VIAVI
VIAVI Solutions

OneExpert HFC ONX-720 and ONX-730 Mainframe Upgrades and New Units

Simplify 10G service deployments over DOCSIS or PON

Empower techs with a fast, comprehensive and easy to use tool for all their residential and small business service testing needs.

10 Gbps Testing. All Interfaces. Under a Minute.

Accelerate service turn-up and troubleshooting with integrated 10 Gbps testing—validating Ethernet, Fiber, DOCSIS, or WiFi 7 connections in less than a minute.

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 Features

- **Unified OneCheck Workflow** – Automates pass/fail for DOCSIS, Ethernet, WiFi, and PON
- **TruePON + PON Emulation** – Verifies PON-ID, loss, ODN Class; emulates ONT for GPON/XGS
- **Precision Optical Power** – Measures coexistent wavelengths; XGS w/ GPON, 25G, or 50G
- **Built-In Fiber Tools** – VFL and scope with Auto Analysis for fast defect detection
- **Smart Access Anywhere** – Remote coaching and training via PC or mobile connection
- **Rugged, Modular, Connected** – IP54, 25G/50G/DOCSIS 4.0 ready, GPS, StrataSync, long-life battery

Key Benefits

- **Validate Multi-Gig Speeds** – Test DOCSIS, Ethernet, PON and WiFi 7 to 10 Gbps in under a minute
- **Simplify Tech Workflows** – Guided steps ensure consistency and cut training time
- **Fewer Repeat Visits** – Full install testing reduces callbacks and speeds delivery
- **Future-Ready Design** – Modular path supports 25G/50G PON, DOCSIS 4.0 for scalable upgrades
- **One Device, All Tests** – Ethernet, Fiber, DOCSIS and WiFi 7 combined in one platform

OneExpert HFC Mainframe Specifications

Ethernet	
Standard	IEEE 802.3 100M, 1G, 2.5G, 5G, and 10G Ethernet
Test Results	Ethernet Frames, IP Connectivity, Ping, Trace route, Web Connectivity, Speed Test up to 10 Gbps
Ethernet Testing Interfaces	10GBase-T RJ-45 Electrical – 100M, 1G, 2.5G, 5G, 10G
	SFP+ Optical Ethernet 1G, 10G (SFP dependent) (optional)
	SFP+ Electrical Ethernet (optional) 100M, 1G, 2.5G, 5G, 10G
WiFi (Optional)	
Test Results	
OneCheck WiFi (Connected Mode)	WiFi - 7 2x2 (802.11 a/b/g/n/ac/ax/be) 2.4, 5, 6 GHz bands Signal strength (RSSI), Standard, Width, Max Router PHY Rate, IP/Web connectivity, Throughput Tests (SpeedCheck, Ookla Speedtest, iPerf)
Throughput/Performance Tests	
TCP Throughput Test	VIAVI SpeedCheck: 5 Gbps, 10 Gbps
	Ookla Speedtest: 5 Gbps, 10 Gbps
	VIAVI TrueSpeed (RFC-6349): 5 Gbps, 10 Gbps
Performance	Up to 10 Gbps for SpeedCheck, Ookla Speedtest, TrueSpeed, iPerf client: 5 Gbps, 10 Gbps
Test Results	Delay, Upstream and Downstream Bit Rates
Bluetooth Communications	
Communication Interface	Bluetooth v5.0, BLE 2.0
Smart Device Support (recommendation)	VIAVI Mobile Tech app
	Android 8 or newer
	iOS12 or newer
Optical Fiber Scope Support	
Usb Optical Fiber Scope	P5000i, FiberChek Probe
Results for Zone Defects	Pass/Fail
Results for Zone Scratches	Pass/Fail
Low Mag Field-of-View (FOV)	Horizontal 740 µm, Vertical 550 µm
High Mag Field-of-View (FOV)	Horizontal 370 µm, Vertical 275 µm
Particle Size Detection	<1 µm
Power Source	USB port

Broadband Power Meter and Selective PON Power Meter

	Broadband Power Meter	Selective Power Meter
Photo Diode	InGaAs	InGaAs
Spectral Range	Broadband (800...1650 nm)	Passband (1260...1500 nm, 1540...1650 nm)
Wavelength Setting	850, 980, 1310, 1490, 1550, 1577, 1625, 1650 nm Custom 800...1650 nm, step size 1 nm	1342, 1358, 1490, 1577 nm Dual: 1490/1577, 1342/1577, 1358/1577 nm Broadband: 1270...1650 nm[3], Custom step size 1 nm
Resolution	0.01dB,0.001 μW	0.01 dB, 0.001 μW
Measurement Range for Power Level	–65...+10 dBm	–45...+3 dBm
Max. Power Level	+16 dBm	+15 dBm
Measurement Uncertainty	±0.2dB/±5% (intrinsic)[1]	1490 nm: ±0.5 dB/±12 %[2] 1577 nm: ±0.5 dB/±12 %[2] 1342nm: ±0.5 dB/±12 %[2] 1358nm: ±0.5 dB/±12 %[2] Broadband: ±0.5 d/±5 %[2,3]
Measurement Range for PON-ID	N/A	GPON: –30...0 dBm XGS-PON: –25...0 dBm
Number of Calibrated Wavelengths	8 (850,980,1310,1490, 1550,1577,1625,1650 nm)	2 (1490,1577 nm)
Tone Detection (future Optional Capability)	270 Hz, 330 Hz, 1 kHz,2 kHz[4,5]	270 Hz, 330 Hz, 1 kHz,2 kHz[4,5]
Connection	UPP 2.5 mm	SC/APC

