

# FIP-400

NETWORK TESTING—OPTICAL



Highly versatile probe to detect dirty/damaged connectors with unparalleled precision

- Easy back-panel connector inspection
- Truly rugged and lightweight solution for the field
- Image-capture capability for report documentation
- Ideal for all types of connectors: APC, UPC, MTP and more
- Slim design for easy use in crowded patch panels
- Compatible with EXFO test instruments



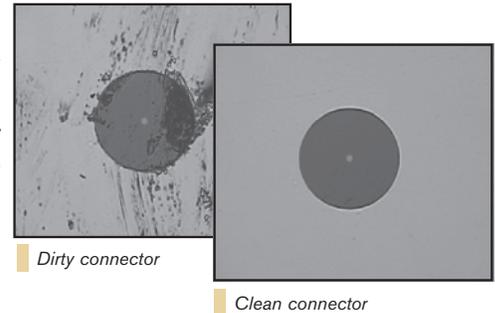
Next-Generation Network Assessment

**EXFO**  
EXPERTISE REACHING OUT

## Zoom In on Clarity

It's a known fact: optical network problems are often caused by dirty and/or damaged connectors. Using a fiber inspection probe to ensure that connectors/adapters are clean and exempt of any defect is where accurate testing starts.

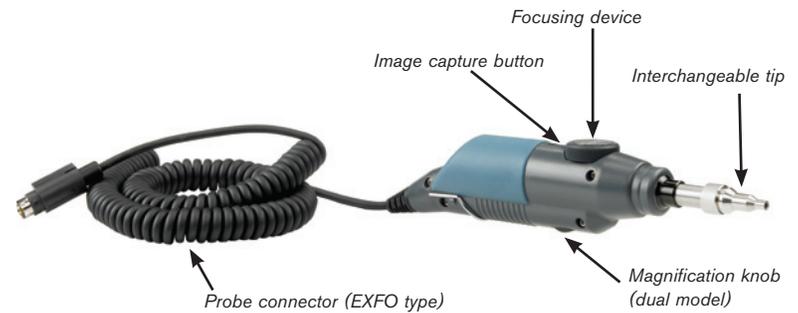
Thanks to EXFO's FIP-400 Fiber Inspection Probe, checking connectors and other fiber terminations for polish quality and cleanliness has never been easier. Benefit from the best optical resolution in the industry and see scratches and dirt particles as small as 1 µm. Also, use a USB converter to send image captures to a portable platform or a PC.



### Fiber Probe Viewer



### Video Inspection Probe



## Cleaning Kits

Connectors are key components that interconnect the entire network elements, which is why maintaining them in good condition is essential to ensure that all the equipment operates to their maximum performance and to avoid catastrophic network failure. A reliable network begins with good connector care and EXFO's cleaning kits will help you achieve this:

- Complete inspection and cleaning solution in one case
- Specialized devices and connector tips adapted for most connectors you will encounter in the field

Items	Description	Basic	Deluxe	MPO
Video probe and display	- FIP-400-D: Handheld display with 3.5 in TFT screen - FIP-400-P: 200x/400x or 400x magnification video probe	✓	✓	✓
Adapter tips	- Tips for FC-SC bulkheads	✓	✓	✓
	- Tip for LC bulkheads	✓	✓	
	- Universal patchcord tips for 2.5 mm and 1.25 mm ferrules	✓	✓	✓
	- MTP/APC tip for bulkhead adapter			✓
Cleaning devices	- Electro-Wash <sup>®</sup> MX cleaning pen - QbE <sup>™</sup> dry fiber-optic wipes - 2.5 mm swabs (6 in long) - 1.25 mm swabs (6 in long)	✓		
	- Electro-Wash <sup>®</sup> MX cleaning pen - QbE <sup>™</sup> dry fiber-optic wipes - IBC <sup>™</sup> brand cleaner for 1.25 mm connectors - IBC <sup>™</sup> brand cleaner for 2.5 mm connectors - Green Cletop <sup>®</sup> ferrule cleaning cassette, blue tape reel (type B)		✓	
	- Electro-Wash <sup>®</sup> MX cleaning pen - QbE <sup>™</sup> dry fiber-optic wipes - IBC <sup>™</sup> brand cleaner for MPO-style connectors - IBC <sup>™</sup> brand cleaner for 1.25 mm connectors - IBC <sup>™</sup> brand cleaner for 2.5 mm connectors - Green Cletop <sup>®</sup> ferrule cleaning cassette, blue tape reel (type B)			✓
Case	- Watertight and hard transit protector case	✓	✓	✓



Deluxe cleaning kit

## The Industry's Most Versatile Probe

With EXFO's FIP-400, you have the choice—you can either use it with a PC, with one of our test sets or with our lightweight, handheld monitor. Choose the way that works best for you.



