

Fujikura - FlexScan OTDR

FLEXSCAN OTDR with SmartAuto™ and LinkMap®

Pocket-sized, Performance-packed, User-friendly, *and* Affordable



Features

- Fast, accurate SmartAuto OTDR network characterization or fault location
- Easy to understand LinkMap results with pass/fail indications
- 1310/1550/1650 nm PON OTDR (in- or out-of-service testing)
- 1310/1550 nm versions for complete network characterization
- 1550 and 1650 nm versions for cost-effective troubleshooting
- Alerts users to live fibers and poor launch conditions
- Integrated Source, Power Meter, VFL (visual fault locator)
- Bluetooth and WiFi communications
- Compatible with FOCIS Flex connector inspection system
- Rugged, lightweight, hand-held for field use
- Large, bright touchscreen display easily viewed indoors and out
- Internal / external data storage via USB, Bluetooth, or WiFi
- 12-hour Telcordia battery operation

Applications

- PON or point-to-point network verification or troubleshooting
- Optical network installation, troubleshooting and maintenance
- OTDR testing plus Insertion Loss and Power measurements
- Locate faults exceeding industry or user pass/fail thresholds
- Visually pinpoint location of macro-bends or breaks inside cabinets and splice closures

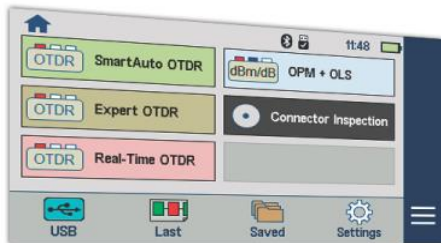
FLEXSCAN OTDRs enable both novice and expert technicians to quickly and reliably troubleshoot PON and point-to-point optical networks or fully characterize newly installed or repaired networks. Using FLEXSCAN's innovative SmartAuto mode, multi-pulse, multi-wavelength OTDR scans quickly and accurately detect, locate, identify and measure network components and faults. After applying industry-standard or user-set pass/fail criteria, the characterized network is displayed using FLEXSCAN's intuitive, icon-based LinkMap view. FLEXSCAN automates test setup, shortens test time and simplifies results interpretation, improving efficiency and reducing the cost of test. Acquired results may be stored internally or externally. Internally stored results are easily accessed via USB, Bluetooth or WiFi.

With optional connector inspection, integrated source, power meter and VFL, FLEXSCAN offers an all-in one solution, ensuring technicians have everything they need to locate and resolve optical network issues. Uploaded results may be viewed and reports may be generated using the included Windows-compatible TRM® 2.0 Test Results Manager software.

Available in Convenient, Cost-saving Installation and Troubleshooting Kits - Bundle FlexScan with your choice of launch cable, FOCIS Flex connector inspection probe and tips, and/or AFL's universal optical fiber identifier (OFI). The universal OFI works with all fiber types – including bend-insensitive fiber – and is available with or without integrated power meter (OFI-BIPM or OFI-BI).

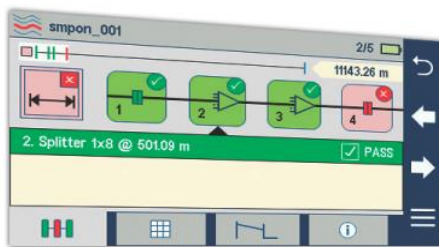
FLEXSCAN OTDR with SmartAuto™ and LinkMap®

SmartAuto Provides Network-optimized Test Settings



In SmartAuto mode, a FLEXSCAN OTDR automatically determines the characteristics of the network under test and rapidly completes multiple scans using a variety of network-optimized acquisition settings. It precisely locates and identifies network events, as well as measures loss and reflectance for each detected event. SmartAuto supports two test modes: Locate End & Faults (for fast network troubleshooting) and Characterize Fiber (for more complete installation verification). For even greater ease-of-use, FLEXSCAN checks for live fiber and verifies the OTDR launch connection before initiating a test. Dual and triple-wavelength FlexScan OTDRs also provide automatic macro-bend detection.

LinkMap Simplifies Network Troubleshooting



LinkMap with Pass/Fail enables even novice users to easily and accurately troubleshoot optical networks. LinkMap presents an icon-based view of the tested network clearly identifying fiber start, end, connectors, splices, PON splitters, and macro-bends.

A LinkMap Summary provides end-to-end link length, loss, loss per distance and ORL. Loss and reflectance of detected events is compared to industry-standard or user-settable pass/fail thresholds and displayed with clear pass/fail indications. Users can instantly toggle between LinkMap and Trace views.