[1] Under reference conditions: –11 dBm (CW), 1310 nm ±1 nm, 23 °C ±3 K, 45 to 75% relative humidity, SM test fiber (Single Mode, 9 μm core, 8° APC), when used with SC/PC connectors

[2] Under reference conditions: –2 dBm (CW), nominal wavelength, 23 °C ±3 K, 45 to 75% relative humidity, SM test fiber (Single Mode, 9 μm core, 8° APC), when used with SC/APC connectors

[3] In Broadband Mode (activated SW option required)

[4] For Broadband Power Meter: received optical power level ≥ –50 dBm – for Selective Power Meter: in Broadband Mode (activated SW option required)

[5] When used with VIAVI Light Source and received optical power level > –50 dBm – for Selective Power Meter: in Broadband Mode (activated SW option required)

Visual Fault Locator (VFL)

	VFL
Fiber Compatibility	Single-mode, Multimode
Wavelength	650 nm (visible)
Output Modes	Continuous and flashing
Connector Interface	Universal 2.5 mm (fixed)
Controls	On/Off Continuous/Flashing
Output Power	1 mW
Laser Safety Rating	Class 2
Range (maximum) [6]	7 km

[6]VFL range depends on many factors, including fiber quality/loss

Specifications

Size	
OneExpert HFC: ONX-720 and ONX-730 with RF Module	5.0 x 11.1 x 4.25 in (W x L x H)
OneExpert HFC Mainframe Upgrades	5.0 x 11.1 x 2.9 in (W x L x H)
Weight	
OneExpert HFC: ONX-720 and ONX-730 with RF Module	3.15 kg (6.9 lb) (without protective case)
OneExpert HFC Mainframe Upgrades	1.94 kg (4.25 lbs) (without protective case)
Operating Temperature Range	Non-Charging: –10°C to 50°C
	Battery Charging: 0°C to 40°C
Storage Temperature Range	–20°C to 60°C
Operating Humidity Range	10% to 90% RH, non-condensing
For Indoor/Outdoor Use	IP54 light rain (0.5 in/hr; 1.27 cm/hr)
Drop Rating	1 m (3.3 ft) onto concrete
Operating Altitude	4000 m max
Pollution	2°
RF immunity	8.5 V/m (for CATV measurements)
DC Input Power	12 V@5 A
DC Charge Port	2.5 mm barrel
Battery	96 W/hr Li-Ion rechargeable battery
	Field replaceable
Battery Charge Time	4 Hrs (90%) 6-8 Hrs 100% (AC charger)
Battery Life	3-5 day typical usage for installation technicians (10 installs a day)
USB Host Port(s)	USB-C, USB-A (USB 3.0)

OneExpert HFC Upgrade Packages

Package and Feature Matrix

OneExpert HFC DOCSIS and PON ONX-720 and ONX-730

	UPG-ONX-620IPX-720	UPG-ONX-620TSX-720	UPG-ONX-630NTX-730	UPG-ONX-630SWX-730	UPG-ONX-620IPX-720-BB	UPG-ONX-620TSX-720-BB	UPG-ONX-630NTX-730-BB	UPG-ONX-630SWX-730-BB	UPG-ONX-620IPX-720-PON	UPG-ONX-620TSX-720-PON	UPG-ONX-630NTX-730-PON	UPG-ONX-630SWX-730-PON
Fiber Optic Testing	No Optics				Broadband Power Meter				PON Selective Power Meter			
Broadband Optical Power Meter	N/A	N/A	N/A	N/A	•	•	•	•	N/A	N/A	N/A	N/A
PON Selective Optical Power Meter	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	•	•	•	•
TruePON PON-ID Analysis with OLT-ID and Loss	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Opt.	Opt.	Opt.	Opt.
Broadband Power Capability for Selective PON Hardware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Opt.	•	•	•
Optical Loss Mode (Set/clear Ref with Delta)	N/A	N/A	N/A	N/A	Opt.	•	•	•	Opt.	•	•	•
Visual Fault Locator (1mW)	N/A	N/A	N/A	N/A	•	•	•	•	•	•	•	•
Service Testing/Throughput Testing Options												
OneCheck WiFi7	•	•	•	•	•	•	•	•	•	•	•	•
OneCheck Ethernet	•	•	•	•	•	•	•	•	•	•	•	•
Optical Ethernet Testing over SFP+	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
OneCheck PON w/Emulation – GPON/XGS PON using VIAVI SFP	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
VIAVI SpeedCheck –5 Gbps	•	•	•	•	•	•	•	•	•	•	•	•
VIAVI SpeedCheck –10 Gbps	•	•	•	•	•	•	•	•	•	•	•	•
Ookla Speedtest –5 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Ookla Speedtest – 10 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
VIAVI TrueSpeed – 5 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
VIAVI TrueSpeed – 10 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
iPerf Speedtest – 5 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
iPerf Speedtest – 10 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Smart Access Anywhere - Remote Connectivity	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
CATV Specific Options/Packages												
IPX Software Package	•				•				•			
TSX Software Package		•				•				•		
NTX Software Package			•				•				•	
SWX Software Package				•				•				•
HomeTDR	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Home Leakage Test	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Return Signal Generator w/Loopback	Opt.	Opt.	•	•	Opt.	Opt.	•	•	Opt.	Opt.	•	•
Reverse Sweepless Sweep	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.
QAM Video MPEG Verification	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.
Ingress Expert	Opt.	Opt.	•	•	Opt.	Opt.	•	•	Opt.	Opt.	•	•
Field View w/RSG	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.

