

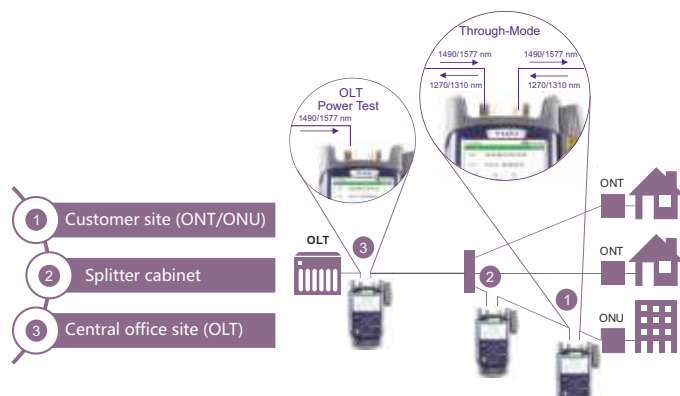
SmartClass Fiber OLP-88/-88P TruePON

Full-featured G-PON and XGS-PON
tester with fiber connector inspection



The VIAVI Solutions OLP-88 TruePON tester is the ideal tool for field technicians dealing with G-PON and XGS-PON network service activation and for support teams charged with resolving service complaints and identifying the sources of issues. TruePON uses G-PON data analysis for real-time measurement of fiber optic cable insertion loss, downstream and upstream power levels, ODN class, and for instantaneous identification of OLT-ID ONU/ONT-ID as well as rogue ONUs causing service issues.

The tester also inspects and certifies fiber end faces, critical steps that must be performed before making any fiber optic connection. With TruePON, technicians get ultimate flexibility and performance from a powerful, easy-to-use solution that instantly turns any user into a Fiber Smart technician.



Connect and perform measurements anywhere in your PON network

BENEFITS

- Ensures first-time-right G-PON and XGS-PON network acceptance
- Reduces workflow complexity during service activation
- Speeds on-site troubleshooting and facilitates service recovery
- Drives optimal user workflows and behaviors to eliminate issues caused by poor practices

BENEFITS

- Wavelength-selective, through-mode power meter for B-PON, E-PON, G-PON, XGS-PON and 10G-EPON networks
- Available in 1310/1490 nm, 1310/1490/1550 nm and 1270/1310/1490/1577 nm versions
 - Automatic ODN class detection and power-level pass/fail analysis
 - In-service loss measurements
 - OLT identification; ONU/ONT serial number extraction; rogue and alien ONU detection
- Low-insertion loss (<1.5 dB)
- Automated pass/fail fiber inspection analysis with built-in patch-cord microscope or optional P5000i probe
- Easy generation of professional certification reports

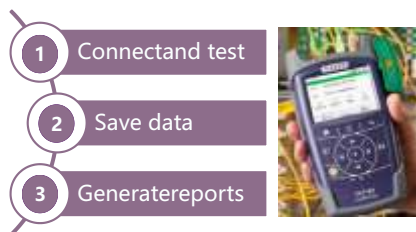
Transforms G-PON Service Activation and Troubleshooting

The comprehensive TruePON tester uses a new technology that enables precise G-PON data analysis for faster, errorfree service activations and advanced troubleshooting. Its sophisticated data analysis:

- Extracts G-PON-specific data carried in the PON-ID standardized by ITU-T G.984.3 Amendment 3.
- Displays OLT transmitted power levels for in-service loss testing between an OLT and ONU/ONT*
- Identifies the ONU/ONT by serial number and rogue or alien ONUs/ONTs in any G-PON system

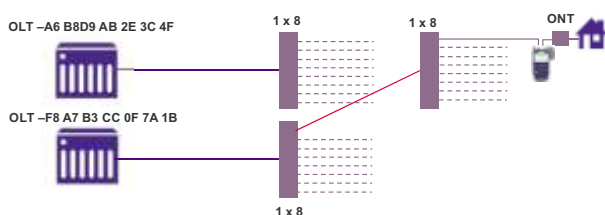
Saves Time

TruePON minimizes or eliminates the time needed to configure jobs at the office prior to a work session. It lets you start testing right away, extracting all relevant information (thresholds, ONT serial number, OLT-ID) directly from data carried in the G-PON signals*.



