

PM-800-G(L) optical Power Meter

The PM-800-G and PM-800-GL are members of OPTOKON test equipment family designed for thorough fiber optic line diagnostic. Both are 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.



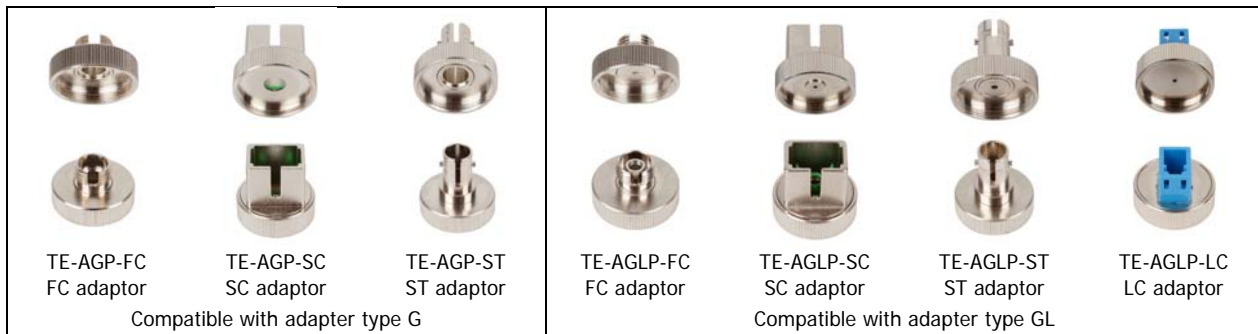
Features:

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

Standard accessories:

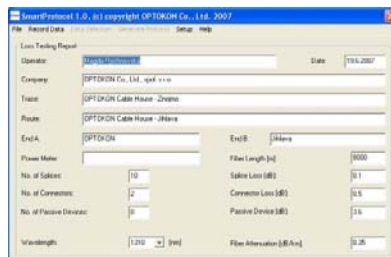
- Power meter
- Changeable input adaptors
- USB cable
- Li-Pol battery
- Power charging adapter 5 V DC
- Calibration certificate
- Hard carrying case
- Smart Protocol PC software
- Data Exporter PC software

Input adaptors:



Application:

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



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Operator: Mgr. Roman Štáhl
Company: OPTOKON Co., Ltd. opt a.s.

OPTOKON Co., Ltd.
ŠTÁHL
www.optokon.cz

Loss Testing Report

Trace: OPTOKON Cable House - Znojmo
Route: OPTOKON Cable House - Jihlava
Start: OPTOKON End: Jihlava
Power Meter: PM800-PM20009 Fiber Length: 8000 m
No. of Solutes: 10 Solute Loss: 0.1 dB
No. of Connectors: 2 Connector Loss: 0.1 dB
No. of Passive Devices: 0 Passive Device Loss: 0.0 dB
Fiber Attenuation (1550 nm): 0.20 dB/km Loss Limit (1550 nm): 4.00 dB
Fiber Attenuation (1310 nm): 0.20 dB/km Loss Limit (1310 nm): 3.00 dB