OneExpert HFC Upgrade Packages

Specifications

No Optics Packages	UPG-ONX-620IPX-720	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck
		ONX-720 IPX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	UPG-ONX-620TSX-720	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck
		ONX 720 TSX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	UPG-ONX-630NTX-730	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck
		ONX 730 NTX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	UPG-ONX-630SWX-730	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck
		ONX 730 SWX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
Broadband Power Meter Packages	UPG-ONX-620IPX-720-BB	Broadband Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck
		ONX-720 IPX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	UPG-ONX-620TSX-720-BB	Broadband Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck
		ONX 720 TSX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	UPG-ONX-630NTX-730-BB	Broadband Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck
		ONX 730 NTX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	UPG-ONX-630SWX-730-BB	Broadband Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck
		ONX 730 SWX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
PON Selective Power Meter Packages	UPG-ONX-620IPX-720-PON	PON Selective Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck
		ONX 720 IPX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	UPG-ONX-620TSX-720-PON	PON Selective Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck
		ONX 720 TSX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	UPG-ONX-630NTX-730-PON	PON Selective Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck
		ONX 730 NTX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	UPG-ONX-630SWX-730-PON	PON Selective Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck
		ONX 730 SWX Package, Protective Fitted Case, Cat6A jumper M–F and M–M

- Upgrade packages include a protective fitted case and a Cat6a M–F and M–M jumper
- AC Charger NOT included standard in Upgrade Packages and can be optionally added
- OneExpert HFC uses same charger as OneExpert CATV

OneExpert CATV DOCSIS Module Compatibility

The OneExpertHFC mainframe upgrade is compatible with the following ONX DOCSIS/RF modules.

Catalog Number	Item Description
ONX-CATV-D31-S-4220-1012	OneExpert CATV-D3.1 Sweep Ready Module 42/204 MHz 1.0/1.2 GHz
ONX-CATV-D31-S-8520-1212	OneExpert CATV-D3.1 Sweep Ready Module 85/204 MHz 1.2/1.2 GHz
ONX-CATV-D31-S-4285-1012	OneExpert CATV-D3.1 Sweep Ready Module 45/85 MHz 1.0/1.2 GHz
ONX-CATV-D31-S-6520-1212	OneExpert CATV-D3.1 Sweep Ready Module 65/204 MHz 1.2/1.2 GHz
ONX-CATV-D31-4285-1012B	OneExpert CATV D31 module with 42 MHz–1 GHz and 85–1.2 GHz Diplexer

OneExpert HFC
New Unit Product Packages and Ordering Information
1.2 GHz versions

Package and Feature Matrix

OneExpert HFC: DOCSIS and PON ONX-720 and ONX-730 – 42/204 MHz Packages

	ONXF-720-42-204-IPX	ONXF-720-42-204-TSX	ONXF-730-42-204-NTX	ONXF-730-42-204-SWX	ONXF-720-BB-42-204-IPX	ONXF-720-BB-42-204-TSX	ONXF-730-BB-42-204-NTX	ONXF-730-BB-42-204-SWX	ONXF-720-PON-42-204-IPX	ONXF-720-PON-42-204-TSX	ONXF-730-PON-42-204-NTX	ONXF-730-PON-42-204-SWX
Fiber Optic Testing	No Optics				Broadband Power Meter				PON Selective Power Meter			
Broadband Optical Power Meter	N/A	N/A	N/A	N/A	•	•	•	•	N/A	N/A	N/A	N/A
PON Selective Optical Power Meter	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	•	•	•	•
TruePON PON-ID Analysis with OLT-ID and Loss	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Opt.	Opt.	Opt.	Opt.
Broadband Power Capability for Selective PON Hardware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Opt.	•	•	•
Optical Loss Mode (Set/clear Ref with Delta)	N/A	N/A	N/A	N/A	Opt.	•	•	•	Opt.	•	•	•
Visual Fault Locator (1 mW)	N/A	N/A	N/A	N/A	•	•	•	•	•	•	•	•
Service Testing/Throughput Testing Options												
OneCheck WiFi7	•	•	•	•	•	•	•	•	•	•	•	•
OneCheck Ethernet	•	•	•	•	•	•	•	•	•	•	•	•
Optical Ethernet Testing over SFP+	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
OneCheck PON w/Emulation – GPON/XGS PON using VIAVI SFP	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
VIAVI SpeedCheck – 5 Gbps	•	•	•	•	•	•	•	•	•	•	•	•
VIAVI SpeedCheck – 10 Gbps	•	•	•	•	•	•	•	•	•	•	•	•
Ookla Speedtest – 5 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Ookla Speedtest – 10 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
VIAVI TrueSpeed – 5 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
VIAVI TrueSpeed – 10 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
iPerf Speedtest – 5 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
iPerf Speedtest – 10 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Smart Access Anywhere - Remote Connectivity	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
CATV Specific Options/Packages												
IPX Software Package	•				•				•			
TSX Software Package		•				•				•		
NTX Software Package			•				•				•	
SWX Software Package				•				•				•
HomeTDR	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Home Leakage Test	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Return Signal Generator w/Loopback	Opt.	Opt.	•	•	Opt.	Opt.	•	•	Opt.	Opt.	•	•
Reverse Sweepless Sweep	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.
QAM Video MPEG Verification	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.
Ingress Expert	Opt.	Opt.	•	•	Opt.	Opt.	•	•	Opt.	Opt.	•	•
Field View w/RSG	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.