Bluetooth and WiFi for Faster Connectivity

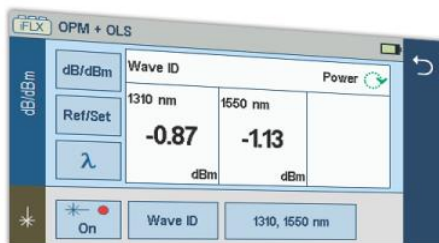


Pair FLEXSCAN with AFL's FOCIS Flex connector inspection probe for fast, easy connector end-face inspection.

FOCIS Flex provides auto-focus, auto-centering, integrated IEC pass/fail analysis, and automatic Bluetooth transfer of images and pass/fail results to FLEXSCAN for display and archiving.

FLEXSCAN's built-in WiFi also supports wireless remote control and file transfer to/from Windows PCs, Android and iOS mobile devices.

Multi-Functionality Ensures Complete Testing Accuracy



FLEXSCAN integrates a Visual Fault Locator (VFL) plus an optional optical laser source (OLS) and optical power meter (OPM) supporting AFL's unique Wave ID capability. With Wave ID, the power meter automatically synchronizes to a single or multi-wavelength Wave ID optical signal sent by an AFL light source. The power meter automatically identifies received wavelengths and measures power and loss at each wavelength, saving significant test time and eliminating setup errors.

The VFL's eye-safe red laser enables users to visually pinpoint the location of macro-bends and fiber breaks often found in splice closures and fiber cabinets.

FLEXSCAN OTDR with SmartAuto™ and LinkMap®

FLEXSCAN OTDRs are available with 1310/1550/1650 nm, 1310/1550 nm or 1550 nm only wavelengths. All versions are available with integrated Optical Light Source (OLS), Optical Power Meter (OPM), Visual Fault Locator (VFL) and Bluetooth/WiFi.

Specifications^a

MODEL: FS200-#	-50	-60	-100	-300	-304
OTDR					
Emitter Type	Laser				
Safety Class ^b	Class I				
Fiber Type	Single-mode				
Wavelengths (nm)	1550	1650	1310/1550	1310/1550	1310/1550/1650
Center λ Tolerance	± 20 nm (CW mode)				
Dynamic Range (dB) ^c	28	37	32/30	37/36	37/36/37
Event Dead Zone ^d (m)	1.0	0.8	0.8	0.8	0.8
Atten. Dead Zone ^e (m)	6.0	3.5	3.6	3.5	3.5
PON Dead Zone ^f (m)	N/A	20	N/A	20	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)	$\pm(1 + 0.005\% \times \text{distance} + \text{data point spacing})$				
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				
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				
Live PON Filter Isolation	>50 dB for 1260 nm \leq wavelength \leq 1600 nm				
Live PON OTDR Test	1650 nm using filtered detector				
VISUAL FAULT LOCATOR (VFL)					
Emitter Type	Visible red laser, 650 ± 20 nm				
Safety Class ^g	Class II				

MODEL: FS200-#	-50	-60	-100	-300	-304
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 ^b	Class I				
Fiber Type	Single-mode				
Wavelengths (nm)	1550	1650	1310/1550	1310/1550	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)				
Output Power	-3 dBm ± 1.5 dB				
OPTICAL POWER METER -OPM (Optional)					
Calibrated Wavelengths	1310, 1490, 1550, 1625, 1650 nm				
Detector Type	InGaAs, 2 mm diameter				
Measurement Range	$+23$ to -50 dBm				
Tone Detect Range	$+3$ to -35 dBm				
Wavelength ID Range	$+3$ to -35 dBm				
Accuracy ^h	± 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-polymer or AC adapter				
Battery Life	>12 hours, Telcordia test conditions				
Display	Color touchscreen 4.3 in LCD, 480x272, backlit				
USB Ports	1 host; 1 micro-USB function				
Bluetooth (optional)	Compatible with Windows PC, Android				
WiFi (optional)	IEEE 802.11 / WLAN				

Notes:

- All specifications valid at 25 °C unless otherwise specified.
- FDA 21 CFR 1040.10 and 1040.11, IEC 60825-1: 2007-03.
- (SNR=1) - Measured using maximum range, widest pulse width and 3 minutes averaging.
- Typical distance between the two points 1.5 dB down each side of a reflective spike caused by a -45 dB event using 5 ns pulse width.
- Typical distance from the location of a -45 dB reflective event to the point where the trace falls and stays within 0.5 dB of backscatter, using a 5 ns pulse width.
- Recovery to within 0.5 dB of backscatter after 1:16 splitter (≤ 13 dB loss) using 100 ns pulse width.
- FDA 21 CFR 1040.10 and 1040.11, IEC 60825-1: 2007-03.
- At calibration wavelengths and power levels of approximately -10 dBm.

