

# OneExpert HFC (ONX-720/730)

Comprehensive DOCSIS, PON, Ethernet, and WiFi 7 testing made easy



The VIAVI ONX-720/730 validates DOCSIS, 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
- All-in-One Testing Platform Combines Ethernet, Fiber, DOCSIS, and WiFi 7 testing in a single device—eliminating the need for multiple tools

### **Features**

- Unified OneCheck Workflow Automates pass/fail testing for Ethernet, WiFi, PON, and DOCSIS 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.

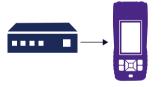
### **Throughput Service Testing**

The ONX-720/730 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-720/730'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-720/730'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.

### DOCSIS™ and RF

The ONX-720 and ONX-730 extend the legacy of the ONX-620 and ONX-630 by preserving their high-performance RF and DOCSIS testing features. With support for existing RF modules, the OneExpert HFC platform protects prior investments while enabling a smooth upgrade to Multi-Gig and fiber testing capabilities.





### RF and DOCSIS testing includes:

- DOCSIS 3.1 service testing
- Forward and Reverse Active Sweep and Sweepless Sweep
- Ingress Expert RealTime Spectrum Analysis with heatmap for ingress troubleshooting
- 8 carrier Return Signal Generator (RSG) with Loopback
- · Fieldview with RSG
- HL Leakage Detection
- HomeTDR
- Ethernet Service testing of DOCSIS 4.0 modems up to 10 Gbps
- Automatic Channel Plans
- Downstream Scan including MER/BER in about 60 seconds
- Simultaneous Ingress, Downstream and DOCSIS testing for improved efficiency

## 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 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



#### 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 DOCSIS**

## DOCSIS, RF and Ingress

- Automated simultaneous testing of DOCSIS and Ingress
- Analysis of OFDM and QAM carriers
- Multi-Gig throughput testing

## **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



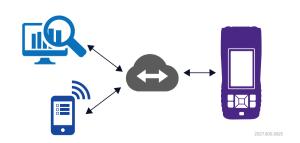
#### VEI

### 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



### 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, DOCSIS 4.0
- Flexible ports fit diverse fiber setups
- Cloud updates keep performance sharp

Adaptable fiber testing for tomorrow's demands



### **INTERFACES**

- Two RF ports for HFC physical layer and DOCSIS service testing
- 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-720/730 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.



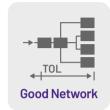
Quickly ensure adequate optical power levels with a dedicated optical port



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



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



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-720/730'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-720/730 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 an ensure service quality.





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