

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
- Backlight option
- 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:

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
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:

CWDM band; 1300 nm; 1625 nm
850 nm
including 2.5 mm universal adapter
battery loaded

between battery charging

Ordering code:

PM-212-CWDM + (options)
PM-212-CWDM-L + (options)

standard CWDM 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

Date: 19.8.2007
Operator: Miroslav Puchynovskii
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: PM420-PM4201090 Fiber Length: 8000 m
No. of Splices: 10 Splice Loss: 0 f dB
No. of Connectors: 2 Connector Loss: 0 f dB
No. of Passive Devices: 0 Passive Device: 0 f 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: 2.60 dB

Fiber	Loss @ 1310 nm			Loss @ 1550 nm			Note
	A-B	A-C	A-D	A-B	A-C	A-D	
1	4.52	4.21	4.28	3.48	3.42	3.40	PASS
2	4.24	4.21	4.24	3.56	3.59	3.58	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	3.10	3.10	3.10	PASS
6	4.62	4.81	4.81	3.68	3.72	3.78	FAIL
7	4.15	4.25	4.20	3.24	3.26	3.25	PASS
8	4.26	4.26	4.26	3.47	3.47	3.47	PASS
9	4.38	4.36	4.37	3.27	3.27	3.27	PASS
10	4.88	4.88	4.88	3.10	3.10	3.10	FAIL
11	4.11	4.13	4.12	3.27	3.18	3.23	PASS
12	4.18	4.21	4.20	3.59	3.48	3.54	PASS
13	4.46	4.21	4.28	3.49	3.40	3.46	PASS
Max	4.62	4.81	4.81	3.75	3.72	3.75	
Min	4.11	4.13	4.12	3.18	3.18	3.18	

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	3.59				
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 Data Selection Generate Protocol Setup Help

Loss Testing Report

Operator: Miroslav Puchynovskii Date: 19.8.2007

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: Splice Loss [dB]: 0.1
No. of Connectors: Connector Loss [dB]: 0.5
No. of Passive Devices: Passive Device [dB]: 0.6

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

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

OPTOKON data exporter 1.1

Options

Connecting to device: Connected device: OFT820 OFT8200008 Import from device

Send path: COM4

All	Absolute	Relative	Cable	Fiber	Wavelength	dBm
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	001	001	1310	-5.1
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	001	002	1310	-5.24
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	001	003	1310	-4.95
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	001	004	1310	-4.74
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	001	005	1310	-5.01
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	001	006	1310	-6.36
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	001	007	1310	-5.98
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	001	008	1310	-6.05
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	001	009	1310	-3.95
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	001	010	1310	-3.24
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	001	011	1310	-3.38
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	001	012	1310	-2.94
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	001	013	1310	-2.73
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	001	014	1310	-4.05
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	001	015	1310	-4.16
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	001	016	1310	-3.83

Export to Excel Export to Clipboard

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	-6.36	
9	1	7	1310	-5.98	
10	1	8	1310	-6.05	
11					
12					
13					
14					
15					