurement of dBm or  $\mu W$
- 2.3 Relative power measurement of dB
- 2.4 Auto off function
- 2.5 Low voltage indication
- 2.6 Adapter: FC
- 2.7 Handheld, large LCD backlight display, easy-to-use

## 3. Specifications

- 3.1 Wavelength range (nm): 800~1700
- 3.2 Detector type: InGaAs
- 3.3 Measurement range (dBm): -70~+10
- 3.4 Uncertainty:  $\pm 5\%$
- 3.5 Resolution: Linearity display: 0.1%  
Logarithm display 0.01 dBm
- 3.6 Auto off duration (min): 10
- 3.7 Battery: 2 pcs dry AA batteries
- 3.8 Battery-hold duration (h): no less than 70 (according to the battery volume)
- 3.9 Operating temperature ( $^{\circ}\text{C}$ ): -10~+50
- 3.10 Storage temperature ( $^{\circ}\text{C}$ ): -30~+60
- 3.11 Weight (g): 210

3.12 Dimensions (L\*W\*H, mm): 160×76×28

## 4. Layout