OneExpert HFC Ordering Information

42/204 MHz Upstream 1.0 GHz/1.2 GHz Downstream DOCSIS 3.1 Packages

No Optics Packages	ONXF-720-42-204-IPX	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4220-1012 module (42/204 MHz D3.1)
		ONX-720 IPX Package, Charger, Protective Fitted Case, Cat6A jumper M–F and M–M
	ONXF-720-42-204-TSX	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4220-1012 module (42/204 MHz D3.1)
		ONX 720 TSX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	ONXF-730-42-204-NTX	OneCheck Ethernet, OneCheck WiFi,
		10G SpeedCheck, ONX-CATV-D31-S-4220-1012 module (42/204 MHz D3.1)
		ONX 730 NTX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	ONXF-730-42-204-SWX	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4220-1012 module (42/204 MHz D3.1)
		ONX 730 SWX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
Broadband Power Meter Packages	ONXF-720-BB-42-204-IPX	Broadband Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4220-1012 module (42/204 MHz D3.1)
		ONX-720 IPX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	ONXF-720-BB-42-204-TSX	Broadband Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4220-1012 module (42/204 MHz D3.1)
		ONX 720 TSX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	ONXF-730-BB-42-204-NTX	Broadband Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4220-1012 module (42/204 MHz D3.1)
		ONX 730 NTX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	ONXF-730-BB-42-204-SWX	Broadband Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4220-1012 module (42/204 MHz D3.1)
		ONX 730 SWX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
PON Selective Power Meter Packages	ONXF-720-PON-42-204-IPX	PON Selective Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4220-1012 module (42/204 MHz D3.1)
		ONX 720 IPX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	ONXF-720-PON-42-204-TSX	PON Selective Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4220-1012 module (42/204 MHz D3.1)
		ONX 720 TSX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	ONXF-730-PON-42-204-NTX	PON Selective Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4220-1012 module (42/204 MHz D3.1)
		ONX 730 NTX Package, Protective Fitted Case, Cat6A jumper M–F and M–M
	ONXF-730-PON-42-204-SWX	PON Selective Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4220-1012 module (42/204 MHz D3.1)
		ONX 730 SWX Package, Protective Fitted Case, Cat6A jumper M–F and M–M

OneExpert HFC
New Unit Product Packages and
Ordering Information
1.2 GHz versions

Package and Feature Matrix

OneExpert HFC: DOCSIS and PON ONX-720 and ONX-730 – 85/204 MHz Version

	ONXF-720-85-204-IPX	ONXF-720-85-204-TSX	ONXF-730-85-204-NTX	ONXF-730-85-204-SWX	ONXF-720-BB-85-204-IPX	ONXF-720-BB-85-204-TSX	ONXF-730-BB-85-204-NTX	ONXF-730-BB-85-204-SWX	ONXF-720-PON-85-204-IPX	ONXF-720-PON-85-204-TSX	ONXF-730-PON-85-204-NTX	ONXF-730-PON-85-204-SWX
Fiber Optic Testing	No Optics				Broadband Power Meter				PON Selective Power Meter			
Broadband Optical Power Meter	N/A	N/A	N/A	N/A	●	●	●	●	N/A	N/A	N/A	N/A
PON Selective Optical Power Meter	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	●	●	●	●
TruePON PON-ID Analysis with OLT-ID and Loss	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Opt.	Opt.	Opt.	Opt.
Broadband Power Capability for Selective PON Hardware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Opt.	●	●	●
Optical Loss Mode (Set/clear Ref with Delta)	N/A	N/A	N/A	N/A	Opt.	●	●	●	Opt.	●	●	●
Visual Fault Locator (1 mW)	N/A	N/A	N/A	N/A	●	●	●	●	●	●	●	●
Service Testing/Throughput Testing Options												
OneCheck WiFi7	●	●	●	●	●	●	●	●	●	●	●	●
OneCheck Ethernet	●	●	●	●	●	●	●	●	●	●	●	●
Optical Ethernet Testing over SFP+	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
OneCheck PON w/Emulation – GPON/XGS PON using VIAVI SFP	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
VIAVI SpeedCheck – 5 Gbps	●	●	●	●	●	●	●	●	●	●	●	●
VIAVI SpeedCheck – 10 Gbps	●	●	●	●	●	●	●	●	●	●	●	●
Ookla Speedtest – 5 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Ookla Speedtest – 10 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
VIAVI TrueSpeed – 5 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
VIAVI TrueSpeed – 10 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
iPerf Speedtest – 5 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
iPerf Speedtest – 10 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Smart Access Anywhere - Remote Connectivity	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
CATV Specific Options/Packages												
IPX Software Package	●				●				●			
TSX Software Package		●				●				●		
NTX Software Package			●				●				●	
SWX Software Package				●				●				●
HomeTDR	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Home Leakage Test	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Return Signal Generator w/Loopback	Opt.	Opt.	●	●	Opt.	Opt.	●	●	Opt.	Opt.	●	●
Reverse Sweepless Sweep	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.
QAM Video MPEG Verification	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.
Ingress Expert	Opt.	Opt.	●	●	Opt.	Opt.	●	●	Opt.	Opt.	●	●
Field View w/RSG	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.

OneExpert HFC Ordering Information

85/204 MHz Upstream 1.2 GHz/1.2 GHz Downstream DOCSIS 3.1 Packages

No Optics Packages	ONXF-720-85-204-IPX	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-8520-1212 module (85/204 MHz D3.1)
		ONX-720 IPX Package, Charger, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-720-85-204-TSX	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-8520-1212 module (85/204 MHz D3.1)
		ONX 720 TSX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-85-204-NTX	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-8520-1212 module (85/204 MHz D3.1)
		ONX 730 NTX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-85-204-SWX	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-8520-1212 module (85/204 MHz D3.1)
		ONX 730 SWX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
Broadband Power Meter Packages	ONXF-720-BB-85-204-IPX	Broadband Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-8520-1212 module (85/204 MHz D3.1)
		ONX-720 IPX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-720-BB-85-204-TSX	Broadband Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-8520-1212 module (85/204 MHz D3.1)
		ONX 720 TSX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-BB-85-204-NTX	Broadband Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-8520-1212 module (85/204 MHz D3.1)
		ONX 730 NTX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-BB-85-204-SWX	Broadband Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-8520-1212 module (85/204 MHz D3.1)
		ONX 730 SWX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
PON Selective Power Meter Packages	ONXF-720-PON-85-204-IPX	PON Selective Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-8520-1212 module (85/204 MHz D3.1)
		ONX 720 IPX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-720-PON-85-204-TSX	PON Selective Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-8520-1212 module (85/204 MHz D3.1)
		ONX 720 TSX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-PON-85-204-NTX	PON Selective Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-8520-1212 module (85/204 MHz D3.1)
		ONX 730 NTX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-PON-85-204-SWX	PON Selective Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-8520-1212 module (85/204 MHz D3.1)
		ONX 730 SWX Package, Protective Fitted Case, Cat6A jumper M-F and M-M

