

PM-212-CWDM

Pocket optical power meter

USB probe

NEW!
Smallest instrument
for measuring CWDM
band

Description:

The PM-212-CWDM 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 full CWDM band with 2 extra wavelengths for MM applications (850 and 1300 nm) and 1625 nm for SM. 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-CWDM

Features:

- Two functions:
 - Portable power meter
 - USB probe – accessory of Testing Workplace
- 18 channels CWDM + 850, 1300 and 1625 nm
- 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
- Universal 2.5 mm adaptor (TE-ADP-250)
- Power charging adapter
- Traceable calibration certificate
- Soft carrying case
- USB cable
- SmartProtocol SW



TE-HC-01

Hard carry case (265 x 270 x 90 mm)



TE-ADP-FC



TE-ADP-LC



TE-ADP-SC



TE-ADP-250



TE-ADP-125

*) Other types available on request:

TE-ADP-SC	SC adaptor
TE-ADP-FC	FC adaptor
TE-ADP-ST	ST adaptor
TE-ADP-DIN	DIN adaptor
TE-ADP-SMA	SMA adaptor
TE-ADP-LC	LC adaptor
TE-ADP-MU	MU adaptor

Specifications:

Note:

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TEQ_03-12_EN
10/02/2021

Photo detector	1 mm InGaAs	
Working wavelengths	CWDM band (18 CH, 1270 nm – 1610 nm) + 850, 1300 and 1625 nm	
Uncertainty	± 5%	
Resolution	0.01	
Dynamic range	-60 dBm to +10 dBm -53 dBm to +10 dBm	CWDM band; 1300 nm; 1625 nm 850 nm
Dimensions	24 x 47 x 71 mm	including 2.5 mm universal adapter
Weight	Less than 90 g	battery loaded
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	between battery charging
Battery life time	> 2 years	
Compliant with RoHS-requirements (2002/95/EG, 27.01.2003)		

Ordering code:

PM-212-CWDM + (options)

standard CWDM tester

Application:

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

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

Date: 19.6.2007
Operator: Magda Plochová
Company: OPTOKON Co., Ltd. spol. s r.o.

Loss Testing Report

Trace: OPTOKON Cable House - Znojmo
Route: OPTOKON Cable House - Jihlava
End A: OPTOKON End B: Jihlava
Power Meter: PM420 PM4207080 Fiber Length: 9000 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	A-B	A-B	A-B	A-B	A-B	Note
1	4.25	4.24	4.26	5.48	3.42	PASS
2	4.43	4.41	4.42	3.58	3.51	PASS
3	4.25	4.42	4.25	3.26	3.23	PASS
4	4.12	4.21	4.17	3.28	3.18	PASS
5	4.52	4.54	4.53	3.33	3.31	PASS
6	4.52	4.51	4.51	3.58	3.72	FAIL
7	4.19	4.25	4.20	3.24	3.20	PASS
8	4.28	4.28	4.28	3.41	3.41	PASS
9	4.38	4.39	4.37	3.27	3.27	PASS
10	4.69	4.49	4.59	3.75	3.51	FAIL
11	4.11	4.13	4.12	3.27	3.18	PASS
12	4.31	4.24	4.30	3.59	3.48	PASS
Avg	4.40	4.37	4.38	3.43	3.37	
Max	4.69	4.51	4.61	3.75	3.72	
Min	4.11	4.13	4.12	3.24	3.18	

Data Selection

Wavelength: 1310 nm

Position	Value	Direction A→B	Direction B→A
1/4	0.48		
1/5	3.59		
1/6	3.19		
1/10	0.48		
1/11	3.59		
1/12	3.19		
1/16	0.48		
1/17	3.59		
1/18	3.19		
1/22	0.48		
1/23	3.59		

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File Record Data Setup Help

Loss Testing Report

Operator: Magda Plochová 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]: 9000

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: Connected device: OFT820 OFT8200008 ☒ Import from device

Send path: COM4

Table:

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	-5.01
001	006	1310	-4.36
001	007	1310	-5.39
001	008	1310	-6.05
001	009	1310	-3.36
001	010	1310	-3.24
001	011	1310	-3.39
001	012	1310	-2.84
001	013	1310	-2.73
001	014	1310	-4.96
001	015	1310	-4.15
001	016	1310	-3.83

Measurements:

Export settings

☒ Export device details

☒ Export table header

Decimal separator: ☒ , ☐ .

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	-5.01	
8	1	6	1310	-4.36	
9	1	7	1310	-5.39	
10	1	8	1310	-6.05	
11					
12					
13					

List1 / List2 / List3

List1 / 3 Vychodzie STD Celkom: