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**FIBER•TRONIX**

**Part Number: FT-OPT-4A-AK  
New-Type Power Meter**

**Manual**

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Thank you for choosing our products, we always do our best for your satisfactions.

## Content

1. Overview.....	2
2. Specifications.....	2
3. Standard Packages.....	3
4. Function .....	3
5. Operation and Notes.....	4
6. Maintenance.....	5
7. Troubleshooting.....	5
8. Notice.....	5
9. Warranty and Service.....	5

# 1. Overview

The new-type optical power meter is the latest self-developed multi-functional power meter designed for the installation, construction and maintenance of optical fiber network.

It features compact size, smooth appearance, user friendly design, optional backlight, auto shut off function, wide measurement range, accurate test, self-calibrating function and universal connector. The stability and reliability of this power meter are greatly improved with the large square ( $\phi 1.0\text{mm}$ ) detector.

## Feature

- Self-calibrating function
- Brand new REF function
- More than 140 hours battery life
- Optional backlight
- Optional auto shut down function
- Universal connector

# 2. Specifications

Type	A	C
Wavelength Range (nm)	800~1700	
Detector	InGaAs	
Detector Square	$\phi 1.0\text{mm}$	
Measurement Range (dBm)	-70~+10	-50~+30
Uncertainty	$\pm 5\%$	
Calibrated Wavelength (nm)	850、1300、1310、1490、1550、1625	
Display Resolution	0.01dBm	
Operating Temperature (°C)	-10~+60	
Storage Temperature (°C)	-25~+70	
Auto-off time (min)	10	
Battery Life (h)	140	
Dimension (mm)	185×84×48	
Power Supply	AA 1.5V batteries(3pcs),9V AC Adapter	
Weight (g)	200	

# 3. Standard Accessories

- 1. Main unit.....1
- 2. Operation Manual..... 1
- 3. Cleaning Swabs... ..1
- 4. Power Supply Adapter..... 1

# 4. Function

## 4.1 Function Instructions



- (1) “ Power Supply Switch: Press it to turn on or off the unit  
Auto Shut Off Selection: Press this key shortly to turn on or off the auto shut off function. Under this situation, the unit will automatically shut off after ten minutes idle time.
- (2) “ $\lambda$ ” Wavelength Selection: Press this key to switch the wavelength and display it on the top left of the LCD screen.
- (3) “dBm/W”  
Press this key to switch between the absolute measurement and relative

measurement of the optical power.

(4) "REF"


Press this key for a few seconds to store the current power value as the reference value which will be displayed on the top left of the LCD screen.

Press this key shortly to enter the relative measurement mode and the reference value will be displayed on the top left of the LCD screen. It will compare the current power with the reference power and show the relative power value in dB.

## Operation and Notes

### 1 Turn on/off the unit

Press  to turn it on, then the LCD screen display the following information.:

- (1) When using the AC adapter, the AC adapter's mark will be showed on the central left screen and lighted.
- (2) The battery mark is showed on the left bottom screen and will be lighted when using the battery. The capacity in the mark will decrease with battery power. Please replace the battery when the mark is empty.
- (3) The "auto-off" mark is showed on the bottom screen. The auto off function is lighted and valid after the unit turned on. The unit will automatically shut off after ten minutes idle time..
- (4) The power value is displayed in the middle of the screen, the unit is dBm,W,dB.
- (5) The reference power value is displayed on the top right screen, the unit is dBm.
- (6) The working wavelength is displayed on the top left screen., the unit is nm  
Press\*  gain to turn off the power meter.
- (7) User self-calibrating function  
Setting Process

- A. After opening the battery compartment and taking out the batteries, you will find a little red switch with a white button on it and push the white button to "on" position. Then please put the batteries and compartment back and open the unit to re-calibrate it.
- B. Press the "REF" key once to increase the current power by 0.05dB which will be displayed on the LCD screen.
- C. Press the "dBm/w" key once to decrease the current power by 0.05dB which will be displayed on the LCD screen.
- D. Press "λ" key to switch the working wavelength.
- E. Press "ON/OFF" key shortly to store the self-calibrating value.
- F. Press "ON/OFF" key for 2 seconds to turn off the unit.
- G. Take out the battery and push that white button to "OFF" position to exit the self-calibrating mode.

## 6. Maintenance

1. Clean the optical connector and adapter regularly.
2. Use the regulated optical connector for the test.
3. Shut off the power and cover the dust-proof cap after your test.
4. Select the power supply within the required voltage range when using AC adapter.
5. Please take out the battery when it is not in operation for a period of time.

## 7. Troubleshooting

Problems	Possible reasons	Solution
Faint display on the LCD screen	The battery power is low	Charge or replace the battery.
Fail to turn the unit on	Low battery power or the battery is put wrongly	1. Replace the battery.
		2. Re-put the battery
Optical power is not stable after the unit turned off.		Use it after 15 minutes warm-up.

## 8. Notice

- 8.1 Ensure the connector is clean when test.
- 8.2 Do not plug in the power supply when install the battery.
- 8.3 Do not look into the laser beam when test.
- 8.4 Please charge the battery before using and do not charge it in the unit.
- 8.5 Please cover the dust-proof cap when it is not in operation.

## 9. Warranty and service

**Caution: Repair it in the field is Forbidden.  
18 months warranty for Our Power Meter.**

- 9.1 We warrant that the power meter will be free from defects in material and workmanship for 18 months. Should the device fail at any time during this warranty period, we will, at its sole discretion, replace, and repair or refund the purchase price of the product. The worth of the repair or replace will not be higher than purchasing price of this unit.
- 9.2 If the problems occurred can not be solved by the trouble shooting methods, please contact us or the local distributor directly.
- 9.3 This warranty is limited to defects in our production, workmanship or material; we will repair or replace the unit free of charge. This warranty only applies to the unit under normal operation without any damage or wrong operation.  
The warranty does not include the following problems:  
Repair the unit by yourself without our official authorization.  
Wrong operation or accident.
- 9.4 As to the freight cost caused by repair or replaces the unit under warranty; it will be shared by the customer and our company.

Warranty Registration Card

A warranty registration card is included with the original shipment of equipment. Please take a few moments to fill out the card and mail or fax it to us to ensure proper initiation of your warranty term and our maintenance, calibration or tracking of this unit.

*An important message from our company*

***We guarantee that any information you supply will remain confidential.***

***By returning this card, you will automatically be notified about updates, modifications, and recalibration.***

Warranty Registration Card

Serial Number: \_\_\_\_\_  
Model Number: \_\_\_\_\_  
Date of Purchase: \_\_\_\_\_  
Company Name: \_\_\_\_\_  
Company Address: \_\_\_\_\_  
TEL: \_\_\_\_\_ FAX: \_\_\_\_\_  
E-mail: \_\_\_\_\_

**Note: Please fax this note within one month from the date of receiving units.**

**YOUR OPINION**

Do you have any comments on the quality of this product or the service from us?

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