

VIAVI

SmartClass Fiber OLP-87

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

The VIAVI Solutions® SmartClass™ Fiber 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

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

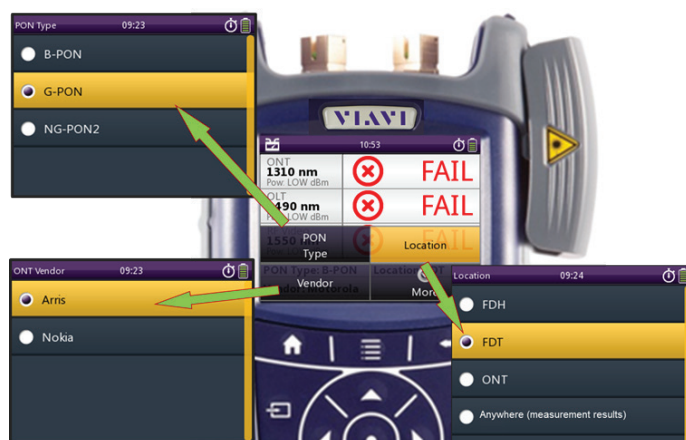
09:24	
ONT -> US 1535 nm Pow: LOW dBm	 FAIL
OLT -> DS 1600 nm Pow: LOW dBm	 PASS
RF Video 1550 nm Pow: LOW dBm	 PASS
PON Type: NG-PON2	Location: FDT
Vendor: NA	

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

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.

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.

Plan availability depends on product and region. Not all plans are available for each product or in every region.

To find out which VIAVI Care Support Plan options are available for this product in your region, contact your local representative or visit: viavisolutions.com/viavicareplan

Features

*5-year plans only

Plan	Objective	Technical Assistance	Factory Repair	Priority Service	Self-paced Training	5 Year Battery and Bag Coverage	Factory Calibration	Accessory Coverage	Express Loaner
 BronzeCare	Technician Efficiency	Premium	✓	✓	✓				
 SilverCare	Maintenance & Measurement Accuracy	Premium	✓	✓	✓	✓*	✓		
 MaxCare	High Availability	Premium	✓	✓	✓	✓*	✓	✓	✓

VIAVI

SmartClass Fiber OLP-87

PON Power Meter NG-PON2 Wavelength Selective Version

The VIAVI Solutions® SmartClass™ Fiber OLP-87 NG-PON2 is an FTTx/PON power meter for use in qualifying, activating, and troubleshooting of next-generation, high-speed NG-PON2 networks.

Part of the VIAVI SmartClass Fiber family, the OLP-87 NG-PON2 combines a high-performance λ -selective FTTx/PON meter with pass/fail 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 NG-PON2 networks. By using separate wavelength selective power meters it is possible to analyze each individual channel of the NG-PON2 signals separately. Low insertion loss, through-mode capability enables simultaneous power measurements of downstream and burst mode upstream signals.

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 OPEX: Easy operation due to simplified workflow driven user interface reduces training cost and makes all technicians fiber experts
- Reduces time for trouble shooting as each individual NG-PON2 channel power can be analyzed
- Certification and documentation: Auto fiber end-face certification and PON-power measurements prove that quality of work meets industry standards and network/customer specifications

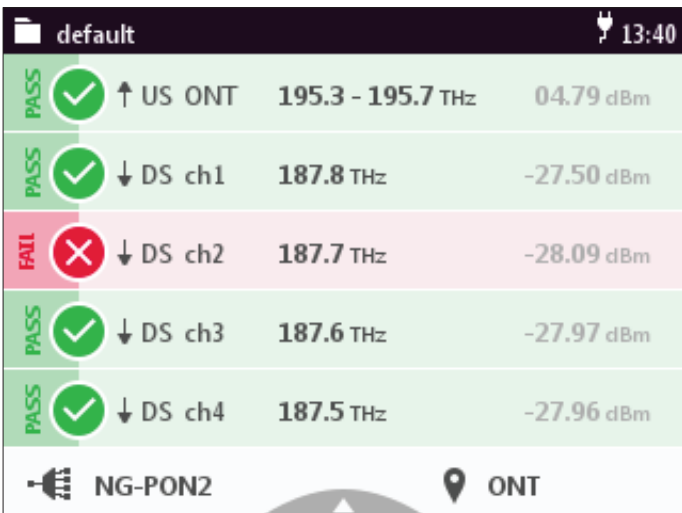
Features

- Field-portable λ selective PON power meter with through-mode capability
- Can measure each individual NG-PON2 TWDM-channel
- Burst mode measurement for NG-PON2 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 next generation NG-PON2 FTTx networks.

