MPO/MTP MM Patchcord Polarity Checker

Features

♦ Detect the polarity and connection status of MM MPO/MTP fiber optic patchcord

♦ Default detected polarities are A、B、C and R

♦ Study and remember the other polarity of MPO/MTP fiber optical patchcord

♦ High reliability，low power consumption，continuous working time over 20 hours

♦ Friendly、simple GUI

♦ Internal 1800mAh lithium battery

♦ Mini-USB interface

♦ Buzzer warning

♦ Attachments：MPO attached cable、MPO adapter、
　　　　　　　Mini-USB cable、power adapter

♦ Required system environment for GUI：Win XP 32bit and Win 7 32bit

Applications

♦ Production line and datacenter fiber check

♦ Detection of the polarity of 4,8,12 cores MM MPO/MTP fiber optical patchcord

♦ Detection of the connection status of MM MPO/MTP fiber optical patchcord

♦ Studying and detection of the other polarity

Description

　　MPO/MTP MM Patchcord Polarity Checker Which is Low power consumption is used to detect the polarity and connection status of MM MPO/MTP fiber Optical patchcord，including 4,8,12 cores. The maximum length of fiber detected is 450 metre for MMF.Its single detection time is less than 1 second in near checking mode and 4 seconds in far checking mode.It can work continuously over 20 hours without USB power supply.

　　The checker displays the connection status of fiber optical patchcord by GUI which has the same operation interface as it.

Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Supply Voltage	Vcc	-0.5	6	V
Storage Temperature	Ts	-15	+45	°C

Technical Specifications

Parameter		Symbol	Min	Typical	Max	Unit
Operating Case Temperature	Standard	Tc	-10		+40	°C
Operating Humidity		-	5		85 non-condensing	%
Power Supply Voltage		Vcc	4.5	5	5.5	V
Power Supply Current		Icc	3	60	70	mA
Physical Dimensions			70(W)x 126(D) x 15.7(H)			mm
Weight			210			g

Operation Characteristics

| Main Frame	
detected fiber optical patchcord type	4,8,12 cores MM MPO fiber optical cable
default detected polarity	A, B, C,R
detect light source wavelength	850nm
detect time	≤1 second in near checking mode; ≤4 seconds in far checking mode
battery charging time	4 hours
Battery life	>20 hours（fully charged）
press time to power on	1 second
press time to power off	1 second
time interval to power off warning	19 minutes（no any operation）
time interval to power off	20 minutes（no any operation）

Hardware Configuration

1) MPO/MTP interface：connect to the detected fiber optical cable.
   LD is for signal emission, and PD is for signal reception.
2) polarity indicator light and work state indicator light.
3) ENTER：
   study and member the polarity when inserting the other polarity effective cable；
   switch checking mode—near and far.
4) POWER：
   power on and off.
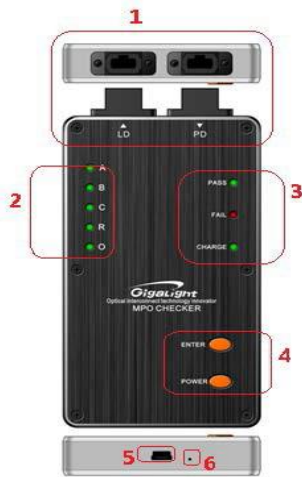
LED	Display	Description
A	off	not polarity A
	green	polarity A
B	off	not polarity B
	green	polarity B
C	off	not polarity C
	green	polarity C
R	off	not polarity R
	green	polarity R
O	off	not other polarity
	flicker	polarity not studied or A/B/C/R polarity but cable partial breakage
	green	the other polarity studied
PASS	off	not A/B/C/R polarity or latest studied polarity
		cable breakage
	green	A/B/C/R polarity or latest studied polarity
FAIL	off	A/B/C/R polarity or latest studied polarity
	red	not A/B/C/R polarity or latest studied polarity
		no cable insert or cable breakage
CHARGE	off	not charge
	green	charging

