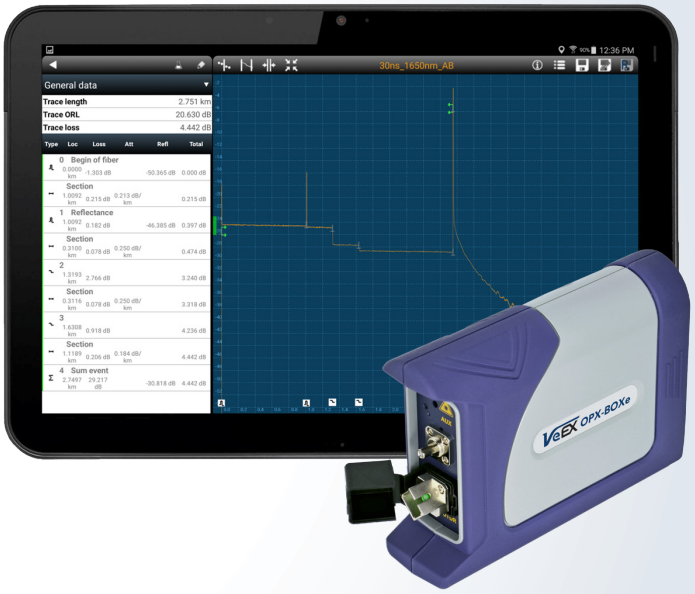


OPX-BOXe

Rugged, Pocket-sized Mini OTDR

Highly Versatile OTDR with Wireless and USB Control

The VeEX OPX-BOXe is an ultra-compact, OTDR designed to operate remotely using Fiberizer software. The unit can be controlled via WiFi, Bluetooth or USB from Windows, iOS, Linux or Android devices.

Platform Highlights

- WiFi, Bluetooth wireless and USB control
- Up to 3 wavelengths for OTDR testing including Live port (1625 nm, 1650 nm)
- Up to 45 dB Dynamic Range and testing 1/4m Dead Zones
- Optional Light Source (via OTDR port)
- Optional Visual Fault Locator (VFL)
- Multimode and Singlemode wavelength test options - 850, 1300, 1310, 1490, 1550, 1625 and 1650 nm
- WiFi operation in Access Point or Client modes
- BT PAN profile communication with BT devices including iPad/ iPhone
- Internal storage of test results which can be transferred later to a host device
- VFL and OLS can be activated locally using a single button
- Fixed and inter-changeable optical adaptors (SC/FC/ST/LC)
- Ruggedized case and gap-free design protect the device from harsh and hazardous environments

Software Support

Fiberizer Software Family

OPX-BOXe OTDR is designed to be used with Fiberizer software. The unit can be controlled via USB, WiFi or Bluetooth from selected platforms (Windows, iOS, Linux, and Android).

Fiberizer Cloud Connectivity

OTDR trace and link map data can be uploaded to the Fiberizer Cloud server directly from the device when the host device is connected to the internet directly or paired with a Tablet or Smartphone using Bluetooth.

Web Browser Remote Control

Embedded application supports web browser remote control via Wifi or Ethernet. Ethernet operation supported using Ethernet to USB OTG cable

Mobile Trace Analysis with Desktop Capabilities

Advanced and intuitive software optimized for quick and fail-safe operations, can be used by any technician level. Users can combine mobility and simplicity of a handheld device with the power of professional testing equipment.

Test Applications

Optical time-domain reflectometers (OTDRs) are considered to be the most important instruments for professional installation and monitoring of fiber optic networks. Most Users however are only accustomed to dedicated, bulky devices for this purpose, but now a compact, battery operated and portable OTDR device compatible with Smartphones and Tablets has become a reality.

OPX-BOXe combines powerful OTDR testing with familiar Smartphone or Tablet ease of use. Connected to your mobile device, technicians can now perform fiber optic tests and be connected to co-workers and managers for work instructions or test data sharing.

Compatibility with selected VeEX testers enables technicians to operate the unit via USB or Bluetooth connection using a virtual OTDR User Interface. Since fibers are now common place in CATV, Telco, and Mobile networks, having a companion OTDR reduces truck rolls as there is less dependence to call on specialized fiber construction crews to verify or troubleshoot problems.

Fiberizer Mobile App and OPX-BOXe OTDR

Fiberizer Mobile is a Smartphone and Tablet application designed specifically for technicians who are constantly on-the-go or may be tasked to troubleshoot optical fiber problems at a moment's notice irrespective of their work location.

Developed by industry experts with extensive fiber optic test and measurement experience, the application interfaces directly with Fiberizer Cloud for uploading or accessing archived fiber traces. Seamless integration with leading cloud providers such as Google Docs and Drop Box ensures Users are not tied to a single data repository.

Sophisticated trace analysis including fiber attenuation, reflectance and optical return loss measurements using dual markers on a familiar, intuitive user interface increases productivity.

