

PM-800 – Power Meter

The PM-800 is a part of OPTOKON test equipment designed for thorough fiber line diagnostic. It is designed to measure absolute or relative optical power in optical networks. It can be used as portable power meter or as a USB probe. The changeable adaptor design allows the simple exchange of optical connectors according actual need.

Automatic wavelength detection

Automatic wavelength detection (AWD) mode allows using OPTOKON Light source and Power meter without manually switching the measured wavelength and decreases the possibility of faulty measurement.

Cycle mode

Cycle mode allows the device to automatically toggle between available wavelengths.



Features:

- Standalone Power Meter
- InGaAs or Si photo detector
- CW, 270 Hz, 1 kHz, 2 kHz Modulation
- Auto Wavelength Detection(AWD) mode
- Changeable input adaptors
- Absolute and Relative optical power measurement
- Cycle mode
- USB probe mode
- Two levels high capacity memory

Standard accessories:

- Power meter
- Universal 2.5 mm testing adaptor
- USB cable
- NiMH batteries
- Power charging adapter 220 V AC/5 V DC
- Calibration certificate
- Hard carrying case
- Smart Protocol PC software
- Data Exporter PC software

Input adapters



TE-ADP-FC
FC adaptor



TE-ADP-LC
LC adaptor



TE-ADP-SC
SC adaptor



TE-ADP-250
2.5 mm



TE-ADP-125
1.25 mm

Application

- Link Loss Characterization
- Measurement of optical power
- Output power of transceivers
- Fiber Detection
- Continuous fiber testing
- Signal detection
- USB probe



File	Operator	Date	Power Meter	Fiber Length [m]	No. of Splices	No. of Connectors	No. of Passive Devices	Wavelength	Power Loss [dB]	Passive Device [dB]	Fiber Attenuation [dB/km]
1	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
2	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
3	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
4	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
5	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
6	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
7	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
8	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
9	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
10	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
11	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
12	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
13	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
14	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
15	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
16	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
17	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
18	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
19	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31
20	OPTOKON	19.12.2007	PM800-PM800000	8000	0	2	0	1550nm	0.25	0.00	0.31

Technical specifications:

General specifications	Value		Unit	Note
Dimensions	165 x 80 x 40		mm	with TE-ADP-250 adapter
Weight	340		g	with battery
Operation temperature	-10 to + 50		°C	
Storage temperature	-40 to + 70		°C	
Humidity (non-condensing)	0 to 95		%	
Power Meter	PM-800	PM-800SI	Unit	Note
Detector	InGaAs	Si		
Detector size	1	3.6	mm	
Wavelength range	850 to 1625	650 to 850	nm	
Calibrated wavelengths	850, 1300, 1310 1490, 1550, 1625	650, 850	nm	
Dynamic range	-65 to +10 ¹	-40 to + 10	dBm	
Uncertainty	± 5		%	1310, 1550 nm at -20dBm
Resolution	0.01		-	
Tone detection	0.270, 1, 2	0.270, 1, 2	kHz	
Auto switching (AWD)	Yes	Yes	-	
Data storage	Up to 3000	Up to 3000	-	Number of measurements
AWD/Modulation Detection	-50 / -45	- / -45	dBm	1300 – 1625 nm / 850 nm
Display units	dBm, dB, W	dBm, dB, W	-	

Ordering code:

PM-800	Standard Power meter with InGaAs photo detector, SM fiber
PM-800SI	Standard Power meter with Si photo detector, MM fiber

Accessories:	
TE-ADP-FC	FC output adaptor
TE-ADP-LC	LC output adaptor
TE-ADP-SC	SC output adaptor
TE-ADP-250	2.5 mm universal adaptor
TE-ADP-125	1.25 mm universal adaptor
TE-HC-03	Rigid carrying case
TE-HP-27/NPC ²	High power probe, FC/APC connectors



TE-HP-27/NPC²



TE-HC-03

- 1) For 850 nm Dynamic range is -57 to +17 for PM-800
- 2) External attenuation probe, $P_{in\ max} = +25\ dBm$



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