

FIP

FIBER INSPECTION PROBE

FIP-S/FIP-USB/FP and Accessories

NETWORK TESTING



- Back panel connector inspection
- Lightweight and ergonomic
- Handheld or FTB-400/PC display or FOT-930
- FTB-400/IQS-500/PC image-capture capability
- Compatible with EXFO products
- Solutions for all types of connectors, APC and UPC

Innovative Image-Capture Technology

Checking connectors and other fiber terminations for polish quality and cleanliness is crucial in modern high-bandwidth systems. Neglect may lead to signal loss in networks, leading to further troubleshooting, lost time and greater expense.

Inspect Hard-to-Reach Connectors

Avoid these problems with the FIP-S/FIP-USB Video Fiber Inspection Probe, a handheld video microscope. Unlike traditional microscopes, the inspection probe facilitates the examination of hard-to-reach connectors on the back of patch panels and bulkhead adapters. It also lets you check the inside of connectors without taking them apart. EXFO offers two ways to achieve clear, sharp images of termination dirt and damage—a convenient handheld display, or our market-leading FTB-400 Universal Test System.

Key Features

- Direct USB output port
- Simple one-cable design
- Basic capture and image-sharpening software
- Save digital images directly to your PC/IQS-500 (Windows 2000 compatibility only or FTB-400)



FTB-400 with FIP-USB4



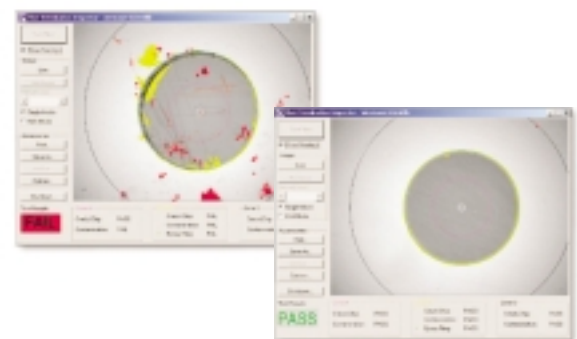
FIP-USB (USB module)

FTB-400/IQS-500: See the Possibilities

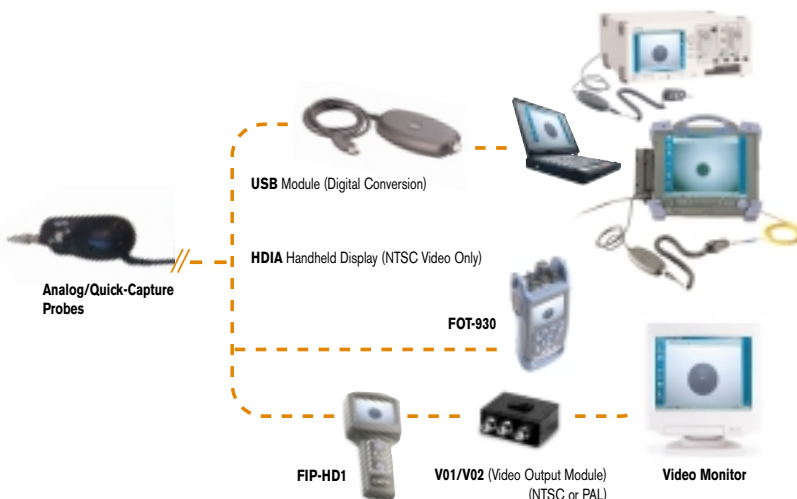
Connect the probe to an FTB-400 Universal Test System and IQS-500 with its 12.1-inch screen or a PC via an image-capture unit to view the fiberendface. This innovative technology draws its power from the USB port and requires no additional battery packs or cabling. Use the unit with specialized software for digital image-capture and sharpening, as well as data storage.

Software Analysis Features and Benefits:

- Automatic debris and defect detection, including fine scratches
- Measurement of epoxy ring for out-of-tolerance conditions
- Printable/archivable inspection results, including image data
- Based on industry standards or user-defined threshold settings

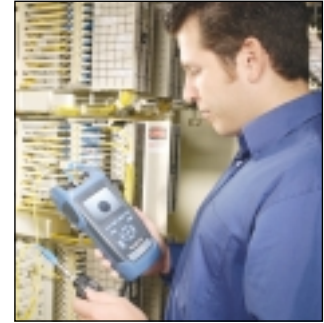


Soft Analysis Software



Excellent Images in Hand

Connect the probe directly to the compact, handheld active matrix LCD screen for safe, efficient inspection. The probe's high-magnification optics project a 530-micron field of view onto the handheld's bright, high-contrast 3.5-inch TFT active matrix LCD display. The handheld display features an Auto-Shutoff interval switch with three settings to ensure long-lasting battery life.



