# AFL

# edp
## Distribution

# FOCIS FLEX
## FIBRE OPTIC CONNECTOR INSPECTION SYSTEM

**FOCIS Flex makes connector inspection simple, fast, and convenient.**

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, saves results internally and/or wirelessly transfers data to a paired FlexScan OTDR or a smart device. It is fast, small, and easy to use to enable 100% connector inspection.

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

**Optional pairing with FlexScan OTDR or smart devices:** Captured images and Pass/Fail results can be immediately displayed and easily saved on either paired FlexScan OTDR or a smart device equipped with the AFL's free FOCIS Flex App. This capability enables inspection results to be included in reporting and archiving.

**Save results internally or externally:** FOCIS Flex internally stores up to 10,000 results using file-naming capabilities similar to those of the FlexScan OTDR. 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-fibre and multifibre patchcords and bulkhead-mounted connectors having either PC or APC polished end-faces.

**Bundled kits for significant savings:** FOCIS Flex is available in kits that include a Basic license for Test Result Manager (TRM® 3.0), user-selected adapter tips and cleaning supplies, and a soft carry case.

**Easy reporting and archiving:** Included Test Result Manager (TRM 3.0) provides data processing and reporting locally via a PC. The FOCIS Flex mobile App is available for free download from Google play or App Store for sharing data with smart devices.
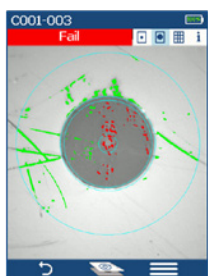
# PRODUCT OVERVIEW



## Features

- 1-button to auto-focus, centre, capture, analyse, and save
- IEC, IPC, and user-defined pass/fail analysis
- Untethered, compact, hand-held inspection
- Use independently or pair with OTDR
- Save 10K results internally or share via WiFi or USB

## Applications

- Inspect connectors on patch cords or in bulkhead adapters
- Optical network installation, troubleshooting, and maintenance
- Inspect MPO/MTP multi-fibre connectors
- Assure critical fibre infrastructure performs properly
- Keep fibre 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 centres the end-face image, applies Pass/Fail rules, displays image and Pass/Fail results. Captured Pass/Fail results are easily viewed in either Image or Table view.

Image view shows end-face image with Pass/Fail region overlay , failing scratches/ defects highlighted in red , and passing scratches/defects highlighted in green.

Table view shows analysis rule applied to determine Pass/Fail, analysis Zone IDs (A, B, C, D), scratch analysis results for each zone, and defect analysis results for each zone.

# Specifications [a]

| Optical Performance | |
|---|---|
| Field of View (viewed on FOCIS Flex) | Live: 710 x 860µm;<br>Captured, Zoomed Out: 560 x 600µm;<br>Captured, Partially Zoomed In: 360 x 390µm;<br>Captured, Fully Zoomed In: 180 x 195µm |
| Field of View (Viewed on a PC) | Stored, Zoomed Out: 700 x 525µm;<br>Stored, Fully Zoomed In: 240 x 180µm |
| Manual Detection Capability (minimum) | 1µm |
| Analysis Resolution | <1.0µm |
| 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 |
| Centring | Auto-centring 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, Chinese Simplified, Chinese Traditional, Finnish, French, German, Italian, Japanese, Korean, Polish, Russian, Spanish, Turkish |

| 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 183mm (1.8 x 1.5 x 7.2 in) |
| Weight | 240g (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).

# FlexScan OTDR PRO and BIPM Kits with FOCIS Flex

## PRO Kits include the following items:

- FlexScan with accessories (AC charger, carry strap, SC/2.5mm connector adapters, TRM® 3.0 Advanced Test Results Manager, carry case)
- FOCIS Flex Fibre 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
- 150m Fibre Ring (launch cable) with user-specified connectors

