

MPO Tester mini (12Fiber)

Specification & Operating Manual

2025 Ver B

1

Leverage Technology Inc.

3F-5, No. 30 Taiyuan Street, Chupei City, Hsinchu County 302, Taiwan

TEL: +886-3-5525268 FAX: +886-3-5525388

<http://www.leverage.com.tw>

E-mail: sales@leverage.com.tw

Copyright 2014 © ,Leverage Technology Inc. reserves the right to modify specifications without prior notice

Page of 8
Ver B

1. Description:

The MPO Tester Mini is a highly useful tool designed for detecting defects in MPO arrayed fiber cables or MPO connectors. It emits a 650 nm visible red laser light through fiber optic cables. If there are breaks or defects in the fiber, the light will refract, creating a bright glow around the faulty area.

The LD output signal can switch all 12 fibers to Continuous Wave mode or other modes, producing different visual effects.



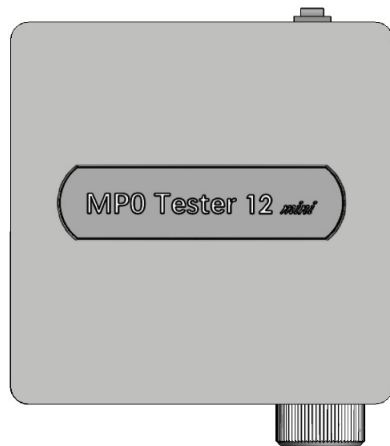
2. Features:

- Easily detect fiber faults using a 650 nm visible red laser.
- Range: Up to 1 km for SMF or MMF fiber.
- Supports additional testing with a 12F MPO connector.
- Highly efficient power circuit ensures stable laser output.
- Operates in Continuous Wave Mode, Pulse Mode, Scan Circular Mode, or Manual Mode.
- Powered via an external USB-C port for direct connection or charging the internal battery, as well as supporting an optional Graphical User Interface (GUI) Control Mode.
- ※ When operating the MPO Tester Mini via an external USB-C connection, all other modes will be disabled.

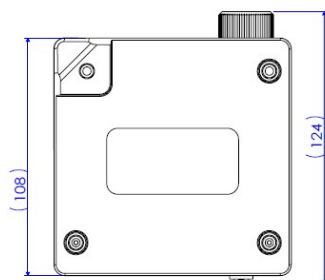
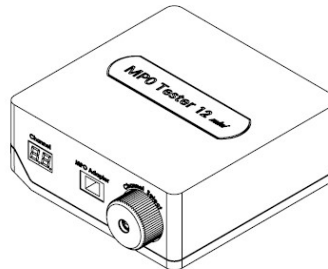
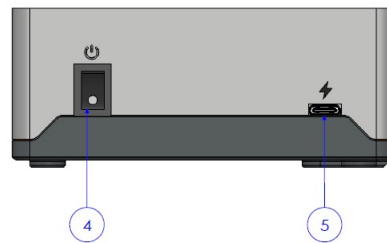
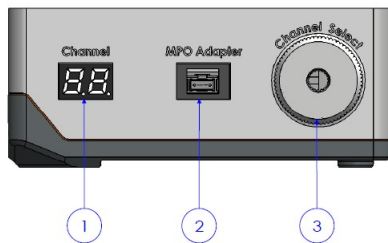
3. Specification

Laser Class	Class 2
Wavelength	650 nm \pm 10 nm
Output Power	> 0.4 mW into 9 μ m fiber
Emitting Range	Visibility up to 1 km
Operating Temp.	0°C ~ 50°C
Storage Temp.	0°C ~ 70°C
Dimension	124 x 108 x 45 mm
Power Supply	USB-C 5V / 2A In