Fiberizer Mobile facilitates WiFi and Bluetooth connectivity between OPX-BOXe OTDR and Smartphone/Tablet devices allowing technicians to test easily in either confined environments or those deemed hazardous.

Work from Anywhere, Anytime

Fiberizer™ Cloud

Fiberizer Cloud not only empowers the OTDR, but also the Workforce. Going way beyond traditional OTDR reporting methods or concepts, this cloud-based solution provides superior centralized test data management capabilities including powerful web based trace analyses. You can work from almost anywhere, at anytime because Fiberizer Cloud is a full online web service.

Streamlining onsite data reporting

Fiber technicians and contractors tasked to validate new fiber installations or restoring cable routes after an outage are generally obliged to submit measured data (.sor files) and related documentation to the network operator as proof of delivery before being paid. Valuable time however is often wasted after the onsite work is completed, because critical test files are usually first stored to some local storage media before being transferred to a colleague via email for verification and further reporting.

Fiberizer Cloud streamlines this information exchange, eliminating costly paper, e-mail or other time consuming communication methods - instead, time wastage can be avoided by transferring traces of jobs completed directly from the OTDR to Fiberizer Cloud. Professional PDF or MS Excel reporting functionality is also available, and users can create their own templates for reports. Bi-directional analysis of OTDR traces, tested from both ends of the optical fiber, can also be performed.

Fiberizer Cloud Connectivity

Pair a Smartphone, Laptop or Tablet PC and efficiently upload test data directly to the Cloud server using any available wireless technology (LTE, 3G or WiFi).

Total compatibility

Fiberizer Cloud is compatible with both Windows and MacOS browsers, not limiting users to PC platforms only. OTDR trace files in Telcordia (Bellcore) GR-196 & SR-4731 *.sor formats are securely transferred via HTTPS connection, a fast reliable communication protocol commonly used in today's Internet applications. Another outstanding feature is compatibility with other OTDR vendor trace data formats, so users can reference or compare other OTDR traces and vice versa.

Optical Specifications

OTDR Testing	Multimode	Single mode
Wavelengths (± 15 nm)[1, 10]	850, 1300	1310, 1490, 1550, 1625, 1650
Fiber type (µm)	50/125	9/125
Dynamic Range (dB)[2]	Refer to Ordering Guide	Refer to Ordering Guide
Pulse width (ns)	3, 10, 25, 100, 300, 1000, 3000, 10000, 20000	
Event dead zone (m)[3]	Refer to Ordering Guide	Refer to Ordering Guide
Attenuation dead zone (m)[4]	Refer to Ordering Guide	Refer to Ordering Guide
Distance range (km)	0.5 to 80	0.5 to 240
Distance Units[5]	Kilometers, Miles or Feet	
Distance Measurement Accuracy (m)[6]	± (0.5 + resolution + 5 x 10^{-5} x L)	
Sampling resolution (m)	0.16 to 7.6	
Sampling points	Up to 128,000	
Attenuation/Loss Resolution (dB)	0.001	
Group Index Range (IoR)	1,3000 to 1,7000	
Measurement time	Auto or User defined	
Trace Format	Bellcore GR196 and Telcordia SR-4731 sor format	
Remote Control	WiFi, Bluetooth or USB. Ethernet supported via micro USB OTG to Ethernet converter cable[9]	
Software Support Required[7]	Fiberizer Desktop (Windows), Fiberizer Mobile (iOS or Android), or VeEX V300 tester	
Fiber analysis	Auto with event table, user defined PASS/FAIL thresholds	
Link Mapping (V-Scout)	Multiple scriptable acquisitions - Supported on Android & iOS Tablets and via VeEX V300/ RXT/MTTplus platforms	
OTDR Laser safety	IEC 60825-1:2007, 21 CFR 1040.10, Class 1M	
Optical Interface[8]	UPC or optional APC	
Optical connectors (OTDR/OLS)	Fixed or optional Universal Interface with FC/SC/ST/LC adaptors	

Test Options	Multimode	Single mode
Visual Fault Locator (VFL)	Optional (not available in certain wavelength combinations)	
-Wavelength (nm)	650 ± 10 nm	
-Output (mW)	Max 1 mW	
-Laser Safety	IEC 60825-1, Class II	
-Modes	CW, 2 Hz	
-Optical connector	Universal 2.5 mm sleeve with dust cap	
Light Source (OLS) - (shares OTDR output)	Optional	
-Wavelengths (nm)	Depends on OTDR laser	
-Output power (dBm)	> -6 MM	> -4 SM
-Level Instability (dB)	Better than ±1 MM (15 min)	Better than ± 0.05 (15 min)

