

OneExpert Fiber (ONX-700)

Comprehensive PON, Ethernet, and WiFi 7 testing made easy



The VIAVI ONX-700 validates Ethernet, PON, and WiFi 7 throughput up to 10 Gbps in under a minute. Its rugged, modular design and Test Process Automation (TPA) boost process compliance and reduce repeat visits—delivering fast, reliable multi-gig service activation with expert results and one-button simplicity for any technician.

10 Gbps Testing. All Interfaces. Under a Minute

Accelerate service turn-up and troubleshooting with integrated 10 Gbps throughput testing of Ethernet, Fiber, DOCSIS, or WiFi 7 connection.

Expertise Made Easy

With one-button testing, VIAVI Test Process Automation turns any technician into an expert—no training required.

Rugged. Reliable. Flexible

This IP54 rated tool features a rugged, weatherproof, drop-tested, modular design built to perform reliably all day, every day for years to come.





Key Benefits

- **Rapid Multi-Gig Service Validation** – Confirms Ethernet, PON, and WiFi 7 performance up to 10 Gbps in under a minute
- **Streamlined Technician Workflows** – VIAVI TPA guides users through standardized procedures, ensuring consistent results and reducing training overhead
- **Reduced Repeat Visits** – Comprehensive testing at the point of install minimizes callbacks and accelerates last-mile service delivery
- **Modular Upgrade Path** – Supports future technologies like 25G/50G PON, making it a scalable investment for evolving network demands

Features

- **Unified OneCheck Workflow** – Automates pass/fail testing for Ethernet, WiFi, and PON with Geo Tagged saved results and minimal training
- **TruePON + PON Emulation** – Verifies PON-ID, loss, ODN Class and power levels; emulates ONT for throughput on GPON/XGS-PON using VIAVI SFPs
- **Precision Optical Power** – Measures coexistent wavelengths and broadband power. Support for GPON/XGSPON/25GPON/50GPON
- **Built-In Fiber Tools** – VFL and fiber scope support w/Auto Analysis and defect detection for fast troubleshooting
- **Smart Access Anywhere** – Provides remote coaching and training on any network via PC or Mobile
- **Rugged, Modular, Connected** – IP54-rated, upgradeable for 25G/50G PON, with GPS, StrataSync, and mobile app support. High Capacity battery for multi-day use.

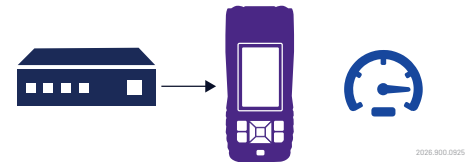
Throughput Service Testing

The ONX-700 platform offers a robust solution for verifying Multi-Gigabit services in demanding residential and enterprise environments. Supporting SLA validation up to 10 Gbps on all interfaces, it enables technicians to perform fast, reliable testing and generate detailed acceptance reports. Built-in Speedcheck functionality and optional alternative throughput testing tools provide flexibility for a wide range of service assurance needs.

- **Speedcheck** – Layer 4 TCP testing of upload/download speeds. Compatible with TR-143 servers
- **TrueSpeed™** – A standards-based, repeatable test for verifying customer experience with layer 4 TCP traffic
- **Ookla® Speedtest®** – Layer 4 Throughput testing to Ookla servers with automatic or manual server selection
- **iPerf** – manual network performance testing used for testing TCP and UDP bandwidth

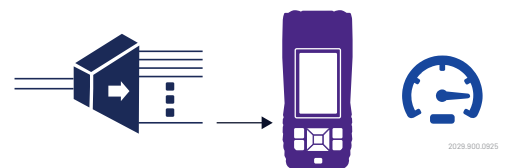
Ethernet

The integrated 10G RJ45 port allows for comprehensive electrical Ethernet throughput testing at the residential gateway or IAD (Internet Access Device), with support for 100M, 1G, 2.5G, 5G, and 10G speeds. For fiber-based networks, the SFP+ port enables optical Ethernet testing in P2P configurations, accommodating a wide range of wavelengths and interface types.



