

## OFT-4212 Fiber optic 4-channels optical testing system

### Description:

The OFT-4212 introduces monitoring and testing system designed for long term measurement of time depending changes of optical power level. The system includes four input channels Power meter, Light source and reporting software - Optical Power Monitor. The system is available with 2 multimode 850/1300 nm or 4 single mode 1310/1490/1550/1625 nm working wavelengths.

The optical Power Meter is designed to measure absolute or relative optical power in four optical fibers at the same time. The OPM - Optical Power Monitor software allows monitoring of all four fibers at multiple wavelengths simultaneously. The measured data are recorded with TimeStamp which includes date and time of measurement. The results can be stored and easily exported into spreadsheets for Reports elaboration.

In addition the OFT-4212 is equipped with 650 nm visible light source for fiber visual check.



### Features:

- Testing system with data recording SW - time dependency optical power measurement
- 4-fibers simultaneous measurements
- Multimode and Single mode application
- 650 nm - Visual Fiber Locator (VFL)
- Absolute and Relative optical power measurement
- Displayed units: dBm, dB, W
- Six working wavelengths measurement:
- 850, 1300, 1310, 1490, 1550, 1625 nm
- Data processing or downloading
- USB probe mode - full control via simple commands

### Specifications:

#### Light Source

Output power		Note:
650 nm	0 dBm	typ. value
850, 1300 nm	-5 dBm	typ. value
1310, 1490, 1550, 1625 nm	-5 dBm	typ. value
Stability (1 hour, delta/2):		
850 nm, 1300 nm	± 0.03 dB	tested after 20 min warm up temperature 23 ± 1°
1310, 1490, 1550, 1625 nm	± 0.05 dB	
Output port:	FC/PC	Other on demand

## Power meter

Photodetector	4x 1 mm InGaAs 4x 3.6 mm Si (13 mm <sup>2</sup> )	Single mode Multimode
Working wavelengths	850, 1300, 1310, 1490, 1550, 1625 nm	can be customized
Dynamic range:	-65 dBm to +10 dBm -57 dBm to +10 dBm	1300, 1310, 1490, 1550, 1625 nm 850 nm
Uncertainty	± 5%	1310, 1550 nm @ -20 dBm
Resolution	0.01	
Input ports:	Universal 2.5 mm	Other on demand

## General specification

Dimensions	450 x 280 x 138 mm
Weight	4.8 kg
Power supply	5 V DC
Operation temperature	-10 to + 50 °C
Storage temperature	-40 to + 70 °C