OneExpert HFC
New Unit Product Packages
and Ordering Information
1.2 GHz versions

Package and Feature Matrix

OneExpert HFC: DOCSIS and PON ONX-720 and ONX-730 – 65/204 MHz Version

	ONXF-720-65-204-IPX	ONXF-720-65-204-TSX	ONXF-730-65-204-NTX	ONXF-730-65-204-SWX	ONXF-720-BB-65-204-IPX	ONXF-720-BB-65-204-TSX	ONXF-730-BB-65-204-NTX	ONXF-730-BB-65-204-SWX	ONXF-720-PON-65-204-IPX	ONXF-720-PON-65-204-TSX	ONXF-730-PON-65-204-NTX	ONXF-730-PON-65-204-SWX
Fiber Optic Testing	No Optics				Broadband Power Meter				PON Selective Power Meter			
Broadband Optical Power Meter	N/A	N/A	N/A	N/A	●	●	●	●	N/A	N/A	N/A	N/A
PON Selective Optical Power Meter	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	●	●	●	●
TruePON PON-ID Analysis with OLT-ID and Loss	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Opt.	Opt.	Opt.	Opt.
Broadband Power Capability for Selective PON Hardware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Opt.	●	●	●
Optical Loss Mode (Set/clear Ref with Delta)	N/A	N/A	N/A	N/A	Opt.	●	●	●	Opt.	●	●	●
Visual Fault Locator (1 mW)	N/A	N/A	N/A	N/A	●	●	●	●	●	●	●	●
Service Testing/Throughput Testing Options												
OneCheck WiFi7	●	●	●	●	●	●	●	●	●	●	●	●
OneCheck Ethernet	●	●	●	●	●	●	●	●	●	●	●	●
Optical Ethernet Testing over SFP+	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
OneCheck PON w/Emulation – GPON/XGS PON using VIAVI SFP	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
VIAVI SpeedCheck – 5 Gbps	●	●	●	●	●	●	●	●	●	●	●	●
VIAVI SpeedCheck – 10 Gbps	●	●	●	●	●	●	●	●	●	●	●	●
Ookla Speedtest – 5 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Ookla Speedtest – 10 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
VIAVI TrueSpeed – 5 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
VIAVI TrueSpeed –10 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
iPerf Speedtest –5 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
iPerf Speedtest –10 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Smart Access Anywhere - Remote Connectivity	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
CATV Specific Options/Packages												
IPX Software Package	●				●				●			
TSX Software Package		●				●				●		
NTX Software Package			●				●				●	
SWX Software Package				●				●				●
HomeTDR	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Home Leakage Test	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Return Signal Generator w/Loopback	Opt.	Opt.	●	●	Opt.	Opt.	●	●	Opt.	Opt.	●	●
Reverse Sweepless Sweep	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.
QAM Video MPEG Verification	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.
Ingress Expert	Opt.	Opt.	●	●	Opt.	Opt.	●	●	Opt.	Opt.	●	●
Field View w/RSG	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.

OneExpert HFC Ordering Information

65/204 MHz Upstream 1.2 GHz/1.2 GHz Downstream DOCSIS 3.1 Packages

No Optics Packages	ONXF-720-65-204-IPX	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-6520-1212 module (65/204 MHz D3.1)
		ONX-720 IPX Package, Charger, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-720-65-204-TSX	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-6520-1212 module (65/204 MHz D3.1)
		ONX 720 TSX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-65-204-NTX	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-6520-1212 module (65/204 MHz D3.1)
		ONX 730 NTX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-65-204-SWX	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-6520-1212 module (65/204 MHz D3.1)
		ONX 730 SWX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
Broadband Power Meter Packages	ONXF-720-BB-65-204-IPX	Broadband Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-6520-1212 module (65/204 MHz D3.1)
		ONX-720 IPX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-720-BB-65-204-TSX	Broadband Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-6520-1212 module (65/204 MHz D3.1)
		ONX 720 TSX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-BB-65-204-NTX	Broadband Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-6520-1212 module (65/204 MHz D3.1)
		ONX 730 NTX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-BB-65-204-SWX	Broadband Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-6520-1212 module (65/204 MHz D3.1)
		ONX 730 SWX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
PON Selective Power Meter Packages	ONXF-720-PON-65-204-IPX	PON Selective Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-6520-1212 module (65/204 MHz D3.1)
		ONX 720 IPX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-720-PON-65-204-TSX	PON Selective Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-6520-1212 module (65/204 MHz D3.1)
		ONX 720 TSX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-PON-65-204-NTX	PON Selective Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-6520-1212 module (65/204 MHz D3.1)
		ONX 730 NTX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-PON-65-204-SWX	PON Selective Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-6520-1212 module (65/204 MHz D3.1)
		ONX 730 SWX Package, Protective Fitted Case, Cat6A jumper M-F and M-M

OneExpert HFC
New Unit Product Packages
and Ordering Information
1.2 GHz versions