FLEXSCAN OTDR with SmartAuto™ and LinkMap®

FLEXSCAN Kit Configurations

FLEXSCAN is available in four kit configurations: Basic, Plus, PRO, and Complete. All kits include FLEXSCAN with AC charger, battery, carry strap, SC/2.5 mm connector adapters, TRM® 2.0, USB cable and carry case. Plus kits add a 150 m fiber ring and One-click cleaner. PRO kits additionally include a FOCIS Flex auto-focusing connector inspection probe with IEC pass/fail analysis and two adapter tips. Complete kits expand on PRO Kits by adding a bend-insensitive fiber identifier with optional power meter (OFI-BI or OFI-BIPM).

Ordering Information

FS200-[MOD]-[KIT]-[PW]-[C]-[LNG]-[AC]-[FR]-[TIP]* where:

[MOD]	FS200 FLEXSCAN OTDR Configuration
50	1550 nm only Troubleshooting OTDR
60	1650 nm filtered Live PON Troubleshooting OTDR
100	1310/1550 nm Verification & Troubleshooting OTDR
300	1310/1550 Pt-to-Pt & PON Verification & Troubleshooting OTDR
304	1310/1550/1650 Pt-to-Pt & PON Verification & Troubleshooting OTDR

[KIT]	FS200 FLEXSCAN Kit Configuration
BAS	Basic kit with soft case, TRM 2.0 Basic, USB cable
PLUS	PLUS kit adds 150 m SMF Fiber Ring and One-Click cleaner
PRO	PRO kit adds Fiber Ring, One-Click cleaner, FOCIS Flex
BI	BI Complete kit adds OFI-BI to PRO kit
BIPM	BIPM Complete kit adds OFI-BIPM to PRO kit

[PW]	Power Meter / Wireless option
P0-W0	No Source, Power Meter, or Bluetooth/WiFi (FS200-50/60/100 only)
P0-W1	No Source or Power Meter; Includes Bluetooth/WiFi (FS200-300/304 only)
P1-W1	Includes Source, Power Meter, Bluetooth/WiFi (all models)

[C]	OTDR / Source Connector Type
A	APC
U	UPC

[LNG]	Language Option
ENG	English
CHS	Simplified Chinese
CHT	Traditional Chinese
DEU	German
FIN	Finnish

[LNG]	Language Option
FRA	French
ITA	Italian
JPN	Japanese
POL	Polish
SPA	Spanish

[AC]	Destination Country	AC Plugs
US	USA	2-pin, US
EU	European Union	2-pin, EU
UK	United Kingdom	2-pin, UK
CN	China, Australia	2-pin, SAA

[FR]	150 m SMF Fiber Ring
Blank	N/A in Basic kits
SC/SC	FR1-SM-150-SC-SC
SC/FC	FR1-SM-150-SC-FC
SC/LC	FR1-SM-150-SC-LC
SC/ST	FR1-SM-150-SC-ST
SC/ASC	FR1-SM-150-SC-ASC
SC/AFC	FR1-SM-150-SC-AFC
SC/ALC	FR1-SM-150-SC-ALC
LC/LC	FR1-SM-150-LC-LC
LC/ASC	FR1-SM-150-LC-ASC
LC/ALC	FR1-SM-150-LC-ALC

[FR]	150 m SMF Fiber Ring
ASC/FC	FR1-SM-150-ASC-FC
ASC/ST	FR1-SM-150-ASC-ST
ASC/ASC	FR1-SM-150-ASC-ASC
ASC/AFC	FR1-SM-150-ASC-AFC
ASC/ALC	FR1-SM-150-ASC-ALC
ALC/ALC	FR1-SM-150-ALC-ALC
FC/FC	FR1-SM-150-FC-FC
FC/ST	FR1-SM-150-FC-ST
FC/LC	FR1-SM-150-FC-LC
FC/AFC	FR1-SM-150-FC-AFC
AFC/AFC	FR1-SM-150-AFC-AFC

[TIP]*	FOCIS Flex Tips & Cleaning (PRO only)
Blank	Option not available in Basic & PLUS kits
SC	SC-UPC bulkhead tip, 2.5 mm UPC ferrule tip, 2.5 mm cleaning
FC	FC-UPC bulkhead tip, 2.5 mm UPC ferrule tip, 2.5 mm cleaning
LC	LC-UPC bulkhead tip, 1.25 mm UPC ferrule tip, 1.25 mm cleaning
ASC	SC-APC bulkhead tip, 2.5 mm APC ferrule tip, 2.5 mm cleaning
AFC	FC-APC bulkhead tip, 2.5 mm APC ferrule tip, 2.5 mm cleaning
ALC	LC-APC bulkhead tip, 1.25 mm APC ferrule tip, 1.25 mm cleaning