OFT-4212-FC-31-49-55-62  
Front panel view



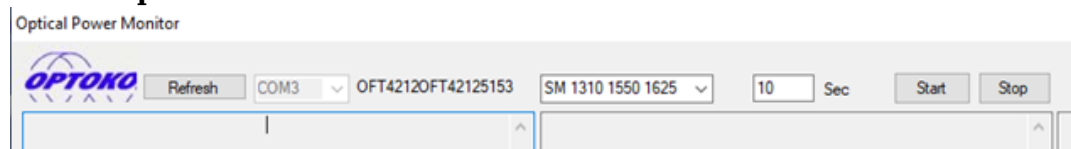
TE-ADP-250  
2.5 mm



TE-ADP-125  
1.25 mm

## Monitoring SW:

### OPM - Optical Power Monitor



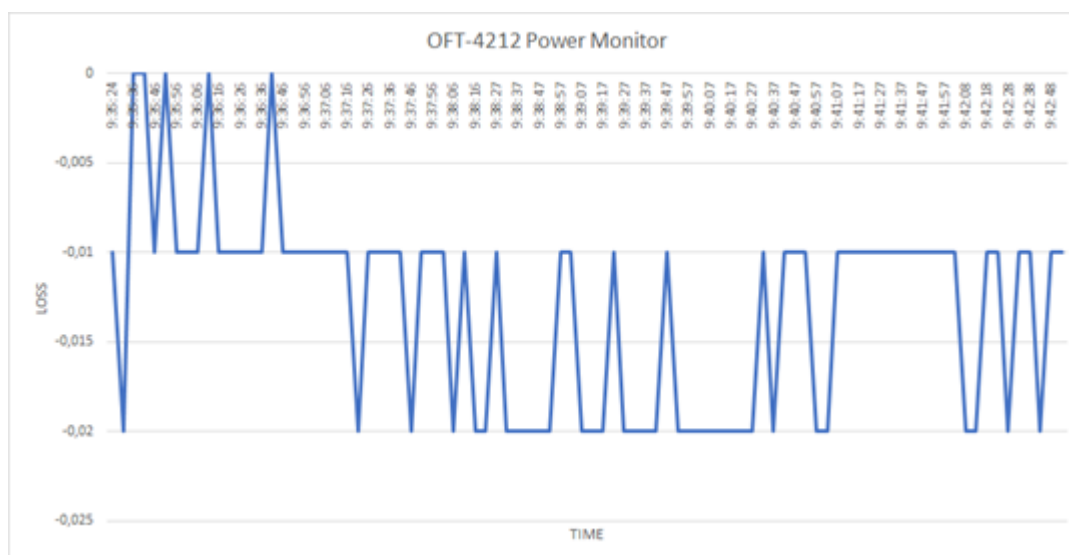
OPM - connection setup, parameter setting

