

OPTICAL INSTRUMENTS SERIES

User's Guide to the **PROLITE-57**

PON Power Meter



v1.0

0 DG0182 (01/12/2014)

Introduction



PROLITE-57 is a portable, high quality PON optical power meter. It is specifically designed to meet the rapid growth of FTTx market with PON (Passive Optical Network) technologies. It is capable to measure all three signals (1310nm, 1490nm and 1550nm) that carry voice, data and video, so-called triple-play applications along a single fiber. **PROLITE-57** can measure not only 1490nm and 1550nm optical signal, but also accurately detect and measure the upstream burst at 1310nm sent from an ONU while the ONU is in the idle mode. The simple operation and accurate measurement make **PROLITE-57** becomes an ideal tool for PON (suitable for APON, BPON, EPON and GPON application) installation/acceptance test to ensure that they meet required standards, and service activation and troubleshooting.

Specification:

Connector Type	SC/APC, ST/APC		
Detector type	InGaAs		
Measurement Range (Continuous Datastream)	1310 nm	1490 nm	1550 nm
	-40 dBm~+10 dBm	-40 dBm~+10 dBm	-40 dBm~+20 dBm
Burst measurement range (1310 nm bursted signal)	-30 dBm~+10 dBm		
Spectral Passband	1310 nm	1490 nm	1550 nm
	1260 nm~1360 nm	1480 nm~1550 nm	1539 nm~1565 nm
Insertion Loss	1.5 dB		
Accuracy	±0.5 dB		
Linearity	±0.2 dB		
Display	2.8 inch TFT LCD		
Refresh Rate of Display	2.5 Hz		
Threshold	10 sets(configured via PC-based software)		
Auto Power-off	Yes		
Number of Ports	2 ports. One for 1310 nm (ONU) and one for 1490 nm / 1550 nm (OLT)		
Operating Temperature	-10 to +50°C		
Relative Humidity	0%~95%,non-condensing		
Power Supply	1.2V*4pcs Ni-MH AA;12V AC/DC Adapter		
Battery life	>20 hours		
Dimension	190 mm*105 mm*55 mm(L*W*H) with rubber protector		
Net Weight	700 g		

Operation

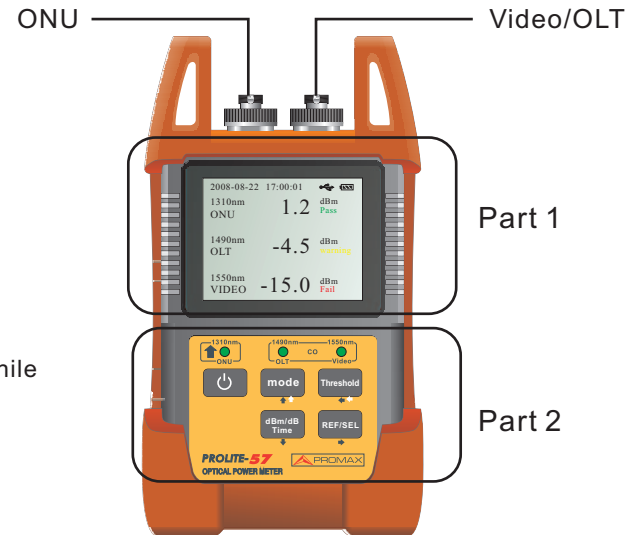
The front panel is divided in two parts:

Part I – LCD Display






Part II- Keypad

The tester shows test result on LCD screen, and in the meanwhile indicates different status in part 2 by LED.

Tester connector types: SC/APC, ST/APC



Key's Functions

	<p>Power Switch – Press the key to Power On the unit. While the unit is in the state of power on, if pressing down the key and release quickly (less than 2 seconds), the unit will switch to auto power off; if pressing down the key for longer than 2 seconds, the unit will shut down. If the unit is in threshold setup, time setup and backlit setup menu, the key becomes ESC key to exit the menu.</p>
	<p>Mode Key – test mode. It is used to switch the test mode - P/F test mode and normal test mode. When the unit is in time setup, threshold setup and backlit menu, the key is used to increase value.</p>
	<p>Threshold – It is used to set threshold. Pressing it down for more than 2 seconds enters threshold setup menu. In threshold setup menu, press and release the key quickly (less than 2 seconds) to switch wavelength. In time setup menu, this key functions as <left> arrow key.</p>
	<p>dBm/dB/Time – unit switching key. Press and release the key quickly (less than 2 seconds) to switch unit between dB and dBm; pressing the key down for more than 2 seconds enters to time setup menu. In time setup menu, threshold setup and backlit setup menu, the key is used to decrease value.</p>
	<p>REF/SEL – It is used for reference value setup and selection. If pressing it down for more than 2 seconds, the instrument will take current light intensity as reference to do measurement. If pressing and release the key quickly (less than 2 seconds), then the key will function as <right> arrow key.</p>

Remarks

1. When battery power is not enough, the battery indicator will flash. Please immediately use the attached AC/DC adapter or charge the instrument/battery.
2. While charging, the instrument does not allow the user to power off. If pressing Power Off key, the charger head will flash. After the battery gauge shows “full”, means the battery is fully charged, remove the charger.
3. Before charging the instrument, please make sure the rechargeable battery pack is installed.
4. If do not use the instrument for long time, please remove the battery pack to avoid battery descompotion.
5. Due to existence of strong interference in some working environment, sometime short lines or disorder may appear on LCD screen, this is normal and not going to affect the instrument. The display will back to normal if reboot the unit or switch menu to refresh the display.

Advice:

- 1) Please use the dust-proof cap to secure the connector to be scratched or contaminated everytime when the product is not in operation.
- 2) Please always stay the optical connectors away from oil, dirt and other contamination to ensure the proper operation,
- 3) Always be careful when you are intend to plug in and pull out the connectors because optical interface is extremely sensitive.



PROMAX ELECTRONICA, S. L.

Francesc Moragas, 71-75
08907 L'HOSPITALET DE LLOBREGAT (Barcelona)
SPAIN

Tel.: 93 184 77 00 * Tel. Intl.: (+34) 93 184 77 02

Fax: 93 338 11 26 * Fax Intl.: (+34) 93 338 11 26

<http://www.promaxelectronics.com>

e-mail: promax@promaxelectronics.com