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.

Dual port:

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

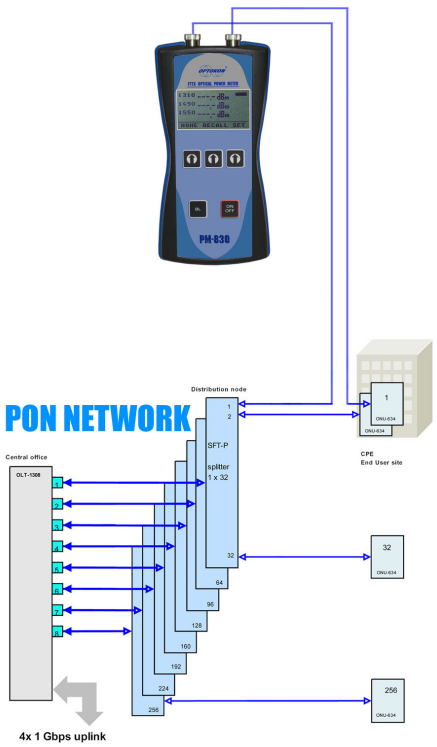
Specifications:

Photodetector	3x InGaAs		
Working wavelength	1310, 1490, 1550 nm		
Spectral passband	1250-1360, 1430-1500, 1530-1650 nm		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
RL	≥ 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
dual port	-45/-20 dBm to +10 dBm		CW/burst: 1310, CW: 1490 nm
	-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

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

Application:

- FTTX optical networks measurements
- PON optical networks measurements

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

Ordering Code:

PM-830(D) - XX - XX - G1

Ferrule style	
P2	2.5/PC
A2	2.5/APC

Adaptor	Combined with
SC	P2,A2
FC	P2,A2
ST	P2
NC	P2,A2, no connectors
LC[1]	Fixed Duplex Adaptor
NLC[1]	Fixed Duplex Adaptor

1.25 Gbps upstream
GEPON, GPON optimized

PM-830 Single port type

PM-830D Dual port type

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
PM-830D-LC-G1 Duplex LC/UPC optical port

Standard accessories

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