

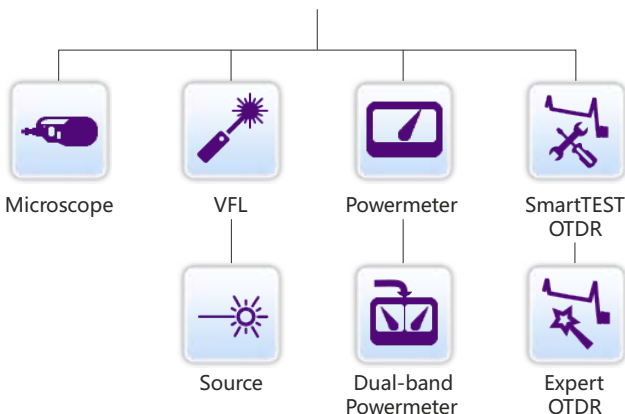
SmartOTDR™ 100AS

The affordable, easy-to-use handheld tester for techs at any level



The lightweight and compact SmartOTDR speeds and optimizes field testing of metro and access networks—with a tailored OTDR interface and automatic analysis that any technician can understand.

With SmartOTDR, generic or user-defined setup configurations eliminate setup errors and maintain results consistency. One-touch operation and a single results window ensure fast and easy measurements, while robust wireless connectivity options increase productivity anywhere.



BENEFITS

- Combines all essential fiber tests in one handheld with visual fault locator (VFL), optical power meter (OPM), and P5000i microscope options
- Simplifies OTDR analysis with Smart Link Mapper (SLM) option
- Upgrades easily in the field
- Automates testing with objective, pass/fail results
- Enhances productivity anywhere with powerful network connectivity options

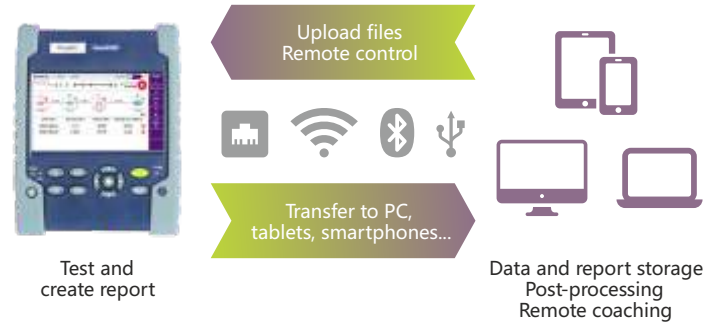
KEY FEATURES

- Single-/dual-/tri-wavelength versions with 1310/1550 nm and in-service 1625 or 1650 nm wavelengths
- Light, compact, hands-free design includes 5" high-visibility outdoor touch screen
- Integrated CW light source
- PON optimized to test through a 1x128 splitter
- Built-in PON/XG-PON power meter (1490/1550/1578 nm)
- Automated fiber inspection and macrobend detection with pass/fail analysis software
- 3G/4G connectivity via USB, Bluetooth®/ WiFi options
- All-day battery life

POWERFUL CONNECTIVITY

Several connectivity options (3G/4G smartphones via USB and optional Bluetooth/WiFi) enable remote control as well as data and work-order transfers to-and-from tablets, smartphones, and computers. The SmartOTDR quickly resolves field issues in real time, and optional SmartAccess Anywhere (SAA) can open a tunnel in the cloud so a technician can remotely access and operate the instrument. Compatible with a wide range of cloud servers (WebDAV service providers), the SmartOTDR can also instantly share measurement reports using onboard FastReport. pdf report generation.

SmartOTDR includes a one-year trial of cloud-based StrataSync™ for asset, configuration, and test-data management, and to ensure that all instruments have the latest software and options installed.



Connectivity features and options enhance workflows



1. 5-inch high-visibility capacitive touch screen
2. Charge indicator
3. On indicator
4. File menu
5. Setup menu
6. Start/Stop
7. Testing indicator
8. On/Off
9. Home page
10. Cancel (switch off functions)

11. Direction and validation keys
12. Results page
13. Loudspeaker
14. AC/DC input
15. Slave mini USB port
16. Visual fault locator (VFL)
17. Master USB ports
18. OTDR port/continuous light source/power meter
19. OTDR live port (in-service test)/PON/XG-PON power meter
20. WiFi or Bluetooth options

SPECIFICATIONS (TYPICAL AT 25°C)