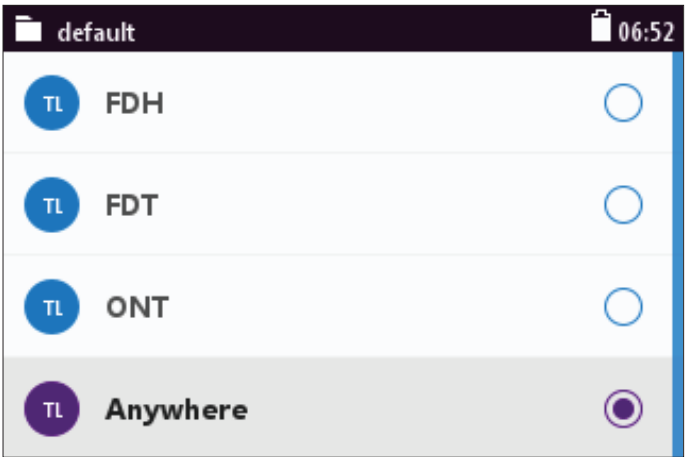


Analysis of the power level for each NG-PON2 channel

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 internally stored Pass/Fail thresholds by selecting the measurement Location providing reliable acceptance testing with simultaneous display of all PON 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.

VIAVI Care Support Plans

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

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- Maintain your equipment for peak performance at a low, predictable cost.

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 BronzeCare	Technician Efficiency	Premium	✓	✓	✓				
 SilverCare	Maintenance & Measurement Accuracy	Premium	✓	✓	✓	✓*	✓		
 MaxCare	High Availability	Premium	✓	✓	✓	✓*	✓	✓	✓

VIavi

OLP-87/87P

SmartClass Fiber PON Power Meter and Microscope

The VIavi Solutions OLP-87 is an FTTx/PON power meter for use in qualifying, activating, and troubleshooting B-PON, E-PON, G-PON, and next-generation, high-speed 10 G PONs such as XG-PON and 10G-EPON networks. As part of the VIavi Solutions SmartClass™ Fiber family, the OLP-87 combines a high-performance λ -selective FTTx/PON meter with pass/fail fiber inspection analysis into one portable solution. These combined capabilities guarantee service providers a lifetime of system performance from their network connectivity 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 fiber at 1490/1550/1577 nm downstream and 1270 or 1310 nm 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. The OLP-87P features an integrated patch-cord microscope (PCM) for added value and improved workflow efficiency.

Users can easily save test results and generate certification reports to document work quality. Integrating these capabilities into one system drives technician behavior toward implementing today's best practices in a seamless workflow that optimizes efficiency and reliability so they complete the job 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



KeyFeatures

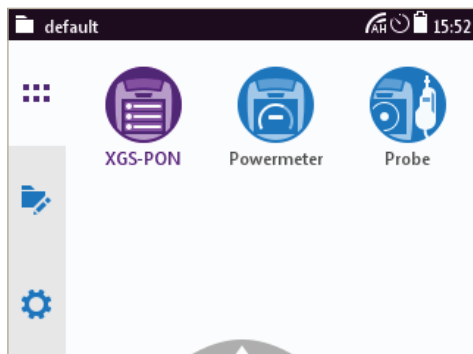
- First universal PON meter with B-PON, E-PON, G-PON, and new XG-PON/10G-EPON networks test support
- Field-portable λ -selective PON power meter with through-mode capability
- Available in 1310/1490 nm, 1310/1490/1550 nm, and 1270/1310/1490/1550/1577 nm versions
- Burst mode measurement of 1270 nm or 1310 nm upstream signals
- High-performance broadband power-meter option
- Automated pass/fail fiber inspection analysis with optional P5000i microscope
- Integrated patch-cord microscope version
- On-board fiber inspection and test results storage
- Data transfer and remote control via USB via USB, Ethernet or optional WiFi connection
- Smart-Reporter certification software to create customized reports
- Modern, smartphone-style user interface with touch screen
- Rugged, weather-proof design

Become an Instant Fiber Expert with SmartClass Fiber

- ✓ **Integration** Combines inspection and testing
- ✓ **Automation** Pass/fail certification
- ✓ **Ease of use** Intuitive smartphone-style user interface

Intuitive Smartphone-Style User Interface

High-contrast, color touch screen with menu icons.



Simultaneously Displays All FTTx/PON Power Levels

Shows OLT downstream signals at 1490, 1550, and 1578 nm along with ONT upstream burst mode signals at 1270 and 1310 nm.