Optical Power Monitor

Refresh COM3 OFF4212OFT4212S153 SM 1310 1550 1625 10 Sec Start Stop

28.05.2020 12:05:40	1310	+30,95	+31,75	+30,52	+30,89	28.05.2020 12:05:53	1550	-42,14	-42,21	-43,21	-42,89	28.05.2020 12:05:56	1625	+30,98	+31,79	+30,52	+30,94
28.05.2020 12:05:50	1310	+32,15	+32,94	+31,78	+32,20	28.05.2020 12:05:53	1550	-42,10	-42,10	-43,05	-42,67	28.05.2020 12:05:56	1625	+31,12	+31,93	+30,67	+31,00
28.05.2020 12:06:00	1310	+32,67	+33,46	+32,35	+32,78	28.05.2020 12:06:03	1550	-40,96	-41,00	-41,92	-41,57	28.05.2020 12:06:06	1625	+32,59	+33,39	+32,26	+32,71
28.05.2020 12:06:10	1310	+31,74	+32,60	+31,49	+31,96	28.05.2020 12:06:14	1550	-42,36	-42,29	-43,19	-42,75	28.05.2020 12:06:06	1625	+33,40	+34,21	+33,11	+33,54
28.05.2020 12:06:20	1310	+31,81	+32,69	+31,59	+32,06	28.05.2020 12:06:24	1550	-42,42	-42,33	-43,23	-42,81	28.05.2020 12:06:16	1625	+31,79	+32,70	+31,56	+32,07
28.05.2020 12:06:30	1310	+31,77	+32,66	+31,55	+32,02	28.05.2020 12:06:34	1550	-42,79	-42,39	-43,84	-42,56	28.05.2020 12:06:26	1625	+31,76	+32,67	+31,53	+32,03
28.05.2020 12:06:40	1310	+31,63	+32,49	+31,31	+31,79	28.05.2020 12:06:44	1550	-42,57	-42,52	-43,48	-41,07	28.05.2020 12:06:36	1625	+31,76	+32,67	+31,55	+32,06
28.05.2020 12:06:50	1310	+31,67	+32,52	+31,37	+31,84	28.05.2020 12:06:54	1550	-42,49	-42,44	-43,36	-42,95	28.05.2020 12:06:46	1625	+31,64	+32,52	+31,35	+31,85
28.05.2020 12:07:00	1310	+31,70	+32,56	+31,43	+31,89	28.05.2020 12:07:04	1550	-42,49	-42,43	-43,35	-42,94	28.05.2020 12:06:56	1625	+31,66	+32,53	+31,37	+31,86
28.05.2020 12:07:10	1310	+32,45	+33,36	+32,36	+32,89	28.05.2020 12:07:14	1550	-42,45	-42,38	-43,27	-42,84	28.05.2020 12:07:06	1625	+31,69	+32,58	+31,43	+31,91
28.05.2020 12:07:20	1310	+31,95	+32,83	+31,75	+32,24	28.05.2020 12:07:24	1550	-42,36	-42,27	-43,16	-42,71	28.05.2020 12:07:16	1625	+32,22	+33,12	+32,00	+32,48
28.05.2020 12:07:30	1310	+31,99	+32,80	+31,67	+32,09	28.05.2020 12:07:34	1550	-41,86	-41,90	-42,86	-42,52	28.05.2020 12:07:26	1625	+31,85	+32,76	+31,45	+32,17
28.05.2020 12:07:40	1310	+32,34	+33,20	+32,14	+32,11	28.05.2020 12:07:44	1550	-41,63	-41,66	-42,63	-42,27	28.05.2020 12:07:37	1625	+32,44	+33,21	+32,03	+32,45
28.05.2020 12:07:50	1310	+32,54	+33,34	+32,21	+32,64	28.05.2020 12:07:54	1550	-41,64	-41,65	-42,57	-42,18	28.05.2020 12:07:47	1625	+32,49	+33,12	+32,16	+32,63
28.05.2020 12:08:01	1310	+32,53	+33,34	+32,21	+32,64	28.05.2020 12:08:04	1550	-40,57	-40,60	-41,48	-41,12	28.05.2020 12:07:57	1625	+32,56	+33,17	+32,24	+32,68
28.05.2020 12:08:11	1310	+31,54	+34,12	+33,20	+33,61	28.05.2020 12:08:14	1550	-40,63	-40,65	-41,55	-41,17	28.05.2020 12:08:07	1625	+33,59	+34,18	+33,27	+33,70
28.05.2020 12:08:21	1310	+32,38	+32,86	+31,63	+31,95	28.05.2020 12:08:24	1550	-42,43	-42,42	-43,38	-41,01	28.05.2020 12:08:17	1625	+33,49	+34,12	+33,20	+33,65
28.05.2020 12:08:31	1310	+31,25	+32,80	+30,67	+30,87	28.05.2020 12:08:34	1550	-41,20	-41,36	-44,62	-44,48	28.05.2020 12:08:27	1625	+33,66	+32,58	+33,29	+33,73
28.05.2020 12:08:41	1310	+31,01	+31,73	+30,36	+30,57	28.05.2020 12:08:44	1550	-41,12	-41,39	-44,61	-44,46	28.05.2020 12:08:37	1625	+33,02	+31,77	+30,38	+30,60
28.05.2020 12:08:51	1310	+31,91	+32,72	+31,55	+31,93	28.05.2020 12:08:54	1550	-42,92	-42,95	-44,06	-41,86	28.05.2020 12:08:47	1625	+30,84	+31,63	+30,16	+30,39