Package and Feature Matrix

OneExpert HFC: DOCSIS and PON ONX-720 and ONX-730 – 42/85 MHz Version

	ONXF-720-42-85-IPX	ONXF-720-42-85-TSX	ONXF-730-42-85-NTX	ONXF-730-42-85-SWX	ONXF-720-BB-42-85-IPX	ONXF-720-BB-42-85-TSX	ONXF-730-BB-42-85-NTX	ONXF-730-BB-42-85-SWX	ONXF-720-PON-42-85-IPX	ONXF-720-PON-42-85-TSX	ONXF-730-PON-42-85-NTX	ONXF-730-PON-42-85-SWX
Fiber Optic Testing	No Optics				Broadband Power Meter				PON Selective Power Meter			
Broadband Optical Power Meter	N/A	N/A	N/A	N/A	•	•	•	•	N/A	N/A	N/A	N/A
PON Selective Optical Power Meter	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	•	•	•	•
TruePON PON-ID Analysis with OLT-ID and Loss	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Opt.	Opt.	Opt.	Opt.
Broadband Power Capability for Selective PON Hardware	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Opt.	•	•	•
Optical Loss Mode (Set/clear Ref with Delta)	N/A	N/A	N/A	N/A	Opt.	•	•	•	Opt.	•	•	•
Visual Fault Locator (1 mW)	N/A	N/A	N/A	N/A	•	•	•	•	•	•	•	•
Service Testing/Throughput Testing Options												
OneCheck WiFi7	•	•	•	•	•	•	•	•	•	•	•	•
OneCheck Ethernet	•	•	•	•	•	•	•	•	•	•	•	•
Optical Ethernet Testing over SFP+	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
OneCheck PON w/Emulation – GPON/XGS PON using VIAVI SFP	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
VIAVI SpeedCheck – 5 Gbps	•	•	•	•	•	•	•	•	•	•	•	•
VIAVI SpeedCheck – 10 Gbps	•	•	•	•	•	•	•	•	•	•	•	•
Ookla Speedtest – 5 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Ookla Speedtest – 10 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
VIAVI TrueSpeed – 5 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
VIAVI TrueSpeed – 10 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
iPerf Speedtest – 5 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
iPerf Speedtest – 10 Gbps	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Smart Access Anywhere - Remote Connectivity	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
CATV Specific Options/Packages												
IPX Software Package	•				•				•			
TSX Software Package		•				•				•		
NTX Software Package			•				•				•	
SWX Software Package				•				•				•
HomeTDR	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Home Leakage Test	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.	Opt.
Return Signal Generator w/Loopback	Opt.	Opt.	•	•	Opt.	Opt.	•	•	Opt.	Opt.	•	•
Reverse Sweepless Sweep	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.
QAM Video MPEG Verification	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.
Ingress Expert	Opt.	Opt.	•	•	Opt.	Opt.	•	•	Opt.	Opt.	•	•
Field View w/RSG	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.	N/A	N/A	Opt.	Opt.

OneExpert HFC Ordering Information

42/85 MHz Upstream 1.0 GHz/1.2 GHz Downstream DOCSIS 3.1 Packages

No Optics Packages	ONXF-720-42-85-IPX	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4285-1012 module (42/85 MHz D3.1)
		ONX-720 IPX Package, Charger, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-720-42-85-TSX	OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4285-1012 module (42/85 MHz D3.1)
		ONX 720 TSX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-42-85-NTX	OneCheck Ethernet, OneCheck WiFi,
		10G SpeedCheck, ONX-CATV-D31-S-4285-1012 module (42/85 MHz D3.1)
		ONX 730 NTX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-42-85-SWX	OneCheck Ethernet, OneCheck WiFi,
		10G SpeedCheck, ONX-CATV-D31-S-4285-1012 module (42/85 MHz D3.1)
		ONX 730 SWX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
Broadband Power Meter Packages	ONXF-720-BB-42-85-IPX	Broadband Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4285-1012 module (42/85 MHz D3.1)
		ONX-720 IPX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-720-BB-42-85-TSX	Broadband Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4285-1012 module (42/85 MHz D3.1)
		ONX 720 TSX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-BB-42-85-NTX	Broadband Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4285-1012 module (42/85 MHz D3.1)
		ONX 730 NTX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-BB-42-85-SWX	Broadband Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4285-1012 module (42/85 MHz D3.1)
		ONX 730 SWX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
PON Selective Power Meter Packages	ONXF-720-PON-42-85-IPX	PON Selective Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4285-1012 module (42/85 MHz D3.1)
		ONX 720 IPX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-720-PON-42-85-TSX	PON Selective Optical Power Meter, VFL
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4285-1012 module (42/85 MHz D3.1)
		ONX 720 TSX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-PON-42-85-NTX	PON Selective Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4285-1012 module (42/85 MHz D3.1)
		ONX 730 NTX Package, Protective Fitted Case, Cat6A jumper M-F and M-M
	ONXF-730-PON-42-85-SWX	PON Selective Optical Power Meter, VFL, Optical Loss
		OneCheck Ethernet, OneCheck WiFi
		10G SpeedCheck, ONX-CATV-D31-S-4285-1012 module (42/85 MHz D3.1)
		ONX 730 SWX Package, Protective Fitted Case, Cat6A jumper M-F and M-M