G-PON ONT 1310 nm	-04.24 dBm
G-PON OLT 1490 nm	-12.61 dBm
XGS-PON ONT 1270 nm	LOW dBm
XGS-PON OLT 1577 nm	-20.84 dBm
RF Video 1550 nm	LOW dBm

Store Inspection and Measurement Readings on the Device

Store up to 10,000 measurement results on the device or, for additional storage, a USB host with a pluggable memory key.

Group: CABLE...		
Fiber ID	λ [nm]	Power [dBm]
BAKER.STREET.10	1310	-41.23
BAKER.STREET.10	1490	-10.24
BAKER.STREET.10	1550	-03.42
FIBER44	1310	-41.21
FIBER44	1490	-10.24

User-Definable Pass/Fail Acceptance Criteria

Whether using the IEC 61300-3-35 or customer-specific requirements, users can easily manage user-specified acceptance criteria with dedicated profiles for each requirement.

Set: default		
G-PON ONT 1310 nm	✓	PASS
G-PON OLT 1490 nm	✓	PASS
XGS-PON ONT 1270 nm	✗	FAIL
XGS-PON OLT 1577 nm	✓	PASS
RF Video 1550 nm	✗	FAIL

Comprehensive Data Management and Report Generation

Easily generate certification reports that prove your quality of work meets industry standards or customer specifications using Smart Reporter™ PC software.

- Easily store measurement data at the press of a button
- Manage data and store results on the instrument
- Download measurement results to a PC via a USB interface

Device Type: OLP-55/01

Serial Number: M-0001

Port Name: COM3

Software Version: V03.32

	Group	Fiber ID	Wavelength	Power [dBm]	Power [Watt]	Power [dB]	Reference	PASS/FAIL	Threshold
1	MEASUREMENT1	FIBER1.00001	1310	2.78	0.00189671	2.78	0	OVER	default
2	MEASUREMENT1	FIBER1.00002	1490	0.78	0.00119674	0.78	0	OVER	default
3	MEASUREMENT1	FIBER1.00003	1550	1.41	0.00138357	1.41	0	OVER	default
4	MEASUREMENT1	FIBER2.00001	1310	2.78	0.00189671	2.78	0	OVER	default
5	MEASUREMENT1	FIBER2.00002	1490	0.78	0.00119674	0.78	0	OVER	default

Perform Broadband Power Measurements

Combines Power Measurements in One Handheld Device

Providing selective power measurements for PON applications and broadband (BB-PM), OLP-87 3-wavelength and 5-wavelength versions provide a separate high-performance broadband power meter option with universal push/pull optical adapters (UPP) for easy and accurate power measurements.



Benefits of a Separate Broadband Power Meter

- A highest absolute accuracy of ± 0.2 dB, due to a free-space optical interface and InGaAs photodiode, avoids fiber/fiber coupling uncertainty
- Easy adaptation of any 2.5 mm and optional 1.25 mm connector type using a universal UPP adapter
- Easy cleaning due to direct access to the photodiode surface
- Tone detection for fiber identification
- Auto lambda function, compatible with all VIAVI sources

Inspect and Test Fiber Anywhere

Combines Inspection and Test in One Handheld Device

Use either the onboard PCM or connect a P5000i digital analysis microscope to inspect fiber end faces and eliminate poor-quality components from entering your network.

Benefits of Using P5000i and PCM Together

Working with both the P5000i and PCM:

- Optimizes technician performance with tools designed for workflow
- Improves network activation with a reliable, repeatable processes
- Ensures test leads are safely stored when not in use
- Enables quick and easy inspection of both female (bulkhead) and male (patch cord) fiber connectors without changing tips

Automatic Image Centering

This convenient feature centers the fiber image on the screen.

Ultimate Portability and Organization

The hands-free carrier stores all essential tools, such as the inspection microscope, visual fault locator, and cleaning materials, in an organized, portable system that you can take with you to every job.



Specifications

Power Meter	OLP-87/87P 1310/1490 nm	OLP-87/87P 1310/1490/1550 nm	OLP-87/87P XG-PON 1270/1310/1490/1550/1577 nm
Functionality			
B-PON (ITU-T G983.x)	■	■	■
G-PON (ITU-T G984.x)	■	■	■
E-PON (IEEE 802.3av)	■	■	■
XG PON (ITU-T G.987)			■
10G-EPON (IEEE 802.3av)			■
RF video signals 1550nm		■	■
Broadband power meter	■	Option	Option

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 BronzeCare	Technician Efficiency	Premium	✓	✓	✓				
 SilverCare	Maintenance & Measurement Accuracy	Premium	✓	✓	✓	✓*	✓		
 MaxCare	High Availability	Premium	✓	✓	✓	✓*	✓	✓	✓



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

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visit viavisolutions.com/contact

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