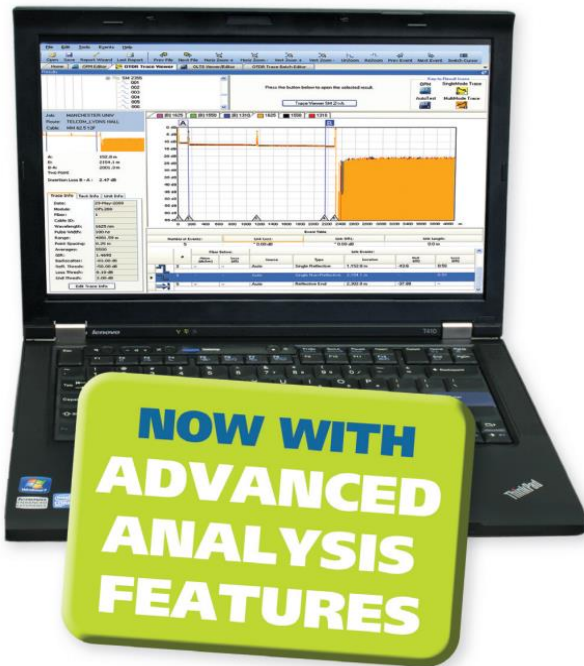
*For additional FOCIS Flex adapter tips, see FOCIS Flex data sheet or Buyer's Guide.

Specifications and descriptions are subject to change without prior notice.

Fujikura - AFL Test Results Manager 2.0

TRM® 2.0 Test Results Manager

All-In-One Comprehensive Analysis and Reporting Software



TRM 2.0 Basic Software Features

- Generate professional acceptance reports including:
 - OTDR traces
 - Certification loss results/OPM loss results
 - Connector Inspection Results
- Create certification results and apply Pass/Fail
- Document networks to reduce maintenance cost
- Increase productivity with powerful OTDR Batch editing
- Telcordia (GR-196 v1.1, SR-4731 issue 1 & 2) .SOR file formats

TRM 2.0 Advanced Software Features

- Macro/Microbend detection capabilities
 - Identify excess insertion loss due to poor installation and fiber handling
 - Detect insertion loss difference between wavelengths (≥ 0.2 dB)
- Automatic Bi-directional trace analysis including
 - Bi-directional trace information in the Event table
 - Reverse direction test data for each event
- Reports with Macrobend and Bi-directional trace averaging
- Export .SOR file contents to .CSV format

Software Licensing

- TRM 2.0 Basic software
- TRM 2.0 Advanced software
- TRM 2.0 Upgrade from Basic to Advanced software

Languages supported

- | | | | |
|-----------|--------------|-----------|------------|
| • English | • Italian | • Russian | • Chinese |
| • French | • Polish | • Spanish | • Japanese |
| • German | • Portuguese | • Turkish | |

TRM 2.0 Test Results Manager is Windows®-compatible, all-in-one analysis and comprehensive reporting software designed for use with AFL test and inspection products. Three software packages are available, TRM Basic software, TRM Advanced software and upgrade from TRM Basic to TRM Advanced software.

TRM 2.0 enables technicians to quickly view results, analyze or batch edit OTDR traces, and generate acceptance reports including OTDR, insertion loss and inspection results uploaded from AFL OTDRs, power meters, and connector inspection probes.

TRM 2.0 Advanced adds Macro/Microbend detection, automatic Bi-directional trace averaging, and .SOR file export to .CSV file format.

TRM 2.0 Basic and TRM 2.0 Advanced software allow integration of fiber inspection images from AFL's FOCIS Flex, FOCIS WiFi or DFS1 FiberScope to be included in customized test reports. Both versions support Bellcore/Telcordia .SOR file formats.

TRM® 2.0 Test Results Manager

All-In-One Comprehensive Analysis and Reporting Software

Test Results Manager 2.0 Basic Software

TRM 2.0 Basic software is included with all AFL OTDRs and OPM5 optical power meters and additional copies are available for purchase. TRM 2.0 Basic permits technicians to quickly view results, analyze OTDR traces, loss or certification results, batch edit OTDR traces and create acceptance reports conforming to industry guidelines. TRM 2.0 allows users to generate reports showing dual wavelength traces and event tables, end-face images with pass/fail results, event map and loss data for each fiber. Users can apply Pass/Fail thresholds to OTDR events and OLTS measurement; create and apply application rules per industry standards. The OTDR Batch editor allows user to edit and analyze multiple trace files simultaneously.

Test Results Manager 2.0 Advanced Software

TRM 2.x Advanced software includes all Basic software features and adds Bi-directional OTDR trace averaging, Macrobend detection, and export of .SOR files to .CSV file format.

