

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.

There are two versions for simultaneous measurement:

12/24 multifiber MPO/MTP connectors

16/32 multifiber MPO/MTP connectors

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



MPO-12/24
Input adapter



MPO-16/32
Input adapter

Features:

- Two functions:
 - Portable power meter
 - USB probe – accessory of Testing Workplace
- MPO/MTP connector: 12/24 or 16/32 fibers
- Multimode applications
- 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/MTP input adapter
- Power charging adapter
- Traceable calibration certificate
- USB cable
- Hard carry case (TE-HC-01)
- SmartProtocol SW

Optional

- Master MPO patchcord¹



TE-HC-01

Hard carry case (265 x 270 x 90 mm)

Note: 1) MPO/MTP patchcord on request, according to: CON_04-14_EN-MTP patchcord datasheet

Specifications:

Photo detector MM – large-scale Si
Working wavelengths MM 850 nm
Uncertainty $\pm 5\%$ (@ -27 to +20 dBm)
 $\pm 10\%$ (@ -30 to -27 dBm)
Resolution 0.01
Dynamic range -30 dBm to +20 dBm
Dimensions 80 x 47 x 25 mm
Weight Less than 90 g
Temperature operating -10 to +50 °C
storage -40 to +60 °C
Humidity (non cond.) 0 – 95%
Battery working time > 50 hrs
Battery life time > 2 years
Compliant with RoHS-requirements (2002/95/EG, 27.01.2003)

Note:

850 nm @ -10 dBm

850 nm
including MTP/MPO adapter

between battery charging
980 mAh Li-Pol

Ordering code:

multifiber multimode tester:

PM-212-MPO

standard tester for 12/24 MTP/MPO connectors

PM-212-MPO-16

tester 16/32 MTP/MPO connectors

Application:

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

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

DATE: 19.6.2007
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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

Table of Measured Values

Fiber	Loss Limit 1310 nm			Loss Limit 1550 nm			Note
	A-B	B-A	Avg	A-B	B-A	Avg	
1	4.52	4.24	4.28	3.48	3.42	3.45	PASS
2	4.42	4.01	4.21	3.58	3.52	3.55	PASS
3	4.59	4.47	4.53	3.28	3.22	3.25	PASS
4	4.12	4.21	4.17	3.28	3.18	3.23	PASS
5	4.52	4.54	4.53	3.32	3.31	3.32	PASS
6	4.62	4.81	4.71	3.58	3.72	3.79	FAIL
7	4.70	4.25	4.48	3.24	3.28	3.26	PASS
8	4.58	4.35	4.47	3.27	3.27	3.27	PASS
9	4.58	4.25	4.42	3.41	3.41	3.41	PASS
10	4.69	4.48	4.58	3.75	3.51	3.63	FAIL
11	4.11	4.13	4.12	3.27	3.18	3.23	PASS
12	4.52	4.24	4.30	3.59	3.48	3.54	PASS
Avg	4.48	4.27	4.38	3.43	3.37	3.40	
Max	4.62	4.81	4.71	3.75	3.72	3.73	
Min	4.11	4.13	4.12	3.24	3.18	3.21	

Data Selection

Wavelength: 1310 nm

Recorded Data		Direction A->B		Direction B->A	
Position	Value	Position	Value	Position	Value
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				

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File Record Data View Selection Setup Help

Loss Testing Report

Operator: Miroslav Rychnovský Date: 19.6.2007

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)

Options

Connecting to device: Connected device: OFT820 OFT8200008

Serial ports: COM4

Relative

Cable	Fiber	WaveLength	dBm
001	001	1310	-5.1
001	002	1310	-5.24
001	003	1310	-4.95
001	004	1310	-4.74
001	005	1310	-6.01
001	006	1310	-6.36
001	007	1310	-5.98
001	008	1310	-6.05
001	009	1550	-3.05
001	010	1550	-3.24
001	011	1550	-3.38
001	012	1550	-2.94
001	013	1550	-2.73
001	014	1550	-4.05
001	015	1550	-4.16
001	016	1550	-3.63

Measurements

Export to Excel

Export settings

☒ Export device details

☒ Export table header

Decimal separator: , .

Ok

F10

	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	-6.01	
8	1	6	1310	-6.36	
9	1	7	1310	-5.98	
10	1	8	1310	-6.05	
11					
12					
13					

List1 / List2 / List3

List1 / 3 Vychodize STD Celkom