

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 λ 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.

09:24	
ONT -> US 1535 nm Pow: LOW dBm	FAIL
OLT -> DS 1600 nm Pow: LOW dBm	PASS
RF Video 1550 nm Pow: LOW dBm	PASS
PON Type: NG-PON2	Location: FDT
Vendor: NA	

- 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 nm		

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 G.984.x) and NG-PON2 signals
2. At 23°C ± 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	ECLICKCLEANER25

Options and Accessories	
Description	Part Number
UC4 hands-free carrier	2128/01
SCASE2 soft shoulder case	2128/03
Fiber One-CLiCk Cleaner 2.5mm	ECLICKCLEANER25
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-P5000I
Commonly used inspection tips	VZ-TIP-Standard
Inspect Corning OptiTap receptacles	FBPT-COD-L



Contact Us **+1 844 GO VIAVI**
(+1 844 468 4284)

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visit viavisolutions.com/contacts.

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