Basic and Advanced Software Comparison

FEATURES	BASIC SOFTWARE	ADVANCED SOFTWARE
OTDR Trace Results	◆	◆
OLTS Viewer/Editor	◆	◆
OTDR Trace Batch Editor	◆	◆
Pre-defined Template for Reports	◆	◆
TRM Trace Comparison	◆	◆
FOCIS Flex Inspection Images and Pass/Fail Table	◆	◆
FOCIS WiFi and DFS1 Inspection Images	◆	◆
Telcordia (GR-196 v1.1, SR-4731 issue 1 & 2) .SOR file formats	◆	◆
Macrobend/Microbend		◆
Automatic Bi-directional OTDR Event Table		◆
Report with Bi-directional OTDR Trace/Event information		◆
Report with Macrobend/Microbend Events		◆
Export .SOR File Contents to .CSV File		◆
License Key	Required (Seat License)	

Ordering Information

TRM 2.0 Basic software is included with M-Series, C-Series, OFL-Series, FlexTester and FlexScan OTDRs and OPM5 (may be installed in up to 5 PCs). Users may download a full working version of TRM 2.0 (Basic plus Advanced features) and try it for 30 days. Once the evaluation period ends, users must purchase and install a TRM 2.0 Basic or Advanced software license to continue to use TRM. To order the TRM 2.0 software, contact your AFL Sales representative or AFL Customer Support. The TRM 2.0 Basic and Advanced software part numbers are listed below.

DESCRIPTION	AFL NO.
TRM 2.0 Basic Software (OTDR Trace/OLTS Viewer, Batch Editor and Reports)	TRM-00-0900PR
TRM 2.0 Advanced Software (Basic TRM plus Advanced Features and Reports)	TRM-00-0910PR
TRM 2.0 Upgrade from Basic to Advanced Software	TRM-00-0920PR

TRM® 2.0 Test Results Manager

All-In-One Comprehensive Analysis and Reporting Software

Optimize Productivity with Powerful Batch Processing

Analysis

- Edit cables or groups of fibers in one batch session
- Modify event pass/fail thresholds:
Loss, ORL, Link Loss, Link ORL
- Add or remove Launch and Receive cables
- Adjust Launch and Receive cable length
- Adjust the location of the cursors

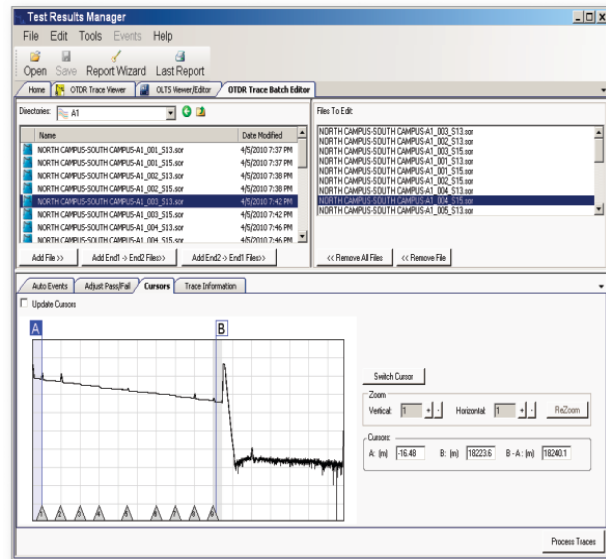
Documentation

Add and edit

- Trace File Names (Fiber Number, Cable ID, End 1, End 2, and Direction of test),
- Cable Information (Cable Type and GIR)
- Job Information (Company name, Main Operator, Second Operator, and Comment)

Reporting

- Generate professional reports by applying edits to a group of fibers for consistency of information and uniformity of results

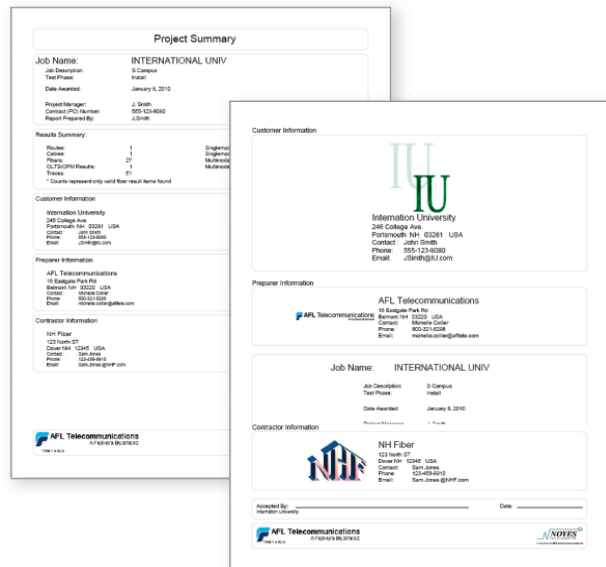


Create Professional Personalized Reports

Featuring the Report Wizard - a powerful tool for creating test reports, TRM allows users to generate personalized professional reports for customer's job acceptance.

