

Data Sheet

# VIAVI

## OneExpert ONX-580

For xDSL, G.fast and FTTH

Fast, consistent, and complete!

Consistently achieve high-performance results when deploying ultra-fast residential broadband over xDSL, G.fast, and FTTH.

OneExpert™ helps field technicians fix problems right the first time, every time. A multitouch, user-friendly interface and OneCheck™ automated tests ease complex tasks with clear pass/fail results. And, its future-proof modules ensure years of use supporting access and home networks.

### Open, Modular Design

OneExpert offers the advantages of integrated cloud-based applications, touch screen interfaces, smartphones, and tablets. OneExpert helps technicians perform more efficiently and fix problems faster while ensuring service providers can invest in a long-term, open platform. Modular hardware means the meter can be updated as technology is updated. Software can be upgraded and enhanced in the field, so no down-time for these changes.

### Key Benefits and Features

- Modular platform scales for new WiFi, fiber, and xDSL technology including VDSL Profile 35b and G.fast
- OneCheck automates field tests and simplifies Copper and DSL results to consistently close jobs correctly
- One button OneCheck TDR auto identifies fault types and locations right away
- Prove the true customer experience with a standardized TrueSpeed™ test (RFC-6349)
- OneExpert™ app uses everyday mobile devices for remote control, data enhancements, and connectivity
- StrataSync™ cloud-enabled asset and test data management provides visibility for test results and completed tasks and keeps track of used instrument inventory

Large screen, simplifies results analysis

Multitouch user interface for quick testing

StrataSync – cloud-based asset and data management

Bluetooth/WiFi ready connectivity



## xDSL Testing up to G.fast

A sync test is essential in characterizing DSL link quality (bandwidth rates, margins, errors, and likelihood for errors). This test also helps determine whether issues are coming from the equipment (CPE or DSLAM/DPU ports) or from the profile settings. It shows important results on a single DSL summary screen page. The test uncovers errors (CRC, FEC, LOS, LOF, and LOM) that impact application layers such as IP video.

Module	ONX-BDCM-DSL-ANXAB xDSL Annex B	ONX580-BDCM-DSL-BONDED xDSL Annex A Bonded	ONX-BDCM-GFAST Broadcom V35b/G.fast 106	ONX-TM-GFAST BDCM/SCKPIO V35b/G.fast 106	ONX-TM-SCKP-212 BDCM/SCKPIO V35b/G.fast 212
ADSL	■	■	■	■	■
ADSL/VDSL Anx A/M/L (to 30a)	■	■	■	■	■
ADSL/VDSL Anx B/J (to 30a)	■	—	■ <sup>1</sup>	■ <sup>1</sup>	■ <sup>1</sup>
ADSL2 Bonded Anx A/M/L	—	■	■	■	■
VDSL2 Bonded Anx A/M/L (to 17a)	—	■	■	■	■
V35b	—	—	■	■	■
V35b Bonded	—	—	—	—	■
BDCM G.fast 106MHz	—	—	■	■	■
Sckipio G.fast 106MHz	—	—	—	■	■
BDCM G.fast 212MHz	—	—	—	—	■
Sckipio G.fast 212MHz	—	—	—	—	■
BDCM 106MHz Bonded	—	—	—	—	■
Sckipio 106MHz Bonded	—	—	—	—	■

<sup>1</sup>Annex B/J Compatible

## Specifications

<b>Power Supply</b>	
<b>Battery</b>	Li-ion internal rechargeable, 7.4 V nominal voltage, 6600 mAh
Operating time >4 hours for typical use cases	
Auto power down (adjustable)	
AC line operation via external adapter/car charger	
<b>Connector</b>	
DSL test module	Varies by module (8 Pin Modular and 6 Pin Modular)
Ethernet	2 x 8-pin modular (RJ45)
T/A, R/B, T1/A1, R1/B1 and ground/Earth	2 mm recessed banana
POTS	8-pin modular (RJ45) and tip A – ring B
USB	2 x USB 2.0 client ports
<b>Connectivity</b>	
USB flash drive	
Remote operation	
Mobile device application	
<b>Bluetooth</b>	
Standard	Bluetooth 2.1 + EDR, Bluetooth 4.0 ready
<b>WiFi</b>	
Standard	802.11 a/b/g/n (2.4/5 GHz)
<b>Audio Support</b>	
Speaker/microphone	
Bluetooth headset	
<b>Permissible Ambient Temperature</b>	
Nominal range of use	0 to 50°C (32 to 122°F)
Storage and transport	-10 to 60°C (14 to 140°F)
<b>Humidity</b>	
Operating humidity	10 to 90%
<b>Water/Dust Ingress</b>	
Complies with IP54	Designed to comply with IP54
<b>Display</b>	127 mm (5 in) diagonal color WVGA (800 x 480 pixels) backlit LCD with projected capacitive multitouch screen

## Ordering Information

The OneExpert can be ordered fully configured for high-end ADSL2+ /VDSL2 /G.fast and copper test demands or scaled for specific needs and applications, such as all fiber only without copper.