Fiber-PON Emulation

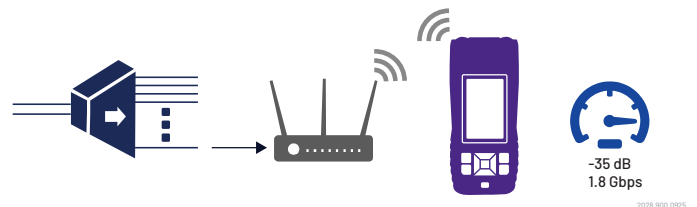
Validate PON network performance and service throughput directly at the network layer. Leveraging the ONX-700's PON Emulation capability with VIAVI GPON or XGSPON SFPs, technicians can confirm service readiness and generate proof-of-service documentation prior to ONT or premise activation.



WiFi

As the dominant access method for in-home internet, WiFi requires precise validation. The ONX-700's built-in WiFi 7 testing tools enable consistent verification of service quality and throughput on 2.4, 5, and 6 GHz frequencies.

OneCheck WiFi simplifies testing and documentation by recording key metrics—signal strength, channel, protocol, and throughput—room by room. This allows technicians to assess router coverage and identify whether mesh networking or repeaters are necessary to meet performance expectations.



EXPERTISE MADE EASY

OneCheck Experts



OneCheck Ethernet

Test up to 10 Gbps
Throughput

- Test Profiles per service type simplify technicians use
- Automatic Pass/Fail with saved results



OneCheck WiFi

Signal Strength and
Throughput

- Automated Process reduces training
- Map WiFi Quality from room to room
- WiFi 7 to test service with latest routers



OneCheck PON

Test Service Delivery
Directly on PON

- Verify network and service levels up to 10 Gbps Throughput
- End to End connectivity and performance of the GPON or XGSPON network with detailed reporting

One Button Test



Power

One Button Test Using
Dedicated Port

- Fast and precise optical power levels
- Test co-existent services simultaneously



TruePON

Automated PON
Network Verification

- Test Power and Loss based on ODN class
- Validate OLT Port Connection



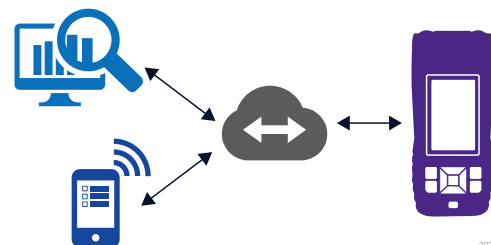
VFL

Easy Access to
Verify the Fiber

- Find craftsmanship issues or breaks
- Identify the correct fiber

Remote Expertise – Smart Access Anywhere

- Remote access anywhere on any network
- Remote coaching, training and troubleshooting
- No need for VPN
- Connect via PC or Mobile Device



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RUGGED

Rugged, IP54-rated build ensures dependable field performance and fewer service disruptions

- Waterproof
- Drop-tested to 1 m
- Max Capacity 96W/Hr batter for multi day use
- Keypad navigation for bad weather usage

Durability that delivers every day

EXPANDABLE/UPGRADABLE

Scales with your needs—upgradable and expandable to support future network testing without hardware replacement

- Modular design adds new features as tech evolves
- Future-ready for standards like 25G/50G PON
- Flexible ports fit diverse fiber setups
- Cloud updates keep performance sharp

Adaptable fiber testing for tomorrow's demands



INTERFACES

- 10G RJ-45T port for 1G,2.5G,5G,10G
- SFP+ Port: GPON, XGSPON, and P2P Optical Ethernet
- Dedicated Optical Power Port SC/APC or UPP 2.5 mm
- VFL port w universal 2.5 mm port
- USB-A and C ports for Fiber Inspection or Data Transfer