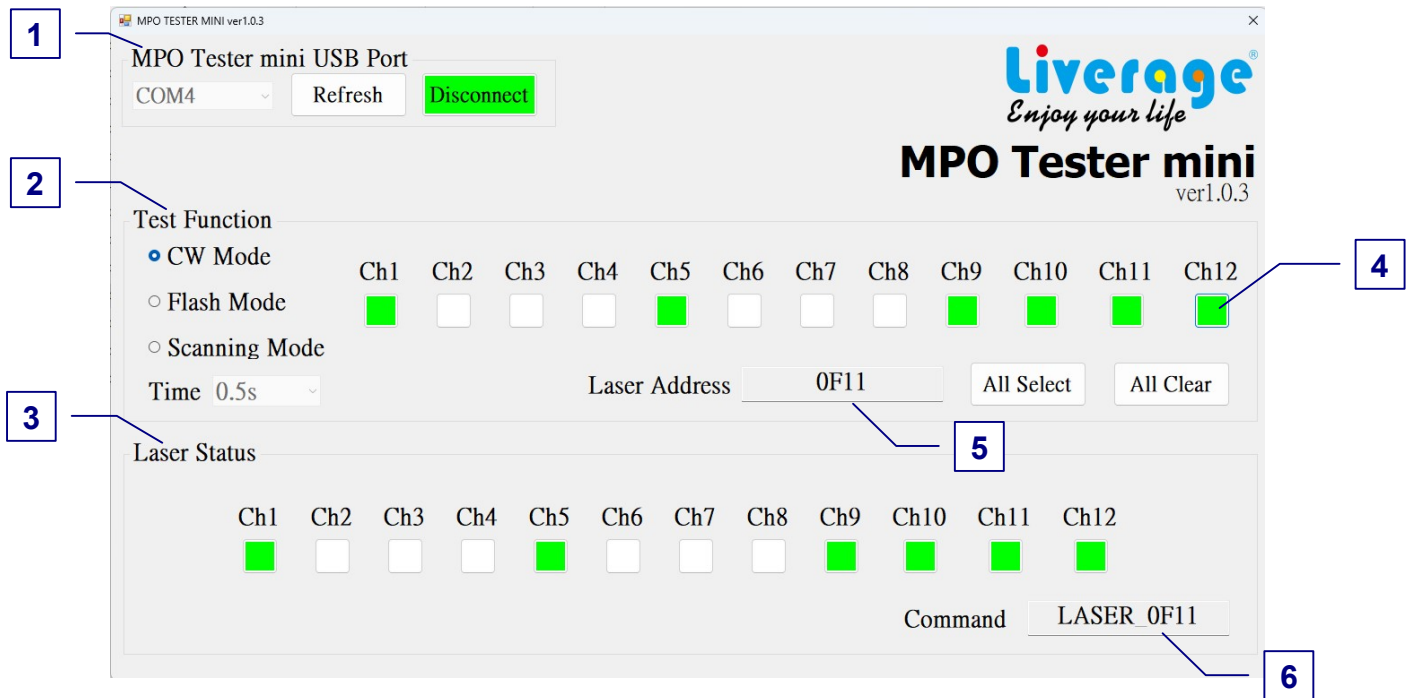
4. Dimensions (Unit: mm)



- ① Channel display
- ② LD Output
- ③ Channel & Mode Select (knob with button)
- ④ Power ON/OFF
- ⑤ USB-C



5. GUI & Command Lits



1. **COM PORT:** Connect to the corresponding COM port via USB.
2. **Test Function:** Configure the laser mode.
3. **Laser Status:** Display real-time laser emission status.
4. **Laser ON/OFF Button:** Click the ON/OFF button to control the laser for each individual channel.
5. **Laser Address:** Address of the current laser status for each selected channel.
6. **Command:** Command to display the laser control status.

Item	Command	Remark	Note
Write MPO-12 Laser On / Off	LASER_AAAA	AAAA : 0000~0FFF (HEX) bit 0 = CH1 Laser bit 1 = CH2 Laser bit 2 = CH3 Laser bit 3 = CH4 Laser bit 4 = CH5 Laser bit 5 = CH6 Laser bit 6 = CH7 Laser bit 7 = CH8 Laser bit 8 = CH9 Laser bit 9 = CH10 Laser bit10 = CH11 Laser bit11 = CH12 Laser bit = 0 (Laser Off), bit = 1 (Laser On) Respond >DONE	
Read MPO-12 Laser On / Off	?LASER	Respond >0000 ~ >0FFF bit 0 = CH1 Laser bit 1 = CH2 Laser bit 2 = CH3 Laser bit 3 = CH4 Laser bit 4 = CH5 Laser bit 5 = CH6 Laser bit 6 = CH7 Laser bit 7 = CH8 Laser bit 8 = CH9 Laser bit 9 = CH10 Laser bit10 = CH11 Laser bit11 = CH12 Laser bit = 0 (Laser Off), bit = 1 (Laser On)	

6. Operating Manual

1. Connect the MPO Tester mini to a USB port to charge the internal battery.
2. Attach the MPO fibers (DUT – Device Under Test) to the MPO Tester mini Adapter.
3. Turn on the MPO Tester mini using the power switch.
4. Press the Mode button to cycle through the modes in the following order:
Continuous Wave Mode → Pulse Mode → Scan Circular Mode → Manual Mode.
5. Check if all MPO fibers display red dots—this indicates that the MPO fibers are functioning properly.
6. When not in use, turn off the MPO Tester mini using the power switch, disconnect the DUT from the MPO Adapter, unplug the USB, and properly store the MPO Tester mini.

Warning:

Laser Product!

Please do not stare at the laser beam directly.

To shut off the Laser urgently, please turn off the Switch or to cover the cap directly.

7. Maintenance

Like any other type of electronic equipment, this MPO Tester mini should be kept away from water, high humidity, dust, electricity, and environments of extreme temperatures. Do not drop this tool on any hard surface. Internal modification of any of the MPO Tester mini components can cause a malfunction and will invalidate the manufacturer's warranty.

8. Warranty

The manufacturer warrants this product to be free of defects in workmanship and materials for a period of 1 year after purchase. This warranty is solely limited to the repair or replacement of the original parts. All other costs are the sole responsibility of the owner. This warranty does not cover any defects, damage, or deterioration due to misuse, alteration, or negligence.

9. Ordering Information:

Part Number	Description		
	Wavelength	Cores	Output Power
S2010121650M	650 nm	12F	> 0.4 mW

10. Service Contacts

Please contact us:

Liverage Technology Inc.
3F-5, No. 30 Taiyuan Street,
Chupei City, Hsinchu County 302,
Taiwan

TEL: +886-3-5525268

FAX: +886-3-5525388

e-mail: sales@liverage.com.tw

<http://www.liverage.com.tw>