### Included Test Applications

(all mainframes and package orders except noted differently below)

#### ***Fiber Tests***

- OneCheck Fiber
- Power meter (via Accessory)
- OTDR (via Accessory)
- Inspection (via Accessory)

#### ***Copper on mainframe ONX-580***

- TDR
- OneCheck Copper
- DVOM
- Opens
- Longitudinal balance
- Load coil
- POTS TDR

#### ***Wiring Tools***

- Wire map on mainframe ONX-580
- Hub flash
- Port discovery
- Ping tool

#### ***IP Data Tests***

- Web browser
- IP ping
- FTP/HTTP speed test
- OneCheck Ethernet

#### ***WiFi***

- Scan
- Access point
- WiFi Advisor support

#### ***Coax — SmartID***

- Locate IDs
- Single-ended coax map
- Dual-ended coax map
- Whole home check

#### ***StrataSync***

- StrataSync Core Asset and Data Management

Description	
<b>Mainframe</b>	
OneExpert; ONX-580 Pro <sup>1</sup>	ONX-580P
OneExpert; ONX-580 <sup>1</sup>	ONX-580
OneExpert; ONX-580A <sup>1</sup>	ONX-580A
<b>Module</b>	
OneExpert Broadcom 63158/Skipio V.35B/G.fast Amendment 3 module (bonded ready)	ONX-TM-SCKP-212
OneExpert Broadcom 63138 G.fast/V.35B test module	ONX-BDCM-GFAST
OneExpert Broadcom 63168 (bonded ready) test module	ONX580-BDCM-DSL-BONDED
OneExpert Broadcom 63168 (VDSL, ADSL2+ ANX A/B) test module	ONX-BDCM-DSL-ANXAB
OneExpert cover module	ONX-COVER
<b>Software Options</b>	
ADSL/VDSL bonding option for module ONX-BDCM-DSL-BONDED	ONX580-BONDED
Broadcom G.fast option	ONX580-GFAST
Skipio G.fast option	ONX580-SCKIPIO
V.35b option	ONX580-V35B
G.fast Amendment 3 Option	ONX580-GFAST-212
DSL Helper Utility	ONX580-DSL-HELPER
Mobile device connectivity	ONX580-MOBILE-001
Bluetooth	ONX580-BLUETOOTH
HPNA	ONX580-HPNA
TrueSpeed	ONX-TRUESPEED
Ookla SpeedTest	ONX-OOKLA-SPEEDTEST
Broadcom Speedservice	ONX-SPEED-SERVICE
VIAMI Speedcheck	ONX-SPEEDCHECK
Smart Access Anywhere	ONX-SMART-ACCESS
HighFrequency SmartID Testing <sup>2</sup>	ONX-SMARTID-MOCA
IP video	ONX580-IPVIDEO
VoIP	ONX-VOIP
MOS <sup>3</sup>	ONX-MOS
Resistive fault locator	ONX580-RFL
Transmission impairments and spectral <sup>4</sup>	ONX580-TIMS
Copper Expert software	ONX580-COPPER-EXPERT
<b>Cables</b>	
Dual Pair Bed of Nails Copper Cables	CB-DUAL-BON
Single Pair Bed of Nails Copper Cables	CB-SINGLE-BON
Dual Pair Telco Clips Copper Cables	CB-DUAL-TELCO
Single Pair Telco Clips Copper Cables	CB-SINGLE-TELCO
Dual Pair Banana Copper Cables	CB-DUAL-4MM
Single Pair Banana Copper Cables	CB-SINGLE-4MM
Telco clip package for 4 mm banana	CB-CLIPS

Spectral monitor cable	CB-SPE-MON
Dual Pair Bed of Nails 8 Pin to Banana Cables	CB-DSL8-4MM
Dual Pair Bed of Nails 8 Pin to Telco Clip Cables	CB-DSL8-TELCO
Dual Pair Bed of Nails 8 Pin to Bed of Nails Cables	CB-DSL8-BON
Dual Pair Bed of Nails 6 Pin to Banana Cables	ONX-DSL6-4MM
Dual Pair Bed of Nails 6 Pin to Bed of Nails Cables	ONX-DSL6-BON
SmartID USB cable 6 ft	SMARTID-USBCABLE-6FT
SmartID USB cable 3 ft	SMARTID-USBCABLE-3FT

### **Accessories**

Battery	ONX580-BATTERY-48WH
AC universal power adapter	AC-CHARGER
Large carrying case	CC-034601
Small carrying case	CC-CARRYING-CASE-SMALL
Soft glove	AC-GLOVE
Strand hook	AC-STRANDHOOK
Hand strap	AC-HANDSTRAP
Shoulder strap	AC-005101
Car adapter	AC-CAR-CHARGER
Bluetooth headset	AC-BLUETOOTH-HEADSET
SmartID Plus incl. micro USB cable	SMARTID-PLUS-1PC-TELCO
SmartID Plus 1 unit	SMARTID_PLUS_1PC
SmartID, 6 units	SMARTID-6PC-TELCO-KIT
SmartID accessory kit	SMARTID-ACCKIT-TELCO
Wire mapping smart remote; RJ11, RJ45	AC-WIREMAP-REMOTE
UFEDIIB bonded far end device with standard accessories	UFEDIIB-PKG-1
SDI-100 WAND	SDI-100
SmartOTDR SL – Wireless OTDR	ESL18FA65-APC
MP-60 – USB optical power meter	MP-60A
P5000i – USB fiber scope	FBP-P5000I

### **WiFi Advisor**

WiFi Advisor Basic Package	WFED300AC-1PC
WiFi Advisor Installer Package	WFED300AC-2PC

### **Services and Support Plans**

Bronze Support Plan 5 years	BRONZE-5
Silver Support Plan 3 years	SILVER-3
Silver Support Plan 5 years	SILVER-5

<sup>1</sup>Includes test applications as specified above. Requires selection of battery, AC universal power adapter, and power cord.

<sup>2</sup>Requires SmartID and SmartID Plus to be ordered separately.

<sup>3</sup>Requires VoIP software option.

<sup>4</sup>Enables copper RX tones, spectral, WB noise, wideband impulse noise, wideband impulse noise capture.

## 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.

For more Information: go to [viavisolutions.com/viavicareplan](https://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	✓	✓	✓	✓*	✓	✓	✓



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