

PM-212-MPO

Pocket optical power meter USB probe

**The PM-212 MPO cuts
larger power meters
to ribbons**

Description:

The PM-212-MPO optical power meter is a small, pocket size low cost item. The small size does not prevent the optical meter fulfilling all technical requirements for field equipment. The tester can be used as pocket power meter or as USB probe, part of testing workstation. The unit can be easily carried in the pocket or on the belt. It allows simultaneous measurement of up to 24 ribbon fibers terminated with MPO/MTP connector. The Li-Pol rechargeable battery ensures long term working time with a minimum life time of 2 years. The unit is able to store 100 measurements which can be uploaded to PC and managed with SmartProtocol software or Data Exporter.



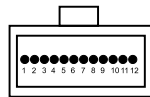
PM-212-MPO

Features:

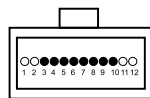
- Two functions:
 - Portable power meter
 - USB probe – accessory of Testing Workplace
- MPO/MTP connector
- Multimode applications
- Backlight option
- Small size, light weight
- Absolute and Relative optical power measurement
- Internal two level memory structure
- Capacity up to 100 measurements
- SmartProtocol SW – test reports creating
- Data Exporter – data download to Excel sheet
- USB port for:
 - USB probe - full control via simple commands
 - charging the battery
 - data upload to PC
 - firmware upgrade
- Build-in Li-Pol rechargeable battery pack
- Auto Off
- Battery status indicator

Standard accessories:

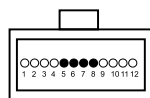
- Power meter
- MPO input adapter
- Power charging adapter
- Traceable calibration certificate
- Soft carrying case
- USB cable
- SmartProtocol SW



MPO 12



MPO 8



MPO 4



TE-HC-01
Hard carry case (265 x 270 x 90 mm)

Optional

- Hybrid Master MPO patchcord¹
- Hard carry case (TE-HC-01)

Note: 1) Hybrid MPO patchcord on request, please define connector type

Specifications:

Photo detector MM – large-scale Si
 Working wavelengths MM 850 nm
 Uncertainty ± 5% (@ -27 to +20 dBm)
 ± 10% (@ -30 to -27 dBm)
 Resolution 0.01
 Dynamic range -30 dBm to +20 dBm
 Dimensions 24 x 47 x 71 mm
 Weight Less than 90 g
 Temperature operating -10 to +50 °C
 storage -40 to +70 °C
 Humidity (non cond.) 0 – 95%
 Operating temperature -10 to +50 °C
 Battery working time > 35 hrs
 Battery life time > 2 years
 Compliant with RoHS-requirements (2002/95/EG, 27.01.2003)

Note:

850 nm @ -10 dBm

850 nm
including MPO adapter
battery loaded

between battery charging

Ordering code:

PM-212-MPO-MM
PM-212-MPO-MM-L

standard ribbon tester
tester with Backlight option

Application:

- Optical components testing
- Optical networks measurement
- Test reports creating

SmartProtocol compatible (refer to TEQ_02-07_EN-SmartProtocol)

Loss Testing Report

Trace: OPTOKON Cable House - Znojmo
 Route: OPTOKON Cable House - Jihlava
 End A: OPTOKON End B: Jihlava
 Power Meter: PM420-PM4207090 Fiber Length: 8000 m
 No. of Splices: 10 Splice Loss: 0.1 dB
 No. of Connectors: 2 Connector Loss: 0.5 dB
 No. of Passive Devices: 0 Passive Device: 3.6 dB
 Fiber Attenuation 1310 nm: 0.35 dB/km Loss Limit 1310 nm: 4.80 dB
 Fiber Attenuation 1550 nm: 0.20 dB/km Loss Limit 1550 nm: 3.60 dB