FOT-930 with P5 option

Outstanding Fiber Probe Features

This compact, lightweight fiber inspection probe contains a coaxial LED light source and a mini CCD video camera, (1/3 in), with a 530 μm field of view and a choice of 200x, 400x or 500x magnification. The probe handle has a small, conveniently positioned focusing device. Simply turn the mechanism until you reach the desired sharpness. The tip of the handle mates with the female bulkhead connector on the patch panel or mating connector and pre-centers the image on the screen. The small probe holds itself in place for hands-free operation. The instrument comes with a standard, built-in NiMH rechargeable battery for use with the handheld active matrix LCD screen.



FIP-S15

Accessories—Maximum Flexibility



FIPT-FC
FC tip for bulkhead adapters.



FIPT-U12M
Universal Patchcord tip for 1.25-mm ferrules (LC and MU) used to view MALE connectors.



FIPT-SC
SC tip for bulkhead adapter.



FIPT-ST
ST tip for bulkhead adapters.



FIPT-LC
LC tip for bulkhead adapters.



FIPT-SC/APC
SC-APC tip for bulkhead adapter.



FIPT-ST-L
Long-reach ST tip for bulkhead adapters with extended reach and narrow barrel.



FIPT-LC-L
Long-reach LC tip for bulkhead adapters with extended reach and narrow barrel (recommended for extensive LC use).



FIPT-UFMA
Universal flare tip. Allows you to attach any MOA adapter from our handheld fiber microscopes (used to view MALE connectors).



FIPT-FC-P
Pro Version FC tip for bulkhead adapters, threads onto bulkhead for true hands-free operation.



FIPT-FC-APC
FC-APC tip for bulkhead adapters; threads onto bulkhead for hands-free operation.



FIPT-MU
MU tip for bulkhead adapters.



FIPT-U25M
Universal Patchcord tip for 2.5-mm ferrules (SC, ST, FC and SMA) used to view MALE connectors.



FIPT-LC-A6
60° angle connector for transceiver and other hard to reach connectors.



FIPT-E2000
E-2000 tip for bulkhead adapters.



FIPT-U25MA
Universal Patchcord tip for APC 2.5-mm ferrules (SC, ST, FC and SMA) used to view MALE connectors.



FIPT-D4
D4 tip for bulkhead adapters.



FIPT-MTP
MTP tip for bulkhead adapters.



FIPT-MTRJ
MTRJ tip for bulkhead adapters.

SPECIFICATIONS

Handheld Display

FIP-HD1: Handheld video display (comes with US, Euro or UK plugs)	
Weight	0.4 kg (0.8 lb)
Display	9 cm (3 1/2 in) TFT active matrix (320 x 240 pixels)
Video input	NTSC, 4-pin interface probe or conversion cable for 6-pin interface and USB interface
Power	Rechargeable NiMH battery or AC power adapter (comes with US, EURO or UK plugs)(110 and 220 VAC)
Battery life	2 h
Charging time	2 h
Dimensions (H x W x D)	5.3 cm x 10 cm x 22 cm (12 1/8 in x 4 in x 8 11/16 in)

Video Inspection Probe

Weight	0.18 kg (0.4 lb)
Optical magnification	200x, 400x or 500x
Camera type	CCD, 1/3 in
Light source	Blue LED, internal to probe
Lighting technique	Coaxial
Focus control	Adjustable in probe
Dimensions (H x W x D)	4.3 cm x 4.6 cm x 14 cm (1 11/16 in x 1 13/16 in x 5 1/2 in)

GENERAL SPECIFICATIONS

Temperature		
operating	0 °C to 40 °C (32 °F to 104 °F)	
storage	-10 °C to 60 °C (14 °F to 140 °F)	
Relative humidity	0 % to 95 % non-condensing	

ORDERING INFORMATION

FIP-SXX-XX

Model

- FIP-S1 (FIP-P1 200x magnification) power supply for North America
- FIP-S1-EU (FIP-P1 200x magnification) power supply for Europe
- FIP-S1-UK (FIP-P1 200x magnification) power supply for UK
- FIP-S15 (FIP-P5 200x, 400x magnification) power supply for North America
- FIP-S15-EU (FIP-P5 200x, 400x magnification) power supply for Europe
- FIP-S15-UK (FIP-P5 200x, 400x magnification) power supply for UK

Standard Accessories

Handheld display (FIP-HD1), probe (FIP-P1 or FIP-P5), adapters: FC tip (FIPT-FC), ST tip (FIPT-ST), SC tip (FIPT-SC), universal 2.5 mm patchcord tip (FIPT-U25M), carrying case (FIPP-HSC1).