## Applications

### Patchcord inspection

- Compatible with a wide range of connector types
- Offers great optical performance for patchcord quality assurance
- Use it as a stand-alone unit to perform field applications or with a USB adapter in a manufacturing environment

### Patch panel bulkhead inspection

- Get a clear view of both sides of an interconnection
- Inspect hard-to-reach connectors without stressing adjacent fibers, thanks to the FIP-400's slim design

### Single-fiber connector inspection

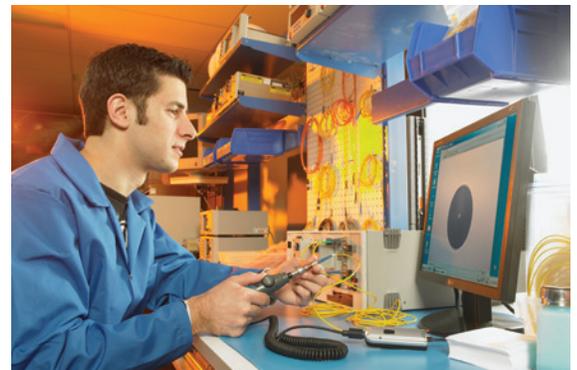
- Compatible with 1.25 mm and 2.5 mm angled-polished and ultra-polished connectors (APC and UPC)

### Multifiber connector inspection

- Compatible with male and female ribbon connectors such as MTP multifiber APC and UPC connectors

### Connection inspection through ConnectorMax Analysis Software

- Delivers clear-cut pass/fail verdicts, eliminating guesswork in the field and helping you save time and money
- Lightning-fast: results in 4 seconds through simple one-touch operation
- Full test reports for future referencing



Patchcord inspection in a manufacturing environment



Patch panel bulkhead inspection

## SPECIFICATIONS

### Video Inspection Probe

Size (H x W x D)	without tip cap 38 mm x 32 mm x 170 mm (1 1/2 in x 1 1/4 in x 6 11/16 in)
	with tip cap 38 mm x 32 mm x 200 mm (1 1/2 in x 1 1/4 in x 7 3/4 in)
Weight	0.2 kg (0.44 lb)
Resolution	Theoretical < 2 µm, detection capability < 1 µm
Field of view	625 µm x 464 µm (low magnification) <sup>a</sup> 412 µm x 306 µm (high magnification)
Light source	Blue LED
Lighting technique	Coaxial
Capture button <sup>b</sup>	Present on all models
Connector	EXFO probe port type (8 pin mini-DIN)
Focus control	Adjustable on the probe
Optical magnification	Adjustable, low and high (dual model only)

### Fiber Probe Viewer

Size (H x W x D)	50 mm x 99 mm x 190 mm (1 15/16 in x 3 7/8 in x 7 1/2 in)
Weight <sup>c</sup>	0.3 kg (0.66 lb)
LCD screen	3.5 in TFT active matrix (320 x 240 pixels)
Power	Rechargeable Li-ion battery or AC adapter/charger
Battery life	3 hours (continuous use)
Charging time	4 hours
Connector	EXFO probe port type (8 pin mini-DIN)

### USB Converter

	USB 1.1 Model	USB 2.0 Model
Size (H x W x D)	20 mm x 36 mm x 90 mm (13/16 in x 1 7/16 in x 3 9/16 in)	19 mm x 36 mm x 95 mm (3/4 in x 1 7/16 in x 3 3/4 in)
Connectors	EXFO probe port type (8 pin mini-DIN)/USB	
Capture button	No	Yes

