JONARD TOOLS®

MADE FOR LIFE

MINI OPTICAL
POWER METER

TABLE OF CONTENTS

DISPLAY AND PORT DESCRIPTIONS

① **OPM Port:** For power meter testing
② **VFL Port:** For visual port locating
③ **LED Light:** Flashlight
④ **Dustcover:** Protects the optical port when not testing
⑤ **Display Screen:** Displays test results and other information
⑥ **Indicators:** Cable tracking LEDs
⑦ **Power Key:** Turn the device ON/OFF. Change automatic shutdown function
⑧ **☀/VFL:** Turn on/off backlight, turn ON/OFF VFL
⑨ **RJ45/dB:** Turn on/off RJ45 sequence, switch absolute power display
⑩ **RJ45 Network Port:** RJ45 sequence/tracking test
⑪ **PRESS Button:** Press to take out the RJ45 sequence remote tester
⑫ **Remote Tester:** RJ45 cable sequence test
⑬ **λ:** Switch the test wavelength of the power meter
⑭ **LED Key:** Turn the flashlifht ON/OFF
⑮ **REF Key:** Set the current power as the reference power

PRODUCT DESCRIPTION

The Jonard Tools Mini Optical Power Meter is perfect for measuring both the absolute optical power and relative power loss in fiber optic cables. It also features a built-in visual fault locator, network cable tester and remote.

The Mini Optical Power Meter measures a wide variety of wavelengths from 800-1650 nm, with a mere 0.01 dB resolution and has 10 preset calibrated wavelengths with high precision to determine absolute or relative power.

The LED screen is backlit for viewing in low light locations and a 10 minute auto-off helps preserve battery life.

Built-in 2 mW visual fault locator (VFL) identifies faults in fiber cable in a pinch.

Tests RJ45 connected network cables using built-in remote.

The Mini Optical Power Meter also comes with FC and LC adapters so that fiber connectors can be directly connected to the tool. The FC/SC adapters are for APC/PC/UPC connectors and the LC adapter is for PC/UPC connectors only.

OPERATING INSTRUCTIONS

POWER ON/OFF AND AUTOMATIC SHUTDOWN

After pressing ⏻ briefly, the meter will turn on and start the automatic shutdown function. The default automatic shutdown time is 10 minutes. If you want to cancel the function, press and hold the power button for two seconds, and the ⏻ icon disappears, the automatic shutdown will be cancelled.

SET REFERENCE OPTICAL POWER

After powering on, enter the interface of OPM, press REF to set the current power as the reference power, switch the relative optical power test (insertion loss test) and absolute power test. In the relative power test mode, the insertion loss (dB) and the reference value is displayed simultaneously. Short press the dB key to switch linear power and absolute power display.

The units of linear power, absolute power and relative power are W, dBm and dB respectively.

Pabs.p = 10lglin.p/lmW; Prel.p = Pabs.p - Pref.p

OPERATING INSTRUCTIONS (CON'T)

SWITCH THE WAVELENGTH

In the interface of OPM, short press the λ key to switch the measurement wavelength. Ten different wavelengths can be selected: 1310nm, 1550nm, 1577nm, 1490nm, 1625nm, 1650nm, 850nm, 1270nm, 1300nm and 980nm.

In order to ensure the accuracy of the test, the selected wavelength must be consistent with the measured optical signal.

RJ45 CABLE SEQUENCE AND ANALOG CABLE TRACKING

In the test interface of OPM, long press the dB key to display the word "RJ45" on the screen. At this time, enter the RJ45 cable sequence test, connect one end of the network cable to the RJ45 port in the bottom, and connect the other end to the remote tester.

Short press the dB key to exit. Long press the dB key again, "📶" displays on the upper left corner of the screen, enter the cable tracking mode, and short press the dB key to exit.

VFL AND LED FLASHLIGHT

After powering on, long press the ☀/VFL key to turn on the VFL, short press to flash and turn off. Press the power button to control the flashlight to turn on and off.

CALIBRATION INSTRUCTIONS

At the same time, press the LED+ REF keys to clear the user's calibration value, and the screen will full display "–" to restore default value; press the LED+VFL to enter the calibration mode, and "Cal" will be displayed in the upper left corner of the screen.

The following operations are only valid in the calibration mode.

KEY	FUNCTION
☀/VFL	Increase 0.05dB
dB	Reduce 0.05dB
⏻	SAVE
λ	Switch Wavelength

COMMON TROUBLESHOOTING SOLUTIONS

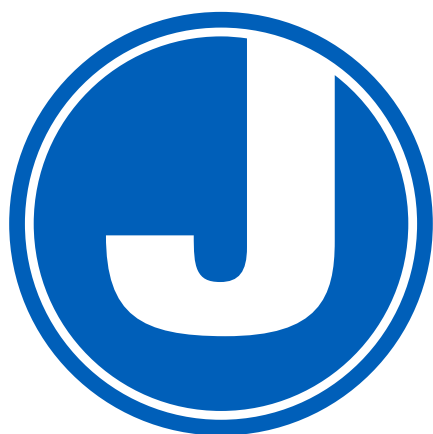| PROBLEM	POSSIBLE REASONS	SOLUTION
LCD display is weak	Insufficient power supply	Replace battery
Bootup cannot be displayed	Insufficient power supply or other	Reboot or replace batteries
Abnormal optical power values	Port damaged or dirty	Reconnect the connector and clean sensor

STANDARD PRODUCT CONFIGURATIONS

Micro Optical Power Meter
Instruction Manual
(2) AAA Batteries (required for operation)
2.50 mm Universal Adapter
1.25 mm LC Adapter

PRODUCT SPECIFICATIONS

OPTICAL POWER METER		
Wavelength Range	800-1700nm	
Connector	Universal 2.50 mm/1.25 mm	
Detector Type	InGaAs	
Power Test Range	-70~+6dBm	-50~+26dBm
Uncertainty	± 5%	
Standard Wavelength	850/980/1270/1300/1310/1490/1550/1577/1625/1650nm	
Display Resolution	Linear Display: 0.1%; Logarithmic Display: 0.01dBm	
Recognizable Frequency	270Hz, 330Hz,1kHz, 2kHz	
VFL (OPTIONAL)		
Wavelength	650nm ± 30nm	
Output Power	2mw	
Mode	CW/1Hz/2Hz	
Connector	Universal 2.50 mm/1.25 mm	
RJ45 CABLE SEQUENCE (STANDARD); CABLE TRACKING (OPTIONAL)		
Test Distance	300m	
OTHERS		
Power Supply	2 AAA Batteries	
Battery Duration	≥120h (OPM)	
Automatic Shutdown Time	10 Minutes	
Working Temperature	-10℃~+50℃	
Storage Temperature	-40℃~+70℃	
Relative Humidity	0~95% No Condensation	
Dimension	110mm x 68mm x 27mm	
Weight	130g	

MADE FOR LIFE