General	
Display	5-inch capacitive color touch screen (12.5 cm)
Display resolution	800 x 480 W VGA
Interfaces	2x USB 2.0 ports, 1x mini-USB 2.0 port, built-in Bluetooth and WiFi (optional, dongles also available)
Storage	10,000 OTDR traces typical
Battery	Rechargeable Lithium-polymer battery, up to 20 hours of operation ¹
Power supply	AC/DC adapter, input 100-250 V AC, 50-60 Hz; 2.5 A max, output 12 V DC, 25 W
Electrical safety	En60950 compliant
Size (HxWxD)	175 x 138 x 57 mm (6.9 x 5.4 x 2.24 in)
Weight (battery included)	Approx. 0.9 kg (1.98 lb)
Operating/storage temperature	Operating: -20 to +50°C; storage: -20 to +60°C
Humidity (noncondensing)	95%
OTDR 100 AS	
Laser safety class (21 CFR)	Class 1
Number of data points	Up to 256,000 data points
Display range	0.1 km to 260 km
Sampling resolution	4 cm
Distance accuracy	(±1 m) ± (sampling resolution) ±(1.10 ⁻⁵ x distance), excluding group index uncertainties
Attenuation resolution	0.001 dB
Attenuation linearity	±0.04 dB/dB
Central wavelength ²	1310/1550nm ±20nm
RMS dynamic range ³	30/30 dB
Pulse widths	5 ns to 20 µs
Event dead zone ⁴	1.35m
Attenuation dead zone ⁵	4m
CW Light Source ⁹	
Output power level ⁶	-3.5 dBm
Stability long term (8 hr) ⁷	±0.05 dB
Built-in Power Meter (optional)	
Operating mode	270, 330, 1 kHz, 2 kHz, and TWINTest
Power level range	0 to -55 dBm
Calibrated wavelengths	1310, 1490, 1550, 1625, and 1650 nm
Measurement accuracy ⁸	±0.5 dB
Built-in Visual Fault Locator (optional)	

1. Per Telcordia GR-196-CORE.

2. Laser at 25°C and measured at 10 µs.

3. The one-way difference between the extrapolated backscattering level at the start of the fiber and the RMS (SNR=1) noise level, after 3 minutes of averaging using the largest pulsewidth.

4. Measured at ±1.5 dB below the peak of an unsaturated reflective event using the shortest pulse width.

5. Measured at ±0.5 dB from the linear regression using a FC/UPC-type reflectance and the shortest pulse width.

6. ±1 dB.

7. After light source stabilization, warm-up time of 20 min.

8. At calibrated wavelengths and at -30 dBm.

ORDERING INFORMATION

SmartOTDR Configurations	Part Number
Includes a hands-free soft case with neck strap and a stylus for the capacitive touch screen	
SmartOTDR 1550nm AS-range handheld tester with APC connector	E100AS-APC
Additional OTDR Connector Adapters	
SC universal adapter	EUSCADS
FC universal adapter	EUFCADS
LC universal adapter	EULCADS
Battery	
Lithium polymer battery	E10LIPO
Accessories	
Hands-free soft case with neck strap	E10GLOVE
Stylus for capacitive touch screen	EHVT-STYLUS
Large soft carrying case (optional)	E40SCASE1
12 V car lighter adapter (optional)	E40LIGHTER
EU/US-to-India type D power adapter (optional)	EINDIADPLUG
Optional Tools	
VFL with 2.5 mm UPP adapter	E10VFL
Optical power meter option (same port as OTDR)	E10PM
MP-60 USB optical power meter with 2.5 and 1.25 mm UPP adapters	MP-60A
MP-80 USB high-power optical power meter with 2.5 and 1.25 mm UPP adapters	MP-80A
P5000i digital microscope kit with 7 tips	FBP-MTS-101
Built-in WiFi	E10WIFI
Built-in Bluetooth	E10BLUE
External WiFi USB dongle	E60EWIFI
External Bluetooth USB dongle	E60EBLUE
FTTA-SLM	ESMARTFTTA-100
FTTH-SLM	ESMARTFTTH-100
SLM E	SMARTLINK-100
CABLE-SLM	ESMARTCABL-100
SmartAccess Anywhere S	AA-100-L2
1310nm wavelength	E113WEB
Extended dynamic range (35dB at 1550nm/ 37dB at 1310nm if available)	EXTRANGE100WEB

* For ordering in the USA replace E for F in the part number, e.g. E100AS-PC becomes F100AS-PC