Fiber	Loss [dB] 1310 nm			Loss [dB] 1550 nm			Note
	A-B	Avg	σ	A-B	Avg	σ	
1	4.32	4.21	4.28	3.48	3.42	3.45	PASS
2	4.40	4.41	4.42	3.56	3.51	3.56	PASS
3	4.59	4.47	4.58	3.26	3.28	3.26	PASS
4	4.17	4.21	4.17	3.28	3.18	3.23	PASS
5	4.82	4.84	4.83	3.33	3.31	3.32	PASS
6	4.82	4.81	4.81	3.19	3.12	3.16	FAIL
7	4.19	4.25	4.20	3.24	3.26	3.25	PASS
8	4.28	4.28	4.28	3.41	3.41	3.41	PASS
9	4.28	4.26	4.27	3.27	3.27	3.27	PASS
10	4.69	4.48	4.58	3.15	3.51	3.63	FAIL
11	4.11	4.13	4.12	3.27	3.18	3.23	PASS
12	4.27	4.24	4.26	3.19	3.49	3.56	PASS
Avg	4.40	4.37	4.38	3.43	3.37	3.40	
Max	4.82	4.81	4.81	3.19	3.12	3.16	
Min	4.11	4.13	4.12	3.18	3.18	3.23	

Data Selection

Wavelength: 1310 nm

Position	Value	Direction A->B	Direction B->A
1/4	0.48		
1/5	3.99		
1/6	3.19		
1/10	0.48		
1/11	3.99		
1/12	3.19		
1/16	0.48		
1/17	3.99		
1/18	3.19		
1/22	0.48		
1/23	3.99		

SmartProtocol 1.0. (c) copyright OPTOKON Co., Ltd. 2007

Operator: Miroslav Fuchsovsky Date: 13.6.2007

Company: OPTOKON Co., Ltd. spol. s r.o.

Trace: OPTOKON Cable House - Znojmo

Route: OPTOKON Cable House - Jihlava

End A: OPTOKON End B: Jihlava

Power Meter: Fiber Length [m]: 8000

No. of Splices: 10 Splice Loss [dB]: 0.1

No. of Connectors: 2 Connector Loss [dB]: 0.5

No. of Passive Devices: 0 Passive Device [dB]: 3.6

Wavelength: 1310 [nm] Fiber Attenuation [dB/km]: 0.35

DataExporter compatible (refer to TEQ_08-13_EN-DataExporter)

OPTOKON data exporter 1.1

Options: Converting to device: OFT820 OFT8200008 Import from device

Cable	Fiber	Wavelength	dBm
<input checked="" type="checkbox"/>	001	1310	-5.1
<input checked="" type="checkbox"/>	001	1310	-5.24
<input checked="" type="checkbox"/>	001	1310	-4.95
<input checked="" type="checkbox"/>	001	1310	-4.74
<input checked="" type="checkbox"/>	001	1310	-5.01
<input checked="" type="checkbox"/>	001	1310	-6.28
<input checked="" type="checkbox"/>	001	1310	-5.98
<input checked="" type="checkbox"/>	001	1310	-6.05
<input checked="" type="checkbox"/>	001	1990	-3.66
<input checked="" type="checkbox"/>	001	1990	-3.24
<input checked="" type="checkbox"/>	001	1990	-2.84
<input checked="" type="checkbox"/>	001	1990	-2.84
<input checked="" type="checkbox"/>	001	1990	-2.73
<input checked="" type="checkbox"/>	001	1990	-4.66
<input checked="" type="checkbox"/>	001	1990	-4.16
<input checked="" type="checkbox"/>	001	1990	-3.83

Export settings

Export device details

Export table header

Decimal separator: , .

Ok

	A	B	C	D	E
1	OFT820	OFT8200008			
2	Cable	Fiber	Wavelength	dBm	
3	1	1	1310	-5.1	
4	1	2	1310	-5.24	
5	1	3	1310	-4.95	
6	1	4	1310	-4.74	
7	1	5	1310	-5.01	
8	1	6	1310	-6.28	
9	1	7	1310	-5.98	
10	1	8	1310	-6.05	
11					
12					
13					