Improves Field Technician Efficiency

Absent or wrong labeling of fiber cables in splitter cabinets can lead to incorrect customer/ONT connections. TruePON ensures the ONT is connected to the right G-PON OLT by identifying the OLT-ID carried by the PON-ID at any network location*.



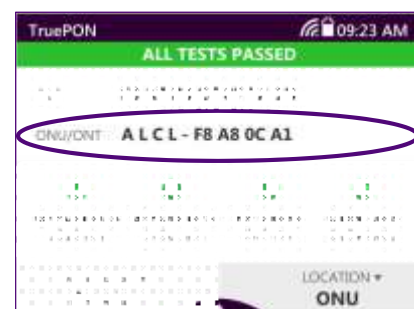
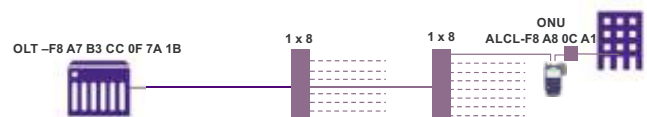
Certifies Power Levels Automatically

When verifying power levels at a customer ONT, TruePON certifies that the G-PON and XGS-PON services meet specifications by performing a fully automated power level certification. It performs downstream and upstream PON power level measurements (1270/1310/1490/1577 nm) and automatically sets pass/fail thresholds in systems with PON-ID*.



Eliminates Human Errors While Ensuring Reliable Results

Service-activation is often performed by subcontractors who are dealing with hundreds of customer turn ups. To make sure test reports are error-free and authentic, TruePON analyzes G-PON data to extract and display ONU/ONT serial numbers. It allocates ONU/ONT serial numbers according to the customer service contract, and automatically links service-activation results to the ONT/customer—ensuring the authenticity of test results.



* Requires activation of PON-ID functionality in G-PON systems according to ITU-T G.984.3 Amd3.

Qualifies In-Service Fiber Plant

During the construction phase, the fiber plant is qualified; end-to-end loss testing ensures that the fiber link complies with the loss budget. However, several years later, when new customers subscribe to the FTTH services, performance may not be intact. TruePON performs real-time, in-service, end-to-end loss measurements in G-PON networks*. It is the fastest way to qualify fiber links in an already-running network.

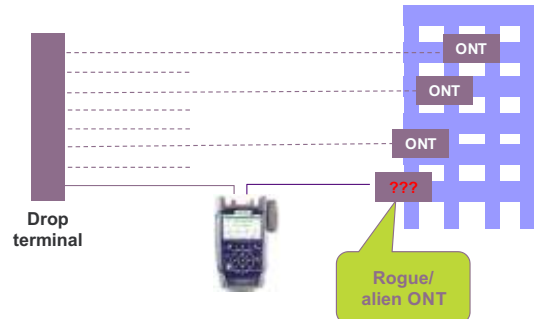


Stands Up to Harsh Field Conditions

Compact and lightweight (<1 kg), OLP-88 is a ruggedized tool for field technicians working indoors and outdoors. It runs for up to 12 hours on battery power, and is easy to operate using a simple and user-friendly color touch-screen display. OLP-88 stores up to 10,000 test results and includes an APC test interface with a switchable adapter system.

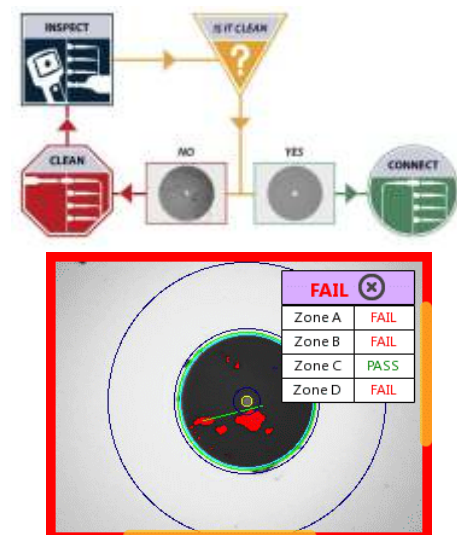
Facilitates Fast Service Recovery

Identifying and localizing a rogue ONU that degrades or disables customer service can be difficult. OLP-88 instantaneously detects the presence of a rogue or alien ONU/ONT in G-PON networks, facilitating fast service recovery by isolating the faulty ONU/ONT for quick replacement.