Table of Measured Values

Fiber	Loss (dB) (1550 nm)	Loss (dB) (1310 nm)	Loss (dB) (1550 nm)	Loss (dB) (1310 nm)	Notes
1	4.23	4.28	4.28	4.28	1.00
2	4.23	4.28	4.28	4.28	1.00
3	4.23	4.28	4.28	4.28	1.00
4	4.23	4.28	4.28	4.28	1.00
5	4.23	4.28	4.28	4.28	1.00
6	4.23	4.28	4.28	4.28	1.00
7	4.23	4.28	4.28	4.28	1.00
8	4.23	4.28	4.28	4.28	1.00
9	4.23	4.28	4.28	4.28	1.00
10	4.23	4.28	4.28	4.28	1.00
11	4.23	4.28	4.28	4.28	1.00
12	4.23	4.28	4.28	4.28	1.00
13	4.23	4.28	4.28	4.28	1.00
14	4.23	4.28	4.28	4.28	1.00
15	4.23	4.28	4.28	4.28	1.00
16	4.23	4.28	4.28	4.28	1.00
17	4.23	4.28	4.28	4.28	1.00
18	4.23	4.28	4.28	4.28	1.00
19	4.23	4.28	4.28	4.28	1.00
20	4.23	4.28	4.28	4.28	1.00
21	4.23	4.28	4.28	4.28	1.00
22	4.23	4.28	4.28	4.28	1.00
23	4.23	4.28	4.28	4.28	1.00
24	4.23	4.28	4.28	4.28	1.00
25	4.23	4.28	4.28	4.28	1.00
26	4.23	4.28	4.28	4.28	1.00
27	4.23	4.28	4.28	4.28	1.00
28	4.23	4.28	4.28	4.28	1.00
29	4.23	4.28	4.28	4.28	1.00
30	4.23	4.28	4.28	4.28	1.00
31	4.23	4.28	4.28	4.28	1.00
32	4.23	4.28	4.28	4.28	1.00
33	4.23	4.28	4.28	4.28	1.00
34	4.23	4.28	4.28	4.28	1.00
35	4.23	4.28	4.28	4.28	1.00
36	4.23	4.28	4.28	4.28	1.00
37	4.23	4.28	4.28	4.28	1.00
38	4.23	4.28	4.28	4.28	1.00
39	4.23	4.28	4.28	4.28	1.00
40	4.23	4.28	4.28	4.28	1.00
41	4.23	4.28	4.28	4.28	1.00

Technical specifications:

General specifications	Value				Unit	Note
Dimensions	165 x 80 x 40				mm	with TE-AGP-250 adapter
Weight	340				g	with battery
Operation temperature	-10 to +60				°C	charging battery 0 to +45
Storage temperature	-40 to +70				°C	Li-Pol battery -10 to +45
Humidity (non-condensing)	0 to 95				%	
Power Meter	PM-800-06	PM-800-16	PM-800-26	PM-800-36		
Dynamic range	-70 to +6	-60 to +16	-50 to +26	-40 to +36	dBm	
Detector	InGaAs		Si			
Wavelength range	850 to 1700		400 to 1100		nm	
Working wavelengths	850, 1300, 1310, 1490, 1550, 1625		650, 850, 980		nm	can be customized
Accuracy	± 5				%	1310, 1550 nm at -20 dBm
Resolution	0.01				dB	
Tone detection	0.270, 1, 2				kHz	
Auto switching (AWD)	Yes				-	
AWD/Modulation Detection	-50 / -45				dBm	1300 – 1625 nm / 850 nm
Data storage	Up to 3000				-	number of measurements
Display units	dBm, dB, W				-	

Ordering code:

PM-800	-	XX	-	XX	-	(SI)
		Dynamic range		Adaptor type		Photodetector
		06 -70 to +6 dBm		G 2.5 ¹ , FC, SC, ST		- InGaAs
		16 -60 to +16 dBm		GL LC, FC, SC, ST		SI Si
		26 -50 to +26 dBm				
		36 -40 to +36 dBm				

Note: 1) G-type without additional adapter is suitable for ferrule 2.5 mm



PM-800 with adapter type G



PM-800 with adapter type GL



TE-HC-03

Typical configuration:

PM-800-16-G dynamic range -60 to +16 dBm, connectors FC, SC, ST and universal 2.5 mm ferrule, InGaAs

PM-800-26-G high power dynamic range up to +26 dBm, FC, SC, ST and universal 2.5 mm ferrule, InGaAs

PM-800-06-GL dynamic range -70 to +6 dBm, connectors LC, FC, SC, ST, InGaAs

PM-800-16-G-SI dynamic range -60 to +16 dBm, connectors FC, SC, ST and universal 2.5 mm ferrule, Si