

PM-215

Pocket optical power meter USB probe

NEW!
THE SMALLEST
IN THE MARKET

Description:

The PM-215 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. It can be placed within rack mount ODF's with the display on the top or on the side. 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-215

Features:

- Two functions: Portable power meter
USB probe – accessory of Testing Workplace
- Small size, light weight
- Rotate display – switchable function (right/left-hander use)
- Backlight option
- SM and MM fiber testing
- Six working wavelengths
- Absolute and Relative optical power measurement
- Internal two level memory, 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
- Battery status indicator, Auto Off

Standard accessories:

- Power meter
- Universal 2.5 mm adapter (TE-ADP-250)
- USB cable
- Power charging adapter
- Traceable calibration certificate
- SmartProtocol SW
- Hard plastic case TE-HC-215, 265x270x90 mm



TE-HC-215

Specifications:

Photodetector	1 mm InGaAs
Working wavelengths	850, 1300, 1310, 1490, 1550, 1625 nm
Uncertainty	± 5%
Resolution	0.01
Dynamic range	-60 dBm to +10 dBm -53 dBm to +10 dBm
Dimensions	15 x 38 x 90 mm
Weight	less than 80 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	> 75 hrs
Battery life time	> 2 years

Compliant with RoHS-requirements (2002/95/EG, 27.01.2003)

Note:

can be customized
 1310, 1550 nm @ -20dBm

1300, 1310, 1490, 1550, 1625 nm
 850 nm
 including 2.5 mm universal adaptor
 battery loaded

between battery charging

**Options:
Changeable input adapters¹:**



Soft case:



TE-EVA-215
130x32x80 mm

Note: 1) other connector type – on request

Ordering code: **PM-215 + (options)** standard tester
PM-215-L + (options) tester with Backlight function

Application:

- Optical networks testing
- Test reports creating



Right-hander > switched to > **Left-hander** operator

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

OPTOKON
Date: 19.6.2007
Operator: Magda Rychnovská
Company: OPTOKON

Loss Testing Report

Trace: OPTOKON Cable House - Znojmo
Route: OPTOKON Cable House - Jihlava
End A: OPTOKON End B: Jihlava
Power Meter: PM-215/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	B-A	Avg	A-B	B-A	Avg	
1	4.32	4.24	4.28	3.48	3.42	3.45	PASS
2	4.43	4.41	4.42	3.56	3.51	3.54	PASS
3	4.59	4.47	4.53	3.26	3.22	3.24	PASS
4	4.12	4.21	4.17	3.28	3.18	3.23	PASS
5	4.52	4.54	4.53	3.33	3.31	3.32	PASS
6	4.82	4.81	4.81	3.68	3.72	3.70	FAIL
7	4.15	4.25	4.20	3.24	3.28	3.26	PASS
8	4.28	4.26	4.26	3.41	3.41	3.41	PASS
9	4.28	4.35	4.37	3.27	3.27	3.27	PASS
10	4.68	4.49	4.58	3.76	3.51	3.63	FAIL
11	4.11	4.13	4.12	3.27	3.18	3.23	PASS
12	4.37	4.24	4.30	3.59	3.48	3.54	PASS
Avg	4.40	4.37	4.38	3.43	3.37	3.40	
Max	4.82	4.81	4.81	3.75	3.72	3.70	
Min	4.11	4.13	4.12	3.24	3.18	3.23	

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				

SmartProtocol 1.0. (c) copyright OPTOKON

Loss Testing Report

Operator: Magda Rychnovská Date: 19.6.2007
Company: OPTOKON
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

Connecting to device: Connected device: PM-215 PM-215-2150009

Serial ports: COM4

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	-6.36
001	007	1310	-5.98
001	008	1310	-6.05
001	009	1550	-3.06
001	010	1550	-3.24
001	011	1550	-3.38
001	012	1550	-2.84
001	013	1550	-2.73
001	014	1550	-4.06
001	015	1550	-4.16
001	016	1550	-3.83

Export settings

Export device details
 Export table header
Decimal separator: , .

Buttons: Check all, Export checked, Export to Excel, Export to Clipboard

Excel spreadsheet showing the exported data table with columns A, B, C, D, E.

	A	B	C	D	E
1	PM-215	PM2150009			
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					