

Data Sheet

VIAVI OLP-87

SmartClass Fiber PON Power Meter B/G/NG-PON2 Composite Power Version

The VIAVI OLP-87 is an FTTx/PON power meter for use in qualifying, activating, and troubleshooting B-PON, G-PON, and next generation high speed NG-PON2 networks.

Part of the VIAVI SmartClass[™] Fiber family, the OLP-87 combines a high performance λ selective FTTx/ PON power meter with automated fiber inspection analysis into one portable solution. These combined capabilities guarantee service providers a lifetime of network and service performance, and gives contractors an essential tool for delivering best-in-class, reliable networks to their customers. The OLP-87 is ideal for end-of-line testing, activation, and maintenance of all FTTx/PON signals. The through-mode capability can simultaneously measure voice, data and RF video signals on a fiber at 1490/1550 and 1600nm downstream and at 1310/1535 nm in burst mode upstream.

The OLP-87 is compatible with the P5000i digital analysis microscope so users can check fiber end-face quality and get pass/fail acceptance results with one button push.



Benefits

- Reduced CAPEX: One instrument for testing legacy B-PON and G-PON as well as next generation NG-PON2 networks
- Reduced OPEX: Easy operation due to simplified workflow driven user interface reduces training cost and makes all technicians fiber experts
- Certification and documentation: Auto fiber end-face certification and PON-power measurements prove that quality of work meets industry standards and network/ customer specifications.

Features

- Field-portable $\boldsymbol{\lambda}$ selective PON power meter with through-mode capability
- Can measure B/G-PON downstream signals at 1490 nm and new NG-PON2 signals at 1600 nm
- Burst mode measurement for 1310 nm B-/G-PON and 1535 nm TWDM upstream signals
- Pre-defined threshold sets for auto Pass/Fail analysis of PON power measurements
- Automated Pass/Fail fiber inspection analysis with optional P5000i microscope
- Rugged, weather-proof design

A new workflow driven user interface simplifies acceptance testing with simple selection of ITU-T standardized pass/fail thresholds. Users can easily save test results and generate certification reports to document work quality. Integrating these capabilities into one solution drives technician behavior toward implementing today's best practices in a seamless workflow that optimizes efficiency and reliability to get jobs right—the first time.

The handheld OLP-87 can be used anywhere today's fiber technicians go, up poles or down holes. Technicians get ultimate flexibility and performance from this powerful, easy-to-use solution that can help any technician become an instant fiber expert.

Wavelength selective power measurements in B-/G.- and next generation NG-PON2 FTTx networks.



B/G-PON	DS 1490 nm and US 1310 nm testing
NG-PON2	DS 1600 nm and US 1535 nm window
RF-Video	1550 nm video overlay testing

Inspect and Test Fiber Anywhere

Use optional P5000i digital analysis microscope with automatic image centering and auto pass/fail analysis to inspect fiber end faces and eliminate poor-quality components from entering your network

New Workflow-driven GUI to Auto-Select Pass/Fail Acceptance Criteria



Easily select PON-type, Location, and Vendor to setup standard pass/fail thresholds providing reliable acceptance testing with simultaneous display of all PON and video power levels.

Store Inspection and Measurement Readings on the Device

Store up to 10,000 measurement results on the device or, for additional storage, on a USB memory stick.

Technical Specifications					
Power ^{1,2}	B/G-PON	NG-PON2 (TWDM)	RF Video		
Upstream ³ Meas. Range / max input Spectral passband	1310 nm -40 to +13 / +17 dBm 1260 to 1360 nm	1535 nm -40 to +13 / +17 dBm 1500 to 1620 nm			
Downstream Meas. Range / max input Spectral passband	1490 nm -40 to +13 / +15 dBm 1450 to 1500 nm	1600 nm 40 to +26 / +27 dBm 1585 to 1625 nm	1550 nm 40 to +26 / +27 dBm 1535 to 1565 nm		
Measurement uncertainty	±0.5 dB ^{2,4}				
Pass-through insertion loss	<1.5 dB ²				
ORL	>60 dB				
Calibrated wavelengths	1310/1490/1550/1625 nr	n			

General Specifications				
Display	High-contrast 3.5" color LCD touch-screen			
Display resolution	0.01 dBm/0.001 μW			
Measurement units	dB, dBm, W, pass/fail			
Fiber inspection	P5000i probe (option)			
Threshold sets	Standardized threshold sets are pre-loaded			
Live image	320x240x8 bit grey, 10 fps			
Data memory	Up to 10,000 PON results			
Data readout	Via client USB interface			
Electrical interface	2 x USB host, 1x micro USB, Ethernet			
Battery	8 NiMH/dry batteries			
Battery life	>10 hrs			
Optical connectors (PON measurements)	SC/APC (optional: FC, ST and LC adapters)			
Recommended recal. Interval	3 years			
Dimensions and weight	8.2 x 4.4 x 2.5 in 1.6 lbs			
Operating temp. range	14 to 122°F			

1. For B-PON (ITU-T G.983.x), G-PON (ITU-T G984.x) and NG-PON2 signals

2. At 23°C \pm 3°C, at calibrated wavelengths

3. Burst mode: -35 to +13dBm

4. At -7 dBm

Ordering Information

Description	Part Number	
OLP-87 NG-PON2 1310/1490/1535/1550/1600nm, SC-APC	2305/40	
Included Items		
8 x ALKALINE BATTERY MIGNON AA- SIZE LR6	2229/90.01	
1 x Uc-4 Hands Free Carrier for SCF	2128/01	
1 x SC-2 SOFT SHOULDER CASE FOR SCF	2128/03	
1 x Fiber One-CLIck Cleaner 2.5mm		

Options and Accessories				
Description	Part Number			
UC4 hands-free carrier	2128/01			
SCASE2 soft shoulder case	2128/03			
Fiber One-CLIck Cleaner 2.5mm				
RBP2 rechargeable battery pack; Li-ion battery 3.7 V-20 W/hr	2305/90.02			
PS4 power supply, 12 V/2 A	2305/90.01			
P5000i Digital analysis probe, USB 2.0	FBP-P50001			
Commonly used inspection tips	VZ-TIP- Standard			
Inspect Corning OptiTap receptacles	FBPT-COD-L			

VIAVI Care Support Plans

Increase your productivity for up to 5 years with optional VIAVI Care Support Plans:

- Maximize your time with on-demand training, priority technical application support and rapid service.
- Maintain your equipment for peak performance at a low, predictable cost.

For more Information: go to viavisolutions.com/viavicareplan

Features

					*5-	5-year plans only	
Plan	Objective	Technical Assistance	Factory Repair	Priority Service	Self-paced Training	5 Year Battery and Bag Coverage	Factory Calibration
BronzeCare	Technician Efficiency	Premium	\checkmark	\checkmark	\checkmark		
SilverCare	Maintenance & Measurement Accuracy	Premium	\checkmark	\checkmark	\checkmark	\checkmark^{\star}	\checkmark



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