Example: FIP-S15

FIP-USBX

Model

- FIP-USB2 (FIP-P1 200x magnification)
- FIP-USB4 (FIP-P5 200x and 400x magnification)

Standard Accessories

USB module (FIP-USB) and software (Windows 2000 compability only), probe (FIP-P1 or FIP-P5), FC tip (FIPT-FC), ST tip (FIPT-ST), SC tip (FIPT-SC), universal 2.5 mm patchcord tip (FIPT-U25M).

Example: FIP-USB4

FOT-930 Add-On

- FP1 (FIP-P1 200x magnification)
- FP5 (FIP-P5 200x and 400x magnification)

Standard Accessories

- Probe (FIP-P1 or FIP-P5), FC tip (FIPT-FC), SC tip (FIPT-SC), universal 2.5 mm patchcord tip (FIPT-U25M).

OPTIONAL ACCESSORIES

Video Inspection Probe

- FIP-P1 200x
- FIP-P5 200x and 400x
- FIP-P7 500x

Video Output Module

- FIP-VO2 for USA
- FIP-VO2-EU for Europe
- FIP-VO2-UK for UK

Handheld Display

- FIP-HD1 for USA
- FIP-HD1-EU for Europe
- FIP-HD1-UK for UK

USB Module and Software

- FIPP-USB3 Includes standard application software (Fiber Check)
- SC-FCA-USB1 USB key and Fiber Check analysis software

Adapter Tips

- FIPT-ST: ST tip for bulkhead adapter
- FIPT-ST-L: Long-reach ST tip for bulkhead adapter
- FIPT-SC: SC tip for bulkhead adapter
- FIPT-SC-APC: SC-APC tip for bulkhead adapter
- FIPT-FC: FC tip for bulkhead adapter
- FIPT-FC-P: Pro-version FC tip for bulkhead for hands-free operation
- FIPT-FC-APC: FC tip for bulkhead adapter with angled connector
- FIPT-LC: LC tip for bulkhead adapter

- FIPT-LC-APC: LC-APC tip for bulkhead adapter
- FIPT-LC-L: Long-reach LC tip for bulkhead adapter
- FIPT-U25M: Universal patchcord tip for all 2.5 mm ferrules
- FIPT-U25MA: Universal patchcord tip for all APC 2.5 mm ferrules
- FIPT-U12M: Universal patchcord tip for all 1.25 mm ferrules
- FIPT-MU: MU tip for bulkhead adapter
- FIPT-MUL: MU tip for bulkhead adapter long reach

- FIPT-SC/APC: SC tip for bulkhead adapter with angled connector
- FIPT-E2: Tip for E-2000 bulkhead adapter
- FIPT-BIC: Biconic tip for bulkhead adapter
- FIPT-D4: D4 tip for bulkhead adapter
- FIPT-MPX: MPX tip with X axis pan control knob
- FIPT-MTP: MTP tip with X axis pan control knob
- FIPT-UFMA: Universal flare adapter, to attach to any MOA adapter

Find out more about EXFO's extensive line of high-performance portable instruments by visiting our website at www.exfo.com.



Rugged Handheld Solutions

- OLTS
- Power meter
- Light source
- Talk set



Optical Fiber

- OTDR
- OLTS
- ORL meter
- Switch

DWDM Test Systems

- OSA
- PMD analyzer
- Chromatic dispersion analyzer
- Multiwavelength meter

Transport/Datacom

- 10/100 and Gigabit Ethernet
- SONET/SDH (DS0 to OC-192c)
- SDH/PDH (64 kb/s to STM-64c)
- SAN

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EXFO is certified ISO 9001 and attests to the quality of these products. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. EXFO has made every effort to ensure that the information contained in this specification sheet is accurate. However, we accept no responsibility for any errors or omissions, and we reserve the right to modify design, characteristics and products at any time without obligation. Units of measurement in this document conform to SI standards and practices. **Contact EXFO for prices and availability or to obtain the phone number of your local EXFO distributor.** For the most recent version of this spec sheet, please go to the EXFO website at <http://www.exfo.com/specs> In case of discrepancy, the Web version takes precedence over any printed literature.