Generated reports meet accepted industry documentation and can be personalized by customizing cover pages to include customer's logos.

Create dedicated inspection, insertion loss and OTDR reports, as well as reports combining OTDR, power meter and inspection results.



TRM® 2.0 Test Results Manager

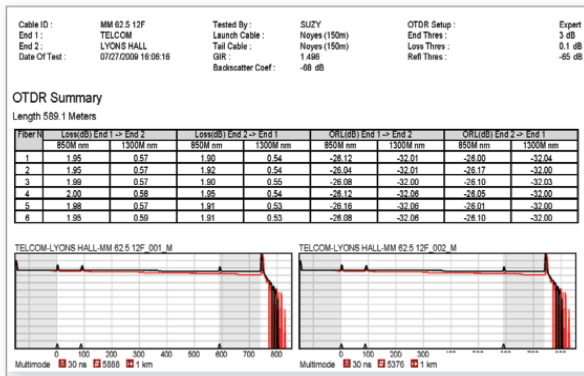
All-In-One Comprehensive Analysis and Reporting Software

Reporting Flexibility

- Create custom cover pages with logos for end-users, installers or consultants
- Generate OTDR summary table with thumbnail OTDR traces
- Combine OTDR trace(s), event table, loss measurements, connector end-face image and pass/fail results, and event map in a single report
- Export jobs to Zip files or save reports as PDF files

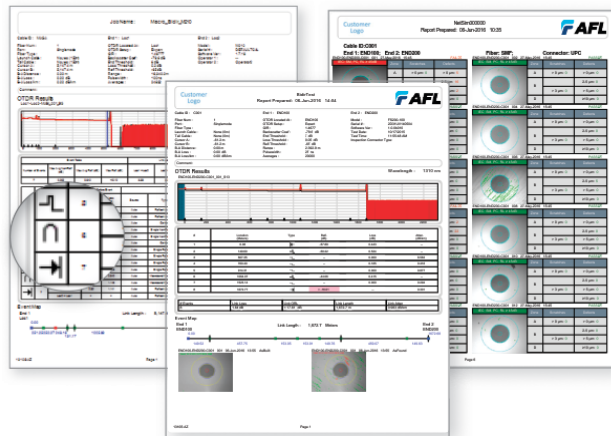
OTDR Cable Summary Page

OTDR cable summary page shows job information and test setup, Loss and ORL test results with or without thumbnails of OTDR traces (shown with Loss/ORL table and OTDR thumbnails).



Fiber Detail Results Page

Fiber Detail Results page documents equipment used for testing, job information, test setup, cursor info and OTDR trace with Event map. OPM or Certification results and end-face image and pass/fail results may be included if available (as shown) with an overall Pass or Fail.



Certification Report Page

Certification report page shows overall Pass/Fail report ① to standards (ISO shown) - with Pass/Fail ② indicated for each fiber as well as User Rule ③ and Applications for which the fibers have passed.

- Combine OTDR trace(s), event table, loss measurements, connector end-face image, and event map in a single report.
- Export jobs to Zip files or save reports as PDF files

Certification Results Cabling Standard : ISO 11801 (International Standard) all cables, 50 or 62.5 µm fiber: ①

Number of Connections : 2 Loss Limit : 850nm (3.58 dB), 1300nm (2.39 dB)
Number of Splices : 0 Length Limit : 2000 Meters

TELCOM LYONS HALL-MM 62.5 12F att

Date of Test	Time	Fiber #	Loss (dB)		Length (m)	P/F	Headroom (dB)		
			850 nm	1300 nm			850 nm	1300 nm	
Jul 27, 2009	3:35 PM	1	E1-E2	2.95	1.05	594.63	Pass	0.63	0.74
			E2-E1	2.68	1.42			0.86	0.95
			E1-E2	2.72	1.84			0.67	0.70
Jul 27, 2009	3:36 PM	2	E1-E2	2.91	1.09	594.63	Pass	1.06	0.79
			E2-E1	2.68	1.42			0.90	0.97
			E1-E2	2.93	1.00			0.86	0.54
Jul 27, 2009	3:37 PM	4	E1-E2	2.72	1.85	594.12	Pass	0.67	0.70
			E2-E1	2.91	1.09			1.03	0.76
			E1-E2	2.95	1.03			0.90	0.97
Jul 27, 2009	3:38 PM	5	E1-E2	2.68	1.42	594.37	Pass	0.86	0.53
			E2-E1	2.72	1.86			0.67	0.70
			E1-E2	2.91	1.09			0.86	0.53

Applications these fibers have been tested to support : User Defined Rule (Marriot Rule) ③
10*100BASE-SX (850 nm) on (OM3) 62.5 µm fiber

Specifications and descriptions are subject to change without prior notice.