28.05.2020 12:09:01	1310	+31,77	+32,55	+31,36	+31,72	28.05.2020 12:09:04	1550	-42,45	-42,48	-43,50	-41,17	28.05.2020 12:08:57	1625	+31,50	+32,35	+31,15	+31,57
28.05.2020 12:09:11	1310	+32,45	+33,24	+32,09	+32,49	28.05.2020 12:09:14	1550	-42,50	-42,53	-43,51	-41,19	28.05.2020 12:09:07	1625	+31,75	+32,55	+31,31	+31,71
28.05.2020 12:09:21	1310	+31,68	+32,46	+31,25	+31,63	28.05.2020 12:09:24	1550	-42,53	-42,55	-43,56	-41,22	28.05.2020 12:09:17	1625	+31,71	+32,52	+31,28	+31,69
28.05.2020 12:09:31	1310	+31,68	+32,46	+31,25	+31,63	28.05.2020 12:09:34	1550	-42,52	-42,53	-43,54	-41,20	28.05.2020 12:09:27	1625	+31,63	+32,45	+31,21	+31,62
28.05.2020 12:09:41	1310	+31,84	+32,63	+31,43	+31,84	28.05.2020 12:09:44	1550	-42,44	-42,46	-43,46	-41,11	28.05.2020 12:09:37	1625	+31,65	+32,46	+31,23	+31,63
28.05.2020 12:09:51	1310	+31,76	+32,54	+31,34	+31,73	28.05.2020 12:09:54	1550	-42,49	-42,50	-43,50	-41,16	28.05.2020 12:09:47	1625	+31,69	+32,51	+31,27	+31,69
28.05.2020 12:10:01	1310	+31,70	+32,49	+31,27	+31,66	28.05.2020 12:10:04	1550	-42,56	-42,58	-43,58	-41,24	28.05.2020 12:09:57	1625	+31,67	+32,49	+31,26	+31,68
28.05.2020 12:10:11	1310	+31,63	+32,40	+31,21	+31,59	28.05.2020 12:10:14	1550	-42,50	-42,52	-43,53	-41,19	28.05.2020 12:10:07	1625	+31,59	+32,40	+31,18	+31,59
28.05.2020 12:10:21	1310	+31,65	+32,43	+31,23	+31,61	28.05.2020 12:10:24	1550	-42,12	-42,20	-43,19	-42,77	28.05.2020 12:10:17	1625	+31,42	+32,25	+31,00	+31,40
28.05.2020 12:10:31	1310	+31,62	+32,40	+31,21	+31,59	28.05.2020 12:10:34	1550	-42,54	-42,55	-43,56	-41,21	28.05.2020 12:10:27	1625	+31,42	+32,29	+31,13	+31,58
28.05.2020 12:10:41	1310	+31,77	+32,56	+31,36	+31,75	28.05.2020 12:10:44	1550	-42,43	-42,45	-43,43	-41,08	28.05.2020 12:10:37	1625	+31,83	+32,66	+31,44	+31,86
28.05.2020 12:10:51	1310	+31,77	+32,54	+31,35	+31,75	28.05.2020 12:10:54	1550	-42,49	-42,50	-43,50	-41,15	28.05.2020 12:10:47	1625	+31,69	+32,55	+31,28	+31,70
28.05.2020 12:11:01	1310	+31,70	+32,49	+31,29	+31,66	28.05.2020 12:11:04	1550	-42,24	-42,28	-43,29	-42,91	28.05.2020 12:10:57	1625	+31,70	+32,51	+31,28	+31,69
28.05.2020 12:11:11	1310	+31,91	+32,49	+31,51	+31,90	28.05.2020 12:11:14	1550	-42,27	-42,29	-43,26	-42,93	28.05.2020 12:11:07	1625	+31,89	+32,70	+31,53	+31,91
28.05.2020 12:11:21	1310	+31,70	+32,49	+31,29	+31,67	28.05.2020 12:11:24	1550	-42,41	-42,43	-43,42	-41,07	28.05.2020 12:11:17	1625	+31,99	+32,77	+31,57	+31,99
28.05.2020 12:11:31	1310	+31,83	+32,62	+31,43	+31,83	28.05.2020 12:11:34	1550	-42,36	-42,38	-43,37	-41,00	28.05.2020 12:11:27	1625	+31,76	+32,57	+31,36	+31,79
28.05.2020 12:11:41	1310	+31,90	+32,69	+31,49	+31,88	28.05.2020 12:11:44	1550	-42,34	-42,35	-43,34	-42,99	28.05.2020 12:11:37	1625	+31,79	+32,60	+31,39	+31,82
28.05.2020 12:11:51	1310	+31,89	+32,68	+31,48	+31,87	28.05.2020 12:11:54	1550	-42,34	-42,34	-43,34	-42,99	28.05.2020 12:11:47	1625	+31,85	+32,67	+31,45	+31,87
28.05.2020 12:12:01	1310	+31,88	+32,67	+31,47	+31,86	28.05.2020 12:12:04	1550	-42,32	-42,33	-43,33	-42,98	28.05.2020 12:11:57	1625	+31,86	+32,67	+31,45	+31,87

Delete Save



OPM -data saving, Report elaboration

## Ordering code:

**OFT-4212-FC-850-30**

MM Loss test set, 850/1300 nm FC/PC adapter output port

**OFT-4212-FC-31-49-55-62**

SM Loss test set, 1310/1490/1550/1625 nm, FC/PC adapter output