## GENERAL SPECIFICATIONS

Temperature	
operating	-10 °C to 50 °C
storage	-40 °C to 70 °C
Relative humidity	0 % to 95 % non-condensing

## ORDERING INFORMATION

### FIP-400-XX-XX

#### Model ■

FIP-400-P-SINGLE = Video inspection probe  
Single magnification

FIP-400-P-DUAL = Video inspection probe  
Dual magnification

FIP-400-D = Handheld display

FIP-400-USB1 = USB1 converter with software,  
compatible with FTB-400 and IQS-500

FIP-400-USB2 = USB2 converter with software for PC <sup>e</sup>,  
FTB-500 <sup>d</sup> and IQS-600

FIP-400-USB

#### ■ Extra Adapter Tips <sup>d</sup>

00 = Without extra FIP-400 tip

FIPT-400-LC-K

FIPT-400-25A-K

FIPT-400-ADAPTER = Adapter tip

FIPT-400-D4 = D4 tip for bulkhead adapter

FIPT-400-E2000 = E-2000 tip for bulkhead adapter

FIPT-400-E2000-APC = E2000 APC tip for bulkhead adapter

FIPT-400-FC-SC-A6 = FC and SC angled tip for bulkhead (60 degree)

FIPT-400-FC-SC-APC = FC and SC APC tip for bulkhead adapter

FIPT-400-LC = LC tip for bulkhead adapter

FIPT-400-LC-A6 = LC angled tip for bulkhead adapter (60 degree)

FIPT-400-LC-APC = LC/APC tip for bulkhead adapter

FIPT-400-LEMO = LEMO tip for bulkhead adapter

FIPT-400-LX5-APC = LX.5/APC tip for bulkhead adapter

FIPT-400-MTP2 = MTP2 tip for bulkhead adapter (extended, reversible)

FIPT-400-MTP2-K = MTP, APC and UPC tips for bulkhead adapter  
(extended, reversible)

FIPT-400-MTPA-TIP = MTPA replaceable nozzle for MTP2  
(extended, reversible)

FIPT-400-MTPA2 = MTP/APC tip for bulkhead adapter  
(extended, reversible)

FIPT-400-MTP2-TIP = MTP2 replaceable nozzle for MTP2  
(extended, reversible)

FIPT-400-MU = MU tip for bulkhead adapter

FIPT-400-MU-L = MU tip for bulkhead adapter (extended)

FIPT-400-OTAP-APC = OptiTap™ bulkhead adapter

FIPT-400-OTIP-MT-APC = MT/APC type OptiTip™ for male  
and female connectors

FIPT-400-OTIP-MT-APC/M = Male adapter tube for  
FIPT-400-OTIP-MT-APC tip

FIPT-400-SC-L = SC tip for bulkhead adapter (extended)

FIPT-400-ST = ST tip for bulkhead adapter

FIPT-400-U12M = Universal patchcord tip for 1.25 mm ferrule

FIPT-400-U12MA = Universal patchcord tip for 1.25mm APC ferrule

FIPT-400-U20M2 = Universal patchcord tip for 2.0 mm ferrule (P4, LEMO)

FIPT-400-U25MA = Universal patchcord tip for 2.5 mm APC ferrule

Example: FIP-400-P-SINGLE-FIPT-400-LX5-APC

## OPTIONAL ACCESSORIES

**FIPT-BOX** = Plastic case divided into various compartments for tips

**GP-1001** = Rechargeable battery for handheld display

**GP-10-073** = Soft carrying case for inspection probe, display and accessories

### NOTES

a. Dual model only

b. Works with USB 2.0 adapter, FOT-930 and FTB-200

c. Without battery

d. FTB-500 minimum Toolbox software requirement: 6.28 or higher

e. May require USB1 or USB2 depending on user's PC

## STANDARD ACCESSORIES

■ Video inspection probe (single or dual magnification)

■ FC-SC tip for bulkhead

■ U25M universal patchcord tip for 2.5 mm ferrule

■ Plastic case divided into various compartments for tips

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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. In addition, all of EXFO's manufactured products are compliant with the European Union's WEEE directive. For more information, please visit [www.EXFO.com/recycle](http://www.EXFO.com/recycle). Contact EXFO for prices and availability or to obtain the phone number of your local EXFO distributor.

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