Drives Best Practices

More than 75% of fiber network troubleshooting can be attributed to connector contamination. OLP-88, optionally equipped with a built-in patch-cord microscope, helps ensure that fiber technicians follow best practices. It integrates automatic pass/fail certification for fiber connectors for optimal user workflows and behaviors that eliminate poor practices.



* Requires activation of PON-ID functionality in G-PON systems according to ITU-T G.984.3 Amd3.

The SmartClass Fiber Product Family

- ✓ **Integration** — combines inspection and testing
- ✓ **Automation** — pass/fail certification
- ✓ **Ease of use** — intuitive touch-screen user interface



SmartClass Fiber tester with P5000i analysis microscope



SmartClass Fiber tester with patch-cord microscope



SmartClass Fiber tester with patch-cord microscope



OLP-37 PON/ROG Power Meter

- Power level measurements of 1490/1550/1610 nm downstream signals

OLP-37X G/XGS-PON Power Meter

- Power level measurements of 1490/1577nm downstream signals



OLP-87 PON/ XG-PON Power Meter

- Power level measurements of 1490/1550/1577 nm downstream and 1270/1310 nm upstream signals

OLP-87 NG-PON2 Power Meter

- Simultaneous selective power level measurements of 1596.34/1597.18/1598.04/1598.89 nm downstream and 1595-1603 nm upstream signals
- Fiber connector inspection



OLP-88 TruePON Tester

- Power level measurements of 1490/1550 nm downstream and 1310 nm upstream signals (model 2327/36), or 1490/1577 downstream and 1270/1310 upstream (model 2327/37)

- G-PON ONT/OLT/ONU identification
- Detection of alien/rogue ONU/ONTs in G-PON systems
- In-service loss testing in G-PON systems
- Fiber connector inspection

SPECIFICATIONS

Power Meter	Version 2327/26 (1310/1490)	Version 2327/36, 2328/36 (1310/1490/1550)	Version 2327/37 (1270/1310/1490/1577)
Functionality			
B-PON (ITU-T G983.x)	■	■	■
G-PON (ITU-T G984.x)	■	■	■
E-PON (IEEE 802.3av)	■	■	■
XGS PON (ITU-T G.9807.1)			■ (option)
10G-EPON (IEEE 802.3av)			■ (option)
RF video signals 1550nm		■	
FTTx Mode			
Upstream 1270 nm, burst mode			
Power measurement range			-40 to +13 dBm ^{1,2}
Max permitted input level			+17 dBm
Spectral passband			1250 to 1330 nm
Upstream 1310 nm, burst mode			
Power measurement range	-40 to +13 dBm ¹	-40 to +13 dBm ¹	-40 to +13 dBm
Max permitted input level	+17 dBm	+17 dBm	+17 dBm
Spectral passband	1290 to 1330 nm	1290 to 1330 nm	1250 to 1330 nm
Downstream 1490 nm			
Power measurement range	-45 to +7 dBm	-45 to +7 dBm	-45 to +7 dBm
Max permitted input level	+9 dBm	+9 dBm	+9 dBm
Spectral passband	1450 to 1495 nm	1450 to 1495 nm	1450 to 1495 nm
G-PON Data Analysis at 1490 nm	-30 to +7 dBm	-30 to +7 dBm	-30 to +7 dBm
Downstream 1577 nm²			
Power measurement range			-45 to +13 dBm
Max permitted input level			+15 dBm
Spectral passband			1528 to 1610 nm
RF video signals 1550 nm³			
Power measurement range		-45 to +26 dBm	
Max permitted input level		+27 dBm	
Spectral passband		1540 to 1560 nm	