5) Mini-USB：
   Port which is connected the checker to computer for charging and displaying inner connection status of the cable.
   The specific inner connection status of A/B/C/R polarity fiber optical cable is shown in right:
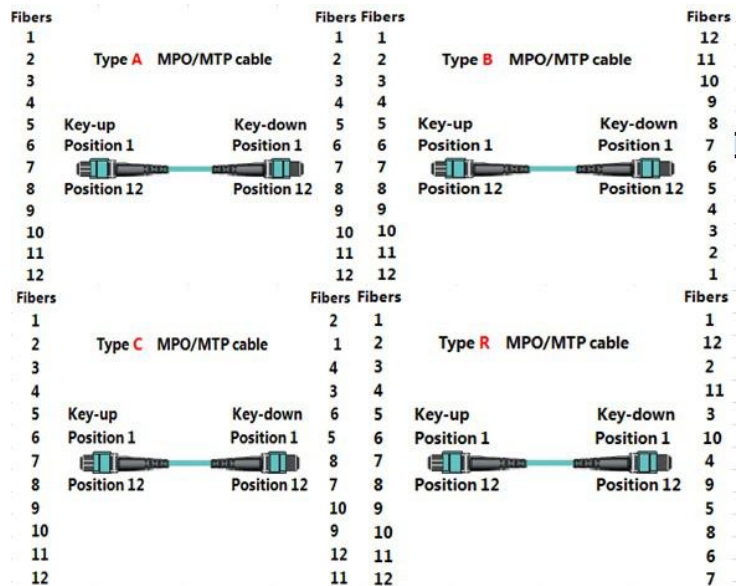
6) **buzzer**：warning when detection failed until the other polarity studied or cable unplugged.

