Data Sheet

VIAVI
OneExpert DSL (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

Wireless personal area network//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-SCKP-212 BDCM/V35b/ G.fast 212
ADSL	■	■	■	■
ADSL/VDSL Anx A/M/L (to 30a)	■	■	■	■
ADSL/VDSL Anx B/J (to 30a)	■	—	■[1]	—
ADSL2 Bonded Anx A/M/L	—	■	■	■
VDSL2 Bonded Anx A/M/L (to 17a)	—	■	■	■
V35b	—	—	■	■
V35b Bonded	—	—	—	■
BDCM G.fast 106MHz	—	—	■	■
BDCM G.fast 212MHz	—	—	—	■
BDCM 106MHz Bonded	—	—	—	■

[1] Annex B/J Compatible

Specifications

Power Supply	
Battery	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	
Connector	
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
Connectivity	
USB flash drive	
Remote operation	
Mobile device application	
WiFi	
Standard	802.11 a/b/g/n (2.4/5 GHz)
Audio Support	
Speaker/microphone	
Bluetooth headset	
Permissible Ambient Temperature	
Nominal range of use	0 to 50°C (32 to 122°F)
Storage and transport	−10 to 60°C (14 to 140°F)
Humidity	
Operating humidity	10 to 90%
Water/Dust Ingress	
Complies with IP54	Designed to comply with IP54
Display	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

StrataSync

- StrataSync Core Asset and Data Management

Description	
Mainframe	
OneExpert; ONX-580 Pro[1]	ONX-580P
OneExpert; ONX-580[1]	ONX-580
OneExpert; ONX-580A[1]	ONX-580A
Module	
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
Software Options	
ADSL/VDSL bonding option for module ONX-BDCM-DSL-BONDED	ONX580-BONDED
Broadcom G.fast option	ONX580-GFAST
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
HPNA	ONX580-HPNA
TrueSpeed	ONX-TRUESPEED
Ookla SpeedTest	ONX-OOKLA-SPEEDTEST
Broadcom Speedservice	ONX-SPEED-SERVICE
VIAVI Speedcheck	ONX-SPEEDCHECK
Smart Access Anywhere	ONX-SMART-ACCESS
IP video	ONX580-IPVIDEO
VoIP	ONX-VOIP
MOS[2]	ONX-MOS
Resistive fault locator	ONX580-RFL
Transmission impairments and spectral[3]	ONX580-TIMS
Copper Expert software	ONX580-COPPER-EXPERT
Cables	
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

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
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

[1]Includes test applications as specified above. Requires selection of battery, AC universal power adapter, and power cord.
[2]Requires VoIP software option.
[3]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.

Contact your local representative for more information on VIAVI Care Support Plan options or visit:
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	✓	✓	✓	✓*	✓	✓	✓

Contact Us **+1 844 GO VIAVI**
(+1 844 468 4284)

To reach the VIAVI office nearest you,
visit viavisolutions.com/contact

viavisolutions.com