

FlexScan® FS200 OTDR



Description

FlexScan® FS200 pocket-sized series of OTDRs offer fast, accurate, singlemode fiber characterization and fault location with Smart Auto® and Flexpress™ test modes. Weighing in at less than a pound (0.4kg) FlexScan OTDRs are designed to deliver high-performance testing on LAN structured cabling and data center networks. Using AFL's SmartAuto™ multi-pulse acquisition, users are able to detect short patchcords hidden in data center cross connects and faulty connectors causing system failures.

Features and Benefits

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| <ul style="list-style-type: none"> • High-resolution dual wavelength singlemode testing • Easy-to-understand LinkMap® results with pass/fail indications • Flexpress™ mode completes OTDR test in <5 seconds • 12F MPO testing with optional Multi Fiber Switch (MFS) | <ul style="list-style-type: none"> • Integrated VFI with optional source and power meter • Large 4.3 inch, bright indoor/outdoor touchscreen • Bluetooth, WiFi and USB communications • Rugged & pocket sized; weighs less than 1 pound (0.4kg) |
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Applications

- High-resolution singlemode network verification using OTDR
- Singlemode loss testing using optional integrated source and power meter
- Fast, accurate singlemode fiber fault location using OTDR and VFL

Specifications

OTDR	MODEL: FS200-100
Emitter Type	Laser
Safety Class	Class I
Fiber Type	Single-mode
Wavelengths (nm)	1310/1550
Center λ Tolerance	± 20 nm (CW mode)
Dynamic Range (dB)	32/30
Event Dead Zone (m)	0.8
Atten. Dead Zone (m)	3.6
PON Dead Zone (m)	N/A
Pulse Widths	3, 5, 10, 20, 30, 50, 100, 200, 300, 500 ns; 1, 2, 3, 10, 20 μ s
Range Settings	250 m to 240 km
Data Points	Up to 300,000 (Expert mode .SOR file)
Data Spacing	5 cm to 16 m
Group Index of Refraction	1.3000 to 1.7000
Distance Uncertainty (m)	$\pm(1 + 0.003\% \times \text{distance} + \text{data point spacing})$
Linearity (dB/dB)	± 0.05
Trace File Format	Telcordia SR-4731 Issue 2
Trace File Storage Medium	4 GB internal memory (>1000 traces); External USB memory stick
Data Transfer to PC	USB cable or Bluetooth® or WiFi (option)
Standard OTDR Modes	SmartAuto, Expert, Real Time
Display Modes	LinkMap Summary, LinkMap Events, Trace
FleXpress Fast Test	No
Real-time Refresh Rate	Up to 4 Hz
Live Fiber Protection	No OTDR damage with input power $\leq +3$ dBm for wavelength(s) in range 1260 to 1675 nm
Live Fiber Detection	Reports live fiber with input signal ≥ -35 dBm for wavelength(s) in range 1260 to 1675 nm

OTDR	MODEL: FS200-300
Emitter Type	Laser
Safety Class	Class I
Fiber Type	Single-mode
Wavelengths (nm)	1310/1550

OTDR	MODEL: FS200-300
Center λ Tolerance	± 20 nm (CW mode)
Dynamic Range (dB)	37/36
Event Dead Zone (m)	0.8
Atten. Dead Zone (m)	3.5
PON Dead Zone (m)	20
Pulse Widths	3, 5, 10, 20, 30, 50, 100, 200, 300, 500 ns; 1, 2, 3, 10, 20 μ s
Range Settings	250 m to 240 km
Data Points	Up to 300,000 (Expert mode .SOR file)
Data Spacing	5 cm to 16 m
Group Index of Refraction	1.3000 to 1.7000
Distance Uncertainty (m)	$\pm(1 + 0.003\% \times \text{distance} + \text{data point spacing})$
Linearity (dB/dB)	± 0.05
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Real-time Refresh Rate	Up to 4 Hz
Live Fiber Protection	No OTDR damage with input power $\leq +3$ dBm for wavelength(s) in range 1260 to 1675 nm
Live Fiber Detection	Reports live fiber with input signal ≥ -35 dBm for wavelength(s) in range 1260 to 1675 nm

VISUAL FAULT IDENTIFIER (VFI)

Emitter Type	Visible red laser, 650 ± 20 nm
Safety Class	Class II
Output Power (nominal)	0.8 mW into single-mode fiber
Modes	CW, 2 Hz flashing

OPTICAL LASER SOURCE - OLS (Optional)

Emitter Type	Laser
Safety Class	Class I
Fiber Type	Singlemode
Wavelengths (nm)	1310/1550
Center λ Tolerance	± 20 nm (CW mode)
Spectral Width (FWHM)	5 nm (maximum)
Internal Modulation	270 Hz, 330 Hz, 1 kHz, 2 kHz, CW, Wave ID
Wave ID	Compatible with AFL OPM/OLS
Output Power Stability	$\leq \pm 0.1$ dB (15 minutes); $\leq \pm 0.15$ dB (8 hours)

OPTICAL LASER SOURCE - OLS (Optional)

Output Power	-3 dBm \pm 1.5 dB
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OPTICAL POWER METER -OPM (Optional)

Calibrated Wavelengths	1310, 1490, 1550, 1625, 1650 nm
Detector Type	InGaAs, 1 mm diameter
Measurement Range	+23 to -50 dBm
Tone Detect Range	+3 to -35 dBm
Wavelength ID Range	+3 to -35 dBm
Accuracy	\pm 0.25 dB
Resolution	0.01 dB
Measurement Units	dB, dBm or Watts (nW, μ W, mW)

GENERAL

Size (in boot)	86 x 160 x 43 mm
Weight	0.4 kg
Operational Temperature	-10 °C to +50 °C, 0 to 95 % RH (non-condensing)
Storage Temperature	-40 °C to +70 °C, 0 to 95 % RH (non-condensing)
Power	Rechargeable Li-Pol or AC adapter
Battery Life	>12 hours, Telcordia test conditions
Display	Color touchscreen 4.3 in LCD, 480 x 272, backlit
USB Ports	1 host; 1 micro-USB function
Bluetooth (optional)	Compatible with Windows PC, Android
WiFi (optional)	IEEE 802.11 / WLAN

Ordering Information

PART NUMBER	DESCRIPTION
FS200-100-BAS-P1-W1	FlexScan® FS200 1310/1550nm OTDR with OPM/OLS/VFI
FS200-300-BAS-P1-W1	FlexScan® FS200 1310/1550nm OTDR with OPM/OLS/VFI & Flexpress™

All kits include FlexScan with AC charger, battery, carry strap, SC/2.5 mm connector adapters, TRM® 2.0, quick reference guide, USB cable and carry case.

Additional Information

FlexScan automates test setup, shortens test time and simplifies results interpretation, improving efficiency and reducing the cost of test. Featuring a large 4.3-inch indoor/outdoor touchscreen display providing excellent visibility results can be viewed in both AFL's icon-based LinkMap® view and OTDR trace view, allowing users to quickly and easily locate faults and identify necessary corrective action supported by PASS & FAIL indicators. FlexScan comes

integrated with a visual fault identifier (VFI) with options to add an optical power meter (OPM) and optical light source (OLS). Flexpress™ high speed test mode completes dual-wavelength tests in <5 seconds – 10 x faster than conventional OTDRs! For multi-fiber testing, Flexpress mode automatically controls 12-fiber MPO switch to further reduce multi-fiber test time.

Related Products



FOCIS Flex Fiber Scope



FOCIS Lightning MPO/MTP®
Fiber Scope



OTDR Fiber Rings



FOCIS WiFi2™ Fiber Scope