Mechanical Dimensions
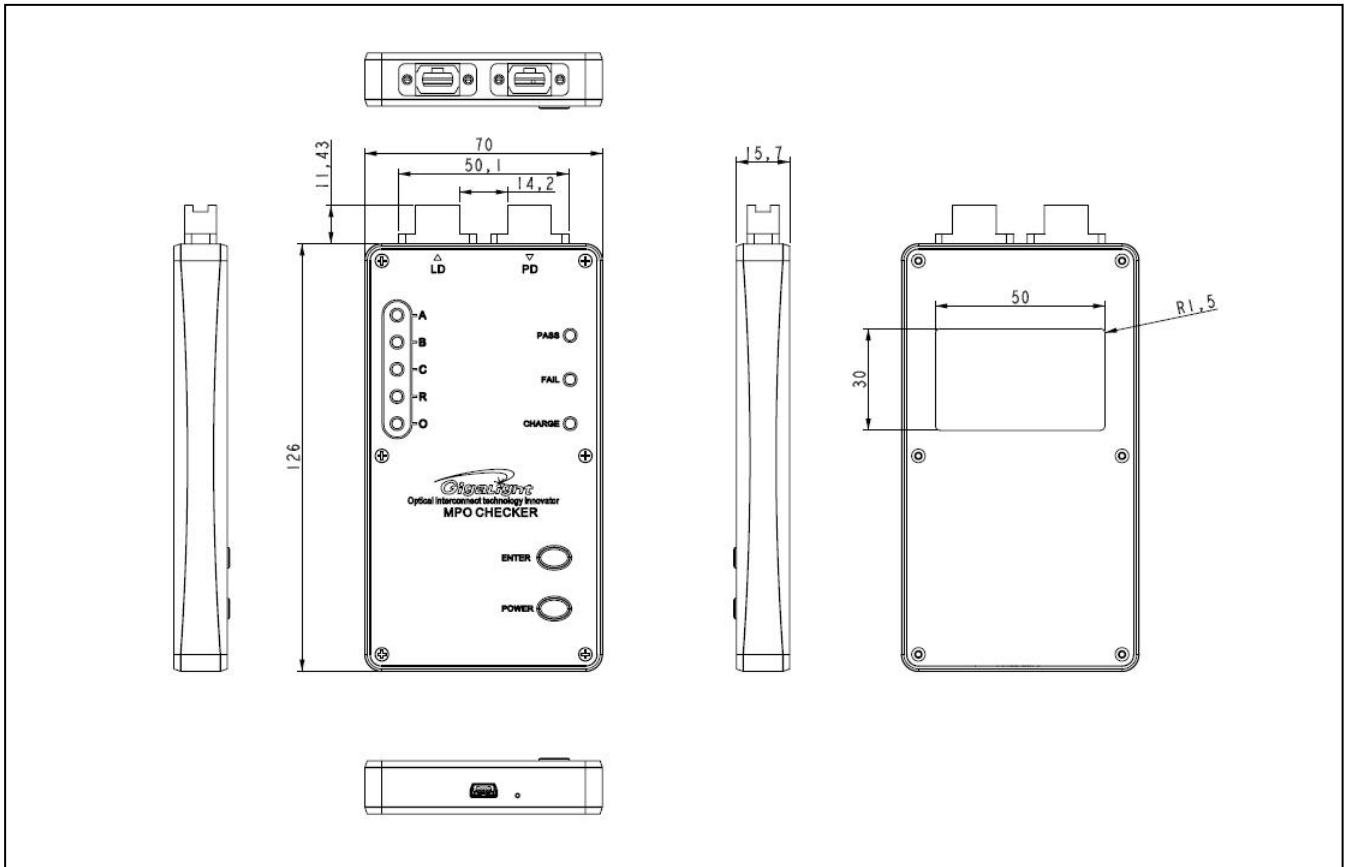
NOTE：

① study：

In near checking mode,plugging cable into PD port of the checker,

O polarity indicator light flicks and buzzer warns when the polarity of detected cable is not same to that of the latest detected one except A,B,C and R , then press ENTER button to record and re-member the polarity. Later the polarity indicator light and PASS state indicator light will be on when cable of the same polarity is detected.

② The other polarity： polarity except A,B,C and R.

③ Attached cable：

Connect the detected fiber optical cable to the checker.

Attached cable MALE port to detected cable FEMAL port, and FEMALE to MALE.

The checker still work normally without cable. Suggest using attached cable to extend service life whose replaceable type must be MM, 12 cores and A polarity only.

④ Charge：

The checker does not indicate battery level.

Charging indication light is on until fully charged.

It will also work normally supplied power by mini-USB line when battery is damaged.

⑤ Any operation:

a.　The checker：press ENTER button or insert effective detected cable;

b.　GUI：Open and press ENTER button, close except.

⑥ Effective detected cable：The connectivity of all cores is normal or some ones break down.

⑦ Automatic shutdown program：Buzzer warning without any operation to the checker for 19 minutes,

and power off for 20 minutes.

⑧ The checker tests the connectivity of fiber cores but insertion loss and return loss.

⑨ Near checking mode：

Used in optical fiber production line.

Initial default is near checking mode after power on.

The checker is called near detector in the mode.

Near Checking Mode

⑩ Far Checking Mode：

Used for optical fiber checking in datacenter.

The checker is called far detector in the mode.

Preparing a near detector, keep pressing Enter button until all polarity indicator lights keep on to switch to far checking mode.

Plug one side of the cable into LD port of far detector, the other side into PD port of near one.

The results are displayed in near detector.

Keep pressing Enter button of far detector until A,B,C,R and O lights turns off to return near checking mode.
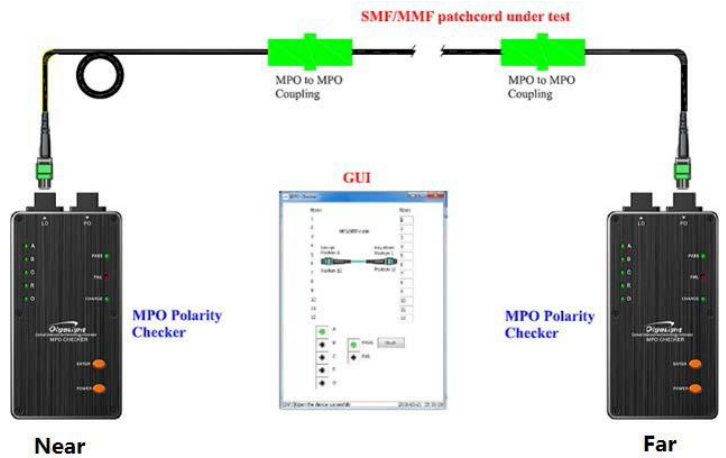
Far Checking Mode

Order information

Part number	Product description
MPO/MTP MM Patch-cord Polarity Checker	It is a test instrument which can be used to detect the polarity and connection status of MM optical fiber patchcord, including 4,8,12 cores. Support for USB-power supply and user-friendly GUI,etc.

Important Notice

Performance figures, data and any illustrative material provided in this data sheet are typical and must be specifically confirmed in writing by GIGALIGHT before they become applicable to any particular order or contract. In accordance with the GIGALIGHT policy of continuous improvement specifications may change without notice.

The publication of information in this data sheet does not imply freedom from patent or other protective rights of GIGALIGHT or others. Further details are available from any GIGALIGHT sales representative.

E-mail: sales@gigalight.com.cn

Web: http://www.gigalight.com.cn