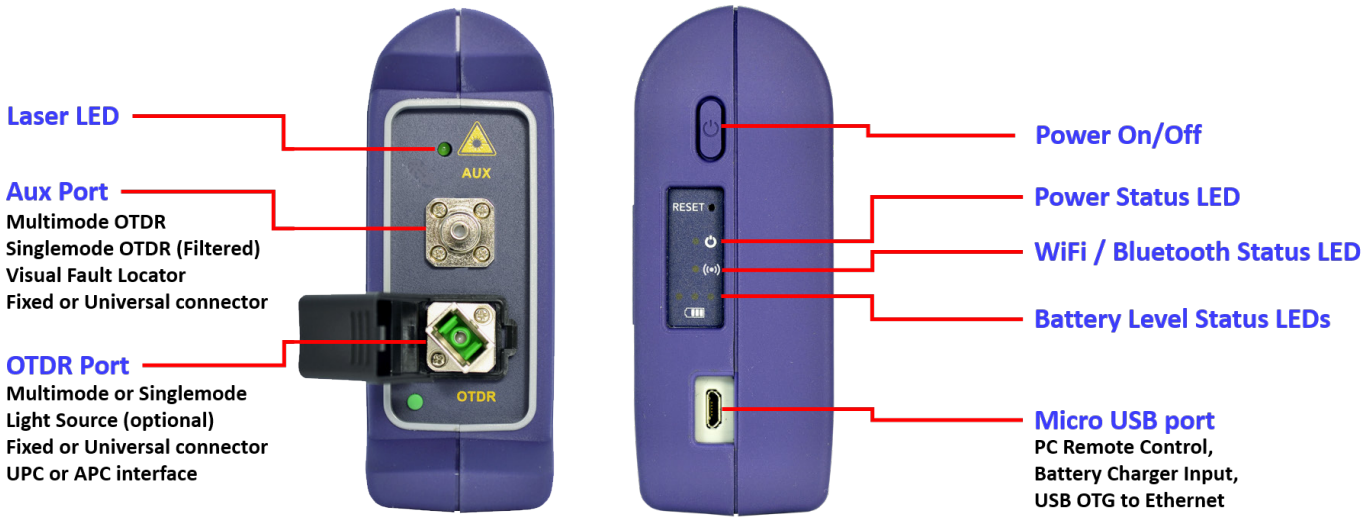
Notes:

1. Typical central/nominal wavelength deviation for 850, 1300, 1310 and 1550 nm. For 1490, 1625, 1650 nm wavelengths, values are typically less.
2. Typical dynamic range after three-minute averaging and SNR = 1.
3. Typical event dead zone using 3 ns pulse and reflections below = -45 dB.
4. Typical loss measurement dead zone using 10 ns pulse and reflections below = -45 dB.
5. Selectable in Fiberizer software (Desktop or Mobile) or via virtual Test Setup menu on VeEX host tester.
6. Excludes uncertainty due to fiber refractive index (IoR) setting.
7. Software requirement
   -Fiberizer Desktop software included with each OPX-BOXe – requires Windows.
   -Fiberizer Mobile OTDR Viewer App can be downloaded from VeEX Apps page (http://www.veexinc.com/apps.php).
   -Embedded web browser application.
8. APC connectors optimize dead zone and related OTDR performance. APC connectors produce smaller reflections minimizing ghosting and other unwanted trace artifacts thus improving testing efficiency.
9. Maximum 3 wavelengths including live filtered port. For available configurations, please refer to the Ordering Guide.

Ordering Guide

Optical Specifications				Test Application						
Multimode OTDR										
Part #	Wavelength (nm)	Range (dB)	Dead Zone (m)	LAN	Access	FTTx PON	Live PON	CATV	Metro	Long Haul
Z06-99-113P	850/1300	22/22	2/10	☑	☑					
Singlemode OTDR										
Part #	Wavelength (nm)	Range (dB)	Dead Zone (m)	LAN	Access	FTTx PON	Live PON	CATV	Metro	Long Haul
Short Range										
Z06-99-112P	1310/1550	27/25	1/4		☑	☑		☑	☑	
Z06-99-117P	1310/1550	36/34	1/4		☑	☑		☑	☑	
Z06-99-120P	1310/1550//1625	36/34//38	1/4				☑			
Z06-99-119P	1310/1490/1550	36/34/34	1/4		☑	☑		☑	☑	
Medium Range										
Z06-99-081P	1310/1550	39/36	1/4		☑	☑		☑	☑	
Combo Multimode/Singlemode OTDR										
	Wavelength (nm)	Range (dB)	Dead Zone (m)	LAN	Access	FTTx PON	Live PON	CATV	Metro	Long Haul
Z06-99-122P	850//1310/1550	26//38/35	1/4	☑	☑			☑	☑	

Note: Contact your sales representative for additional configurations.



General Specifications

Dimensions	125 x 31 x 85 mm	Operating Temperature	0˚C to 50˚C (32˚F to 122˚F)
Weight	0.4 kg	Storage Temperature	-40˚C to 60˚C (-40˚F to 140˚F)
Battery	Lithium Polymer battery	Humidity	0% to 80%, non-condensing
Connectivity	WiFi, Bluetooth, USB		

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