1. Burst mode: -35 to +13 dBm

2. For OLP-88 2327/37 version only, requires XGS-PON option 2327/94.04

3. For OLP-88 2327/36, and 2328/36 versions only

SPECIFICATIONS CONTINUED

Instrument	
Display resolution	0.01 dBm/0.001 μ W
Display units/information	dB, dBm, with pass/fail
ORL	> 60 dB
Threshold sets	ITU-T G.984.3 or user-specific thresholds
Pass-through insertion loss ⁴	< 1.5 dB
Power uncertainty ⁴	$\pm$ 0.5 dB
Calibrated wavelengths	1270/1310/1490/1550/1577 nm
Feature	Availability
Two-port through mode for upstream and downstream power level measurements ⁵	Downstream OLT signal (1490/1577 nm) Upstream ONT signal (1270/1310 nm burst mode) Downstream RF video signal (1550 nm)
G-PON Data Analysis	
Identification of G-PON ONU/ONT serial numbers ⁶	Included for 2327/36, 2327/37 and 2328/36, optional for 2327/26
ODN class detection and auto threshold setting ⁷	GPON-ID software option
In-service insertion loss test with auto pass/fail analysis ⁷	GPON-ID software option
OLT identification ⁷	GPON-ID software option
Detection of alien/rogue ONUs ⁶	Alien/rogue-ONU detection software option
Fiber Inspection	
With external probe	P5000i option
With integrated patch cord microscope	OLP-88P version

4. At 23°C $\pm$ 3°C, at 1310/1490/1550/1577 nm, at -7 dBm

5. For B-PON (ITU-T G.983.x), E-PON (IEEE 802.3), G-PON (ITU-T G.984.x), XGS-PON (ITU-T G.9807.1), 10G-EPON (IEEE 802.3av) signals

6. For G-PON signals according ITU-T G.984 (without PON-ID)

7. Optional for G-PON signals according ITU-T G.984.3 Amd3

SPECIFICATIONS CONTINUED

General		
Display		High-contrast 3.5 in color LCD with touch-screen functionality
Fiber inspection capability		With patch-cord microscope or external P5000i microscope (optional)
Data memory		Up to 10,000 PON results
Data readout		Via client USB interface
Electrical interfaces		2 x USB host, 1x micro USB, Ethernet
Wireless interface		WiFi client (optional)
Power supply		12 V, 2 A with interchangeable wall plug for EU, UK, US, and AU
Battery		Li-ion pack 3.7 V, 20 Wh
Battery life (Li-ion battery pack)		>12 hr
Optical connectors		APC with SC switchable adapters (FC, ST and LC adapters optional)
Recommended recalibration interval		3 years
Dimensions (H x W x D)/Weight	OLP-88	208 x 112 x 64 mm; 750 g (8.2 x 4.4 x 2.5 in; 1.6 lbs)
	OLP-88P	208 x 153 x 64; 850 g (8.2 x 6.0 x 2.5 in; 1.85 lbs)
Operating temperature range		–5° to +45°C (23° to 113°F)
Storage temperature range		–25° to +55°C (–13° to 131°F)

ORDERING INFORMATION

II OLP-88 and -88P TruePON testers include:

- APC connector and SC optical adapter (x2)
- SC2 soft shoulder case

Quick-start manual and safety instructions

RBP2 rechargeable LiON battery pack (3.7 V, 20 Wh) and PS4 power supply (12 V, 2 A)

Description	Part Number
OLP-88 TruePON tester, 1310/1490 nm	2327/26
OLP-88 TruePON tester, 1310/1490/1550 nm	2327/36
OLP-88 TruePON tester, 1270/1310/1490/1577nm	2327/37
OLP-88P TruePON tester with patchcord microscope, 1310/1490/1550 nm	2328/36
Software Options	
OLP-88 Alien ONT detection	2327/94.01
OLP-88 GPON-ID test	2327/94.02
OLP-88 XGS-PON option (for 2327/37 only)	2327/94.04
Hardware Options	
WiFi option including USB WiFi adapter	2327/90.21
Accessories	
P5000i digital analysis microscope with 4 tips (FBPT-SC, FBPT-LC, FBPTU25M, FBPT-U12M)	FBP-SD101
ST switchable optical adapter for OLP-88	2155/00.32
FC switchable optical adapter for OLP-88	2155/00.05
LC switchable optical adapter for OLP-88	2155/00.07
Kit, RBP2 rechargeable battery (Li ion) and FBPP-PS4 power supply (12 V)	FITP-RCG1
Power supply for SmartClass Fiber (12 V)	FBPP-PS4
Rechargeable battery for SmartClass Fiber (Li ion)	FITP-RBP2
Uc4 hands-free carrier for SmartClass Fiber	FITP-UC4
UC4P hands-free carrier for SmartClass Fiber with PCM	FITP-UC4P
SCASE2 soft shoulder case for SmartClass Fiber tools	FBPP-SCASE2