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

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

## FOCIS Flex Adapter Tip

| Part Number | Description |
|---|---|
| FFLX-01-SC | SC-UPC bulkhead adapter tip |
| FFLX-01-FC | FC-UPC bulkhead adapter tip |
| FFLX-01-ST | ST-UPC bulkhead adapter tip |
| FFLX-01-LC | LC-UPC bulkhead adapter tip |
| FFLX-01-U25 | Universal 2.5mm, UPC ferrule adapter tip |
| FFLX-01-U125 | Universal 1.25mm, UPC ferrule adapter tip |
| FFLX-4S-ASC | SC-APC bulkhead adapter tip |
| FFLX-4S-AFC | FC-APC bulkhead adapter tip |
| FFLX-4S-ALC | LC-APC bulkhead adapter tip |
| FFLX-01-A25 | Universal 2.5mm, APC ferrule adapter tip |
| FFLX-01-A125 | Universal 1.25mm, APC ferrule adapter tip |
| FFLX-01-EXTS46 | FOCIS Flex adapter extension tube, straight, 46 mm |
| FFLX-01-EXTS80 | FOCIS Flex adapter extension tube, straight, 80 mm |

| Part Number | Description |
|---|---|
| FFLEX-4S-E2K | E2000 PC/UPC bulkhead adapter tip |
| FFLEX-4S-E2KA | E2000 APC bulkhead adapter tip |
| FFLEX-4S-OTA | Tip for SC/APC (OptiTap®) bulkhead adapter |
| DFS1-01-0013MR | Tip for OptiTip® APC ferrule and bulkhead adapter |
| DFS1-00-0037MR | MTP/PC ferrule & bulkhead adapter extended tip kit (base plus MTP/PC front end tip) |
| DFS1-00-0042MR | MTP/PC and MTP/APC ferrule & bulkhead adapter extended tip kit (base,MTP/PC, MTP/APC front end tips) |
| DFS1-01-0010MR | MTP/APC ferrule and bulkhead adapter extended tip kit (base plus MTP/APC front end tip) |

## Ordering Information

| Part Number | Description |
|---|---|
| FOCIS-FLX-P4XN | FOCIS Flex Kit, soft carry case / holster, USB cable, AC charger, TRM 3.0 reporting software, reference guide, no tips |
| FOCIS-FLX-P4XU | FOCIS Flex Kit, soft carry case / holster, USB cable, AC charger, TRM 3.0 reporting software, reference guide, 2 user-selected UPC adapter tips (ferrule and bulkhead), user-selected One-Click cleaner |
| FOCIS-FLX-P4XA | FOCIS Flex Kit, soft carry case / holster, USB cable, AC charger, TRM 3.0 reporting software, reference guide, 2 user-selected APC adapter tips (ferrule and bulkhead), user-selected One-Click cleaner |
| FOCIS-FLX-P4XUA | FOCIS Flex Kit, soft carry case/holster, USB cable, AC charger, TRM 3.0 reporting software, reference guide, user-selected UPC adapter tips (ferrule and bulkhead), 2 user-selected APC adapter tips (ferrule and bulkhead), user-selected One-Click cleaner |

# Test Management & Reporting Software

| Part Number | Description |
|---|---|
| TRM3-BASIC | TRM 3.0 with Basic License, USB delivery (included with all FOCIS Flex kits) |
| TRM3-UPGRADE | TRM 3.0 upgrade from Basic to Advanced License, USB delivery |
| TRM3-UP-EMAIL | TRM 3.0 upgrade from Basic to Advanced License, email delivery |
| Free Download | FOCIS Flex App (Google play or App Store) |

# Qualifications

| Category | Regulation / Standard | Qualification |
|---|---|---|
| CE Marking | EU | Compliant to relevant EU Directives on health, safety, and environmental protection, and certified with CE marking |
| Safety/EMC/EMI | IEC | Compliant to IEC 61010-1 for safety requirements for electrical equipment |
| | EN | Compliant to EN 61010-1 for safety requirements for electrical equipment |
| | IEC | Compliant to IEC 61326-1 for EMC requirements for electrical equipment |
| | EN | Compliant to EN 61326-1 for EMC requirements for electrical equipment |
| | EN | Compliant to EN 55011 for EMC requirements for industrial, scientific and medical equipment |
| | FCC | Compliant to code of federal regulations FCC 47 CFR 15 on unlicensed transmissions |
| | FDA | Compliant to code of federal regulations FDA 21 CFR 1040.10 and 1040.11 on laser products |
| | IEC | Compliant to IEC 60825-1 for safety of laser products |
| RoHS | EU | Compliant to EU regulations Directive 2011/65/EU (RoHS 2) and Directive 2015/863 (RoHS 3) |
| Test Method | IEC | Compliant to IEC 61300-3-35 for visual inspection of fibre optic connectors and fibre-stub transceivers |
| | IPC | Compliant to IPC-8497-1 for cleaning methods and contamination assessment for optical assembly |

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