Fujikura - FOCIS Flex

FOCIS Flex Fiber Optic Connector Inspection System

U.S. Patent 9,217,688



Features

- Auto-focus and auto-centering for fast, easy inspection
- Untethered operation simplifies access at patch panels
- IEC, IPC and user-defined pass/fail analysis
- Self-contained, compact, hand-held inspection solution
- Use independently, or pair with FlexScan or FlexTester OTDR
- Configure and access results from Android or Apple App
- Save results internally and upload via Bluetooth or USB
- Ergonomic design fits in the palm of your hand
- Generate inspection reports using aeRos or TRM® 2.0

Applications

- Inspect connectors on patch cords or in bulkhead adapters
- Optical network installation, troubleshooting and maintenance
- Inspect MPO/MTP multi-fiber connectors
- Assure critical fiber infrastructure performs properly
- Keep fiber connections working at optimal performance levels
- Verify proper connector cleaning practices are being used

Pass/fail results in seconds: With the press of a single button, FOCIS Flex auto-focuses, captures and centers the end-face image, applies pass/fail rules, displays image and pass/fail results, and wirelessly transfers image and results to a paired FlexScan or FlexTester OTDR. All in a matter of seconds!

Independent, untethered operation: With rechargeable battery supply and integrated display, FOCIS Flex can be used independently – without requiring an external OTDR or display unit.

Pair with FlexScan or FlexTester OTDR: Still prefer to view and save images and pass/fail results on your FlexTester OTDR? No problem! Captured images and pass/fail results are immediately displayed and easily saved on the paired device along with associated OTDR and/or insertion loss test results.

Pair with Android or iOS device: Display images on your Android or iOS device using AFL's FOCIS Flex mobile App. Save results to AFL's aeRos cloud-based workflow management system.

Save results internally or externally: FOCIS Flex internally stores thousands of results using file-naming capabilities similar to FlexScan and FlexTester OTDRs. A micro-USB port supports fast upload of internally stored results to PC, and ensures your FOCIS Flex software can be updated to the latest features and supported languages.

Wide range of adapter tips: Interchangeable adapter tips support connector inspection for a wide range of both single-fiber and multi-fiber patchcords and bulkhead-mounted connectors having either PC or APC polished end-faces.

FOCIS Flex is available in standalone kit configurations including soft carry case / holster and user-selected adapter tips. Available FlexScan and FlexTester PRO and Complete Kits bundle FOCIS Flex with the selected OTDR, fiber ring and cleaning supplies.

FOCIS Flex
Fiber Optic Connector Inspection System

U.S. Patent 9,217,68

Specifications ^a

OPTICAL PERFORMANCE	
Field of View (viewed on FOCIS Flex)	Live: 710 x 860 µm; Captured, Zoomed Out: 560 x 600 µm; Captured, Partially Zoomed In: 360 x 390 µm; Captured, Fully Zoomed In: 180 x 195 µm
Field of View (Viewed on a PC)	Stored, Zoomed Out: 700 x 525 µm; Stored, Fully Zoomed In: 240 x 180 µm
Manual Detection Capability	1 µm
Analysis Resolution	1.5 µm
Captured Image Size (Pixels)	648 x 480 VGA; Images stored internally in three .JPG files, one at each FOV
OPERATING FEATURES	
Focus	Auto-focus and manual focus
Centering	Auto-centering after capture
Pass/Fail Analysis	IEC 61300-3-35 (2015), IPC and user-defined criteria
Image Capture and File Storage Capacity	10,000 files
File Format (Image and Pass/Fail Results)	jpg, gif
Bluetooth Characteristics	SPP to FlexScan and FlexTester OTDRs; IAP to iOS devices
USB Characteristics	USB 1.1 mass storage device
Supported Languages	English, French, German, Japanese, Spanish, Polish, Russian
PHYSICAL AND POWER CHARACTERISTICS	
Display size, type, resolution	2.4", TFT, 240 x 320 with brightness control
Battery Type	NiMH, user replaceable
Battery Operating Time (typical)	8 hours (60 tests in 20 minutes each hour; auto-off enabled)
Recharge Time	<4.5 hours
Power Save Features	Auto-off (disabled, 2, 5, 10 minutes)
AC Charger voltage, frequency, current	100-240 V, 50/60 Hz, 5VDC, 2A
Size	47 x 37 x 183 mm (1.8 x 1.5 x 7.2 in)
Weight	240 g (0.5 lb)
ENVIRONMENTAL CHARACTERISTICS	
Operating Temperature	0 to +50 °C
Storage Temperature	-40 to +70 °C
Relative Humidity	95%, non-condensing
Transit and shock	2G vibration, 30G shock

Notes:

a. All specifications valid at 23°C ±2°C (73.4°F ±3.6°F).