Do it all with one tool

CONNECTED

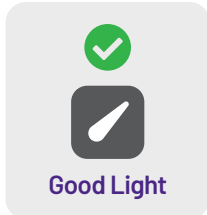
Automate fiber testing and cloud reporting to accelerate installs, reduce errors, and improve process compliance/consistency

- Automated workflows ensure consistency
- Instant fault detection and PON checks
- Auto-upload of geo-tagged test results
- Fiber testing automation for consistent, compliant installs

Cloud-based reporting and oversight

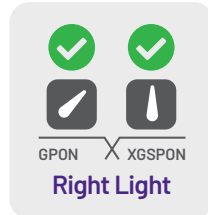
Fiber – Optical Power Meter

The ONX-700 platform enhances PON network validation with its integrated optical power meter, enabling precise measurement of power levels and verification of OLT links across various demarcation locations. Technicians can rapidly confirm network integrity and resolve issues with confidence.



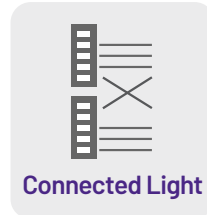
Good Light

Quickly ensure adequate optical power levels with a dedicated optical port



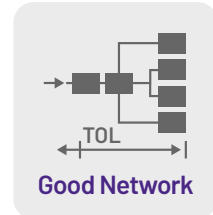
Right Light

Selective Power Meter tests test wavelengths separately to ensure proper service validation



Connected Light

Confirm that the proper connection is being used by reading the PON-ID to validate connection to the expected OLT

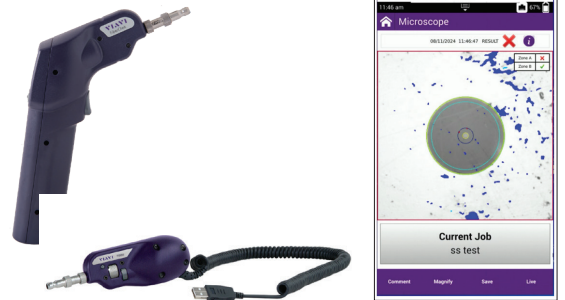


Good Network

TruePON automatically verifies Total Optical Loss (TOL), PON-ID, OLT connectivity, and received power based on the ODN class

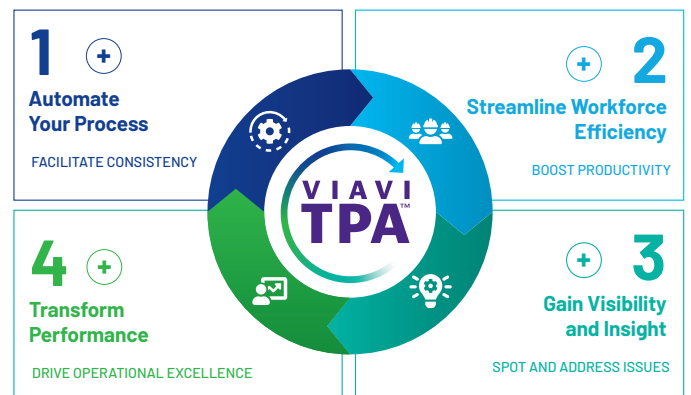
Fiber Inspection

Fiber end-face and bulkhead inspections are streamlined with the ONX-700's integrated application, which connects directly to VIAVI inspection scopes featuring Automatic Results Analysis. The inspection process is fully compatible with TPA workflows and reporting. The ONX-700 supports VIAVI's FiberChek Probe with Auto Focus via wireless or USB, and the p5000i with Manual Focus via USB.



TPA

VIAVI TPA™ (Test Process Automation) connects teams and their test instruments together, ensuring repeatability, efficiency, and accuracy at every stage of a job. Powered by our hosted StrataSync™ platform, VIAVI TPA transforms the performance of your team, driving operational excellence that translates to faster deployment speed, optimized quality, and increased profitability. Step By Step tasks for FTTH Service Activation reduce training time and ensure service quality.





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