OneExpert ONX-720/730 DOCSIS/RF Specifications

Frequency	
Range	0.5 to 1,218 MHz
Accuracy	±10 ppm typical @25°C
Downstream Analysis — Port 1	
Max Input Power	60 dBmV total integrated power
Operation on Powered TAP	Operate with up to 90 VAC/DC on input port
Power Detection/Notification	Notify of AC/DC power presence on port 1 above 2 Volts
Return Loss	>9 dB
Auto Channel Plan Builder	Auto detection of channels (analog, digital, QAM, OFDM)
Upstream Analysis — Port 2	
Ingress Spectrum Scan	0.5–204 MHz, calibrated range 4–204 MHz
Sensitivity	−45 dBmV
RBW	300 kHz
Min Detectable Level Upstream	−55 dBmV
Dynamic Range	50 dB
Max Total Integrated Power	55 dBmV, 4–10 MHz, 60 dBmV, 10 to 204 MHz
Accuracy	±2d B typical at 25°C
Sampling Rate	Hyper Spectrum FFT Gapless technology - no missed samples, spans 0.5 to 110 MHz, 110 to 160 MHz, and 160 to 204 MHz
Return Loss	>9.5 dB
Operation on Powered TAP	Operate with up to 90 V AC/DC on input port
Power Detection/Notification	Notify of AC/DC power presence on port 2 above 2 Volts
Analog Channel Measurement	
Video And Audio Levels (Dual)	
Standards	NTSC, PAL, SECAM
Min Detectable Signal	−50 dBmV (single channel)
Level Accuracy	±1.5 dB from −20 dBmV to +50 dBmV typical at 25°C; ±2.0 dB, −20°C to +50°C
RBW	300 kHz
Downstream Digital Channel Analysis	
Calibrated Power Levels	−20 dBmV to +50 dBmV
Level Accuracy	±1.5 dB from −20 dBmV to +50 dBmV typical at 25°C; ±2.0dB, −20°C to +50°C
Modulation(s)	64, 128, and 256 QAM, OFDM
Annex A: 5.057 to 6.952 MSPS for 64, 128, and 256 QAM	
Annex B: 5.057 MSPS for 64 QAM and 5.361 MSPS for 256 QAM	
Annex C: 5.274 MSPS for 64 QAM, and 5.361 MSPS for 256 QAM	

OneExpert ONX-720/730 DOCSIS/RF Specifications continued

Regional demods	DVB-C
Full span MER	
Ingress under carrier — full span ingress noise trace	
Group delay and in-channel response (ICR)	
Digital quality index (DQI) overtime	
Errored/severely errored seconds	
Level, measured symbol rate, carrier frequency, modulation, interleaver depth	
OFDM Signal Performance Metrics	
OFDM Channels	24-192 MHz wide – up to 3 active OFDM channels
Level — max, min, average, standard deviation	Relative to a 6 MHz carrier per CableLabs®
MER — max, min, average, standard deviation, percentile	16 to 44 dB
MER Channel Band Graph	Max, min, avg across entire OFDM carrier MER per subcarrier
Noise — max	
Echo — dBc	
ICFR	In-carrier frequency response (dB)
Spectrum/IUC	Spectrum display, including carrier and ingress under carrier
Scan	
OFDM signal identified	
Profile Analysis	
Profiles A, B, C, D, NCP, and PLC (more profiles as implemented)	
Lock status, code word errors (corrected and uncorrected)	
MER	
Specified range* −5 to +20 dBmV	21 to 40 dB, 64 QAM; 28 to 40 dB, 256 QAM; 16 to 44 dB, OFDM
Max Displayable Range	50 dB
Resolution	0.1 dB
Accuracy	±2 dB typical at 25°C
Minimum Lock Level	−15 dBmV
BER — Channel Check and DOCSIS Check mode	Down to 1E-9 (pre and post FEC)
BER — OneCheck Mode	Down to 1E-8 (pre and post FEC) Std.1E-9 user selectable
Interleaver Depth	128, 8 max

*MER range declines as input levels decrease. Expected MER range at MINLOCK level of−15 dBmV is >30 dBMER.

OneExpert ONX-720/730 DOCSIS/RF Specifications continued

IRF Module Input/Outputs	
RF(2)	F connectors replaceable
Port 1	Downstream 54/85/108/258MHz depending on diplexer
Port 2	Upstream 0.5–204 MHz and TDR
RF immunity	8.5 V/m (for CATV measurements)
Diplexer Frequencies (Port 1)	
Diplexer return path options (may not be available on all units):	
42 MHz: upstream 4-42 MHz; downstream 54–1,004 MHz	
65 MHz: upstream 4-65 MHz; downstream 85-1,218 MHz	
85 MHz: upstream 4-85 MHz; downstream 108-1,218 MHz	
85 MHz: upstream 4-85 MHz; downstream 108-1,004 MHz	
204 MHz: upstream 4-204 MHz: downstream 258-1,218 MHz	
MoCA filter	All models have MoCA triplexer to filter out MoCA signals below the highest downstream frequency
Forward Sweep	
Telemetry Frequency	Diplexer dependent 50-1,218 MHz
Input Port	Port 1
Compatibility	SCU-1800
Reverse Sweep	
Output Transmit Port	Port 1 or Port 2 (user selectable)
Port 1 Sweep Frequency Range	Diplexer dependent 5-42/5-65/5-85/5-204 MHz
Port2 Sweep Frequency Range	5-204 MHz
Compatibility	SCU-1800 or DAA/RPHY via XperTRAK

Ordering Information – Options

Options		
	Part Number	**Description**
Test Applications	ONXF-SW-OC-WIFI	OneCheck WiFi Software option
	ONXF-SW-OC-ETHERNET	OneCheck Ethernet Software option
	ONXF-SW-OPTICAL-ETH	Enables Ethernet testing over SFP+ port for VIAVI supported SPF
	ONXF-SW-TRUEPON	TruePON software option (requires PON selective HW)
	ONXF-SW-PON-BROADBAND	Enable Selective Power Meter to operate in broadband mode
	ONXF-SW-OPTICAL-LOSS	Optical Loss test mode option to save reference and calculate loss
	ONXF-SW-OC-PON	OneCheck PON – PON testing via GPON/XGSPON SFP+
	ONXF-SW-OC-GPON-EMUL	GPON Emulation for live service testing on GPON network
	ONXF-SW-OC-XGSPON-EMUL	GPON Emulation for live service testing on GPON network
	ONX-SMART-ACCESS	Smart Access Anywhere

