

# FIBER INSPECTION PROBE IIII

FIP-S/FIP-USB/FP and Accessories

**IIII** NETWORK TESTING





# 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.



- 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 compability only or FTB-400)

### 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 portand requires no additional battery packs or cabling. Use the unit with specialized software for digital image-capture and sharpening, as well as data storage.





FTB-400 with FIP-USB4



FIP-USB (USB module)

# **Software Analysis Features and Benefits:**

- Automatic debris and defect detection, including fine scratches
- Mesurement 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

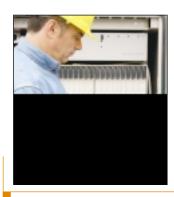
Connect the probe directly to the compact, handheld active matrix LCD screen for safe, efficient inspection. The probe's high-magnification optics project a 530-micron field of view onto the handheld's bright, high-contrast 3.5-inch TFT active matrix LCD display. The handheld display features an Auto-Shutoff 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 oparation.



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



**FIPT-MU** MU tip for bulkhead adapters.

FIPT-E2000



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-MTP
MTP tip for bulkhead adapters.

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-MTRJ MTRJ tip for bulkhead adapters.

#### **SPECIFICATIONS**

FIP-HD1: Handheld video	display (comes with US, Euro or UK plugs)			
Weight	0.4 kg (0.8 lb)			
Display	9 cm (3 <sup>1</sup> / <sub>2</sub> 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 <sup>1</sup> / <sub>8</sub> in x 4 in x 8 <sup>11</sup> / <sub>16</sub> in)			
Video Inspection Probe Weight	0.18 kg (0.4 lb)			
Optical magnification	200x, 400x or 500x			
Camera type	CCD, ¹/₃ in			
	Blue LED, internal to probe			
Light source	Blue LED, internal to probe			
Light source Lighting technique	Blue LED, internal to probe  Coaxial			
Lighting technique	Coaxial Adjustable in probe			
Lighting technique Focus control	Coaxial  Adjustable in probe  4.3 cm x 4.6 cm x 14 cm (1 11/16 in x 1 13/16 in x 5 1/2 in)			
Lighting technique Focus control Dimensions (H x W x D)	Coaxial  Adjustable in probe  4.3 cm x 4.6 cm x 14 cm (1 11/16 in x 1 13/16 in x 5 1/2 in)			
Lighting technique Focus control Dimensions (H x W x D) GENERAL SPECIFICAT	Coaxial  Adjustable in probe  4.3 cm x 4.6 cm x 14 cm (1 11/16 in x 1 13/16 in x 5 1/2 in)			

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**

Relative humidity

Video Inspection Probe	Video Output M	odule	Handheld Di	splay
FIP-P1 200x	FIP-VO2 for	USA	FIP-HD1	for ÚS
FIP-P5 200x and 400x	FIP-VO2-EU for	Europe	FIP-HD1-EU	for Eu
FIP-P7 500x	FIP-VO2-UK for	UK	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**

ST tip for bulkhead adapter FIPT-ST: 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 FC tip for bulkhead adapter FIPT-FC:

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 D1-EU for Europe D1-UK for UK

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 Universal patchcord tip for all APC 2.5 mm ferrules FIPT-U25MA: 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

for USA

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 D4 tip for bulkhead adapter FIPT-D4: 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.



OLTS

Power mete Light source

Talk set



# **DWDM Test Systems**

OTDR -OSA OLTS - PMD analyzer

ORL meter - Chromatic dispersion analyzer Switch - Multiwavelength meter

#### Transport/Datacom

-10/100 and Gigabit Ethernet -SONET/SDH (DS0 to OC-192c)

-SDH/PDH (64 kb/s to STM-64c) \_SAN

Corporate Headquarters > 400 Godin Avenue, Vanier (Quebec) G1M 2K2 CANADA | Tel.: 1 418 683-0211 | Fax: 1 418 683-2170 | info@exfo.com

		Toll	-free: 1 800 663.3936 (USA	and Canada)   www.exfo.com
EXFO America	4275 Kellway Circle, Suite 122	Addison, TX 75001 USA	Tel.: 1 800 663-3936	Fax: 1 972 836-0164
EXFO Europe	Le Dynasteur, 10/12 rue Andras Beck	92366 Meudon la Forêt Cedex FRANCE	Tel.: +33.1.40.83.85.85	Fax: +33.1.40.83.04.42
EXFO Asia-Pacific	151 Chin Swee Road, #03-29 Manhattan House	SINGAPORE 169876	Tel.: +65 6333 8241	Fax: +65 6333 8242
EXFO China	Beijing New Century Hotel Office Tower, Room 1754-1755	Beijing 100044 P. R. CHINA	Tel.: +86 (10) 6849 2738	Fax: +86 (10) 6849 2662
	No. 6 Southern Capital Gym Road			

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.

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