

# PM-830-FTTX Optical power meter

#### **Description:**

The PM-830-FTTX optical power meter is designed for simultaneous measurement and display of all signals voice, data and video. The tester can be used as portable power meter or as USB probe, part of testing workstation. The FTTX tester is also perfect for testing PON services during activation and maintenance. The memory capacity allows storage and uploading of up to 2000 measurements. The stored data can be easily exported to Excel, Word or any other application.

Two versions of PM-830-FTTX meter available:

Single port:

The version with one input port - designed for measurement at end sides of optical lines, it requires disconnection the active device from the optical lines for measurements.

The version with two optical ports - the dual port tester with IN/OUT optical ports allows measurements of uninterrupted optical lines with the connected active device, pass-through testing mode. The PM-830-G1 tester is optimized for testing of standards GEPON (Gigabit EPON) and GPON, transmission speed upstream up to 1.25 Gbps. The 1310 nm channel provides correct power measurements of burst type upstream PON signals

The changeable connector/adaptor design allows the simple exchange of optical PC or APC connectors (FC, SC) and easy cleaning of the output connector ferrule after removing the connector adaptor. LC/PC and LC/APC are also available.



#### Features:

- FTTH-PON testing
- Three simultaneously measured wavelengths
- Pass-through testing
- Absolute and Relative optical power measurement
- Large memory capacity for storing measured data
- USB probe mode full control via simple commands
- Rechargeable Li-Pol battery
- Battery status indicator
- Auto Off

#### Standard accessories:

- Power meter
- Traceable calibration certificate
- FC or SC adapter (can be customized)
- USB connection cable
- Power charging adaptor
- Hard carrying case TE-HC-03

#### **Specifications:**

Note:

3x InGaAs Photodetector

Working wavelength 1310, 1490, 1550 nm

1250-1360, 1430-1500, 1530-1650 nm Spectral passband other passband width - on request

Isolation (dB) 1550->1490: 35 dB 1490->1310: 50 dB 1310->1490: 60 dB

1550->1310: 55 dB 1490->1550: 45 dB 1310->1550: 40 dB

Pass-through IL 1.5 dB typ., 2.0 max (1550 nm) dual port

≥ 50 dB UPC polished connectors

Uncertainty ± 12 % typ., @ -10 dBm

Resolution 0.1

Dynamic range: single port -45 dBm to +10 dBm CW: 1310,1490,1550 nm

-45/-20 dBm to +10 dBm CW/burst: 1310, CW: 1490 nm dual port

> -35 dBm to +20 dBm 1550 nm

**Dimensions** 165 x 80 x 40 mm

Weight 250 g with battery Operating temperature -10 to +50 °C

Battery working time > 150 hrs backlight off Battery life time > 2 years 3000 mAh Li-Pol

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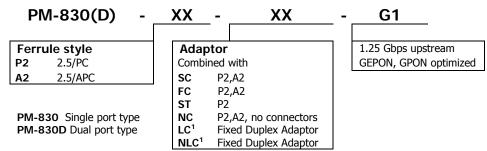
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# Application:

- FTTX optical networks measurements
- PON optical networks measurements

### **Ordering Code:**



Note: 1) LC type – fixed adaptor, not removable Other interface on request

# Typical configuration

Single port power meter:

PM-830-P2-FC FC/UPC optical interface PM-830-P2-SC SC/UPC optical interface

Dual port power meter:

PM-830D-P2-FC-G1 Two FC/UPC optical ports Duplex LC/UPC optical port PM-830D-LC-G1

#### Standard accessories



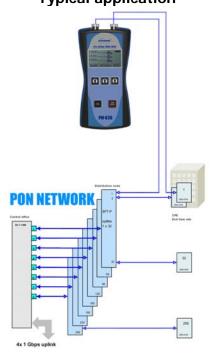
TE-HC-03 hard case for one or two testers

### **Dual port**



PM-830D-P2-FC-G1

# Typical application



Compliant with RoHS-requirements (2002/95/EG, 27.01.2003)

METHOD AND TECHNOLOGY PROTECTED BY US PATENT 7,187,861, RUSSIAN FEDERATION PATENT RU 2345490, AND PENDING APPLICATIONS IN OTHER COUNTRIES