Service Testing Options		
Ookla Speedtest	ONXF-SW-OOKLA-SPD-5G-1Y	ONX Ookla Speedtest to 5 Gbps 1 Yr Timed License/ deployed via StrataSync
	ONXF-SW-OOKLA-SPD-5G-3Y	ONX Ookla Speedtest to 5 Gbps 3 Yr Timed License/deployed via StrataSync
	ONXF-SW-OOKLA-SPD-5G-5Y	ONX Ookla Speedtest to 5 Gbps 5 Yr Timed License/deployed via StrataSync
	ONXF-SW-OOKLA-SPD-5G	ONX Ookla Speedtest to 5 Gbps
	ONXF-SW-OOKLA-SPD-10G-1Y	ONX Ookla Speedtest to 10 Gbps 1 Yr Timed License/ deployed via StrataSync
	ONXF-SW-OOKLA-SPD-10G-3Y	ONX Ookla Speedtest to 10 Gbps 3 Yr Timed License/deployed via StrataSync
	ONXF-SW-OOKLA-SPD-10G-5Y	ONX Ookla Speedtest to 10 Gbps 5 Yr Timed License/deployed via StrataSync
	ONXF-SW-OOKLA-SPD-10G	ONX Ookla Speedtest to 10 Gbps
TrueSpeed	ONXF-SW-TRUESPEED-5G-1Y	ONX TrueSpeed to 5 Gbps 1 Yr Timed License/ deployed via StrataSync
	ONXF-SW-TRUESPEED-5G-3Y	ONX TrueSpeed to 5 Gbps 3 Yr Timed License/deployed via StrataSync
	ONXF-SW-TRUESPEED-5G	ONX TrueSpeed to 5 Gbps permanent License
	ONXF-SW-TRUESPEED-10G-1Y	ONX TrueSpeed to 10 Gbps 1 Yr Timed License/deployed via StrataSync
	ONXF-SW-TRUESPEED-10G-3Y	ONX TrueSpeed to 10 Gbps 3 Yr Timed License/deployed via StrataSync
	ONXF-SW-TRUESPEED-10G	ONX TrueSpeed to 10 Gbps Permanent License
iPerf	ONXF-SW-IPERF-5G-1Y	ONX iPerf test to 5 Gbps 1 Yr Timed License/deployed via StrataSync
	ONXF-SW-IPERF-5G-3Y	ONX iPerf test to 5 Gbps 3 Yr Timed License/deployed via StrataSync
	ONXF-SW-IPERF-5G	ONX iPerf test to 5 Gbps Permanent License
	ONXF-SW-IPERF-10G-1Y	ONX iPerf test to 10 Gbps 1 Yr Timed License/deployed via StrataSync
	ONXF-SW-IPERF-10G-3Y	ONX iPerf test to 10 Gbps 3 Yr Timed License/deployed via StrataSync
	ONXF-SW-IPERF-10G	ONX iPerf test to 10 Gbps permanent License

Ordering Information - Options continued

Options	Part Number	Description
CATV Testing Options	ONX-CATV-SW-HL-LKG	Home Leakage Software Option
	ONX-CATV-SW-HOMETDR	Home TDR Software Option
	ONX-CATV-SW-RSG-LOOP	Return Signal Generator with Loopback Option
	ONX-CATV-SW-REVSWPLSSWP	Reverse Sweepless Sweep Option for ONX 730's
	ONX-CATV-SW-QAM-VIDEO	QAM Video MPEG Verification Option
	ONX-CATV-SW-INGRESS-EXP	Ingress Expert Option for ONX 720's
	ONX-CATV-SW-RP-SNR-OCE	Return Path SNR in OneCheck Expert - OneExpert CATV
	ONX-CATV-SW-FV-RSG	PathTrak Fieldview with Return Signal Generator for ONX 730s
	ONX-CATV-FWD-SWEEP	Active Forward Sweep
	ONX-CATV-REV-SWEEP	Active Reverse Sweep
SFP	NSC-SFP-GPON	GPON SFP for GPON emulation
	NSC-SFP-XGSPON	XGSPON SFP+ for XGSPON emulation
	NSC-SFP-850-1G-10G	Optical Ethernet SFP + 850 nm SR 1G and 10G
	NSC-SFP-1310-1G-10G	Optical Ethernet SFP + 1310 nm LR 1G and1 0G
	NSC-SFP-1550-1G-10G	Optical Ethernet SFP + 1550 nm ER 1G and10G

Optional Accessory		
	AC-CHARGER	Replacement AC charger (no power cord)
	AC-CAR-CHARGER	Car Charger
	CC-034601	Large Carrying Case
	1019-00-1366	Strand Hook
	ONXF-HANDSTRAP	Handstrap for use on unit without a case

Replacement Parts		
	ONXF-HFC-BATT-96WHR	Replacement 96 W/Hr Battery
	AC-CHARGER	Replacement AC charger (no power cord)
	ONXF-DISPLAY-PROTECTOR-5P	Replacement screen protector (5 pack)
	ONXF-ETH-ADAPT-M-F	Ethernet Cat6a M-F adapter 0.5 m
	NSC-ETHERNET-CABLE	Ethernet Cat6a M-M Patch Cable
	ONXF-CATV-D31-ADAPTR	Module adapter for existing D3.1 modules for ONX-720/730
	ONXF-HFC-CASE	Fitted protective case for ONX-720/730 with DOCSIS 3.1

VIAVI

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