Ordering Information

DESCRIPTION	AFL NO.
FOCIS Flex Kit, soft carry case / holster, USB cable, AC charger, TRM 2.0 reporting software, reference guide, no tips	FOCIS-FLX-P4XN
FOCIS Flex Kit, soft carry case / holster, USB cable, AC charger, TRM 2.0 reporting software, reference guide, 2 user-selected UPC adapter tips (ferrule and bulkhead), user-selected One-Click cleaner	FOCIS-FLX-P4XU
FOCIS Flex Kit, soft carry case / holster, USB cable, AC charger, TRM 2.0 reporting software, reference guide, 2 user-selected APC adapter tips (ferrule and bulkhead), user-selected One-Click cleaner	FOCIS-FLX-P4XA

FOCIS Flex Fiber Optic Connector Inspection System

U.S. Patent 9,217,688

FlexScan OTDR PRO and Complete Kits with FOCIS Flex

PRO Kits include the following items:

- FlexScan with accessories (AC charger, carry strap, SC/2.5 mm connector adapters, TRM® 2.0 Advanced Test Results Manager, carry case)
- FOCIS Flex Fiber Optic Connector Inspection System with accessories (AC charger, USB cable, soft carry case/holster)
- Two user-selected adapter tips and one user-selected One-Click Cleaner
- 150 m Fiber Ring (launch cable) with user-specified connectors

Complete kits expand on PRO Kits by adding bend insensitive fiber identifier with optional power meter (OFI-BI or OFI-BIPM).

See FlexScan data sheet for FlexScan PRO and Complete Kit ordering information.

FlexTester PRO2 and Complete2 Kits with FOCIS Flex

PRO2 Kits include the following items:

- User-selected FLX380-3xx or OFL280-1xx FlexTester with accessories (AC charger, USB cable, TRM® 2.0 Advanced Test Results Manager)
- FOCIS Flex Fiber Optic Connector Inspection System with accessories (AC charger, USB cable, soft carry case/holster)
- Two user-selected adapter tips and one user-selected One-Click Cleaner
- 150 m Fiber Ring (launch cable) with user-specified connectors
- Rugged, waterproof carry case

Complete2 Kits include everything in the FlexTester PRO2 kit plus choice of OFI optical fiber identifier.

See FLX380 or OFL280 data sheet for FlexTester PRO2 and Complete2 Kit ordering information.

FOCIS Flex Adapter Tips (Contact AFL for adapter tips for other connector types)

DESCRIPTION	AFL NO.
SC-UPC bulkhead adapter tip	FFLX-01-SC
FC-UPC bulkhead adapter tip	FFLX-01-FC
ST-UPC bulkhead adapter tip	FFLX-01-ST
LC-UPC bulkhead adapter tip	FFLX-01-LC
Universal 2.5 mm, UPC ferrule adapter tip	FFLX-01-U25
Universal 1.25 mm, UPC ferrule adapter tip	FFLX-01-U125
SC-APC bulkhead adapter tip	FFLX-01-ASC
FC-APC bulkhead adapter tip	FFLX-01-AFC
LC-APC bulkhead adapter tip	FFLX-01-ALC
Universal 2.5 mm, APC ferrule adapter tip	FFLX-01-A25
Universal 1.25 mm, APC ferrule adapter tip	FFLX-01-A125
FOCIS Flex adapter extension tube, straight, 46 mm	FFLX-01-EXTS46
FOCIS Flex adapter extension tube, straight, 80 mm:	FFLX-01-EXTS80

DESCRIPTION	AFL NO.
E2000 PC/UPC bulkhead adapter tip	DFS1-00-0023MR
E2000 APC bulkhead adapter tip	DFS1-01-0008MR
Tip for SC/APC (OptiTap®) bulkhead adapter	DFS1-01-0007MR
Tip for OptiTip® APC ferrule and bulkhead adapter	DFS1-01-0013MR
Multi-row MTP/PC ferrule & bulkhead adapter extended tip kit (base plus multi-row MTP/PC front end tip)	DFS1-00-0050MR
MTP/PC ferrule & bulkhead adapter extended tip kit (base plus MTP/PC front end tip)	DFS1-00-0037MR
MTP/PC and MTP/APC ferrule & bulkhead adapter extended tip kit (base, MTP/PC, MTP/APC front end tips)	DFS1-00-0042MR
MTP/APC ferrule and bulkhead adapter extended tip kit (base plus MTP/APC front end tip)	DFS1-01-0010MR

Specifications and descriptions are subject to change without prior notice.