# FIP-500 Fiber inspection scope

FOR FULLY AUTOMATED MULTI-FIBER AND SINGLE-FIBER INSPECTION



Fastest inspection in the industry for both single-fiber and multi-fiber connectors, with the most reliable results. Self-contained, fully automated tool for zero-button testing all day without the need to recharge batteries or offload results.

#### **KEY FEATURES**

Best-in-class optical performance for accurate and repeatable results

Zero-button inspection: 100% automated from insertion to data saving (auto-detect, auto-brightness, auto-focus, auto-center, auto-capture, auto-analysis, auto-save and auto-reset <sup>a</sup>)

Fastest inspection in the industry (within 10 seconds for MP0-12 from connection to analyzed and saved result)

Supports MPO with up to 4 rows of 8/12/16 fibers with the same tip

Wide array of adapter tips for single-fiber b and multi-fiber connectors (e.g., LC, SC, ST, OptiTap®, OptiTip®, MPO)

Smartphone-grade 2.4-inch color touchscreen

Quick-connect design: quarter-turn click for switching between any tips

- a. Auto-detect and auto-reset available in Q2 of calendar year 2021.
- b. Single-fiber support in March 2021.
- c. Available in Q2 of calendar year 2021.

Test all day without any interruption:

- Long-lasting battery
- Stores up test results locally 1800 (MPO-12) or 10 000 (single-fiber)

On-board connector endface analysis (as per IEC standards)

PDF reporting via mobile devices <sup>c</sup>

#### **APPLICATIONS**

Central offices, exchanges and headends

Data centers

Wireless (e.g., 5G, FTTA, DAA, small cells)

Fiber-to-the-home (FTTH)

#### RELATED PRODUCTS





#### SPOT ON, EVERY TIME.

Delivering the most reliable pass/fail results in the industry, the FIP-500 relies on innovative image capture techniques:

- > Enhanced illumination technique based on two LEDs.
- > Violet LEDs (405-nm light) for better contrast.
- > Custom-carved lenses for optimal image quality.
- > Dual-core CPU.

This unprecedented visibility of the connector endface translates into optimal accuracy and repeatability.

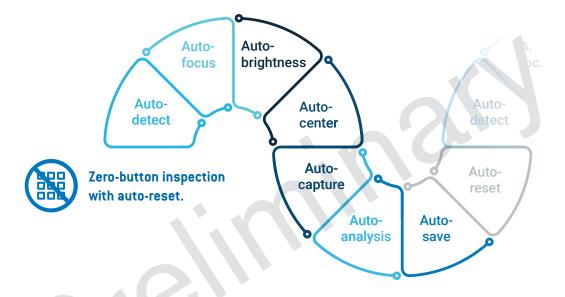
## Did you know?

Dirty or damaged connectors remain the no.1 cause of network outages worldwide.

With fiber going deeper everywhere and with the hassles in inspecting single- or multi-fiber connectors removed by the FIP-500, not testing is no longer a viable option.

#### **EXPRESS MPO INSPECTION**

Fully automated, the FIP-500 does everything on its own. It enables a truly zero-button inspection, in record time.



### Inspecting an MPO-12?

Simply insert a connector in the FIP-500 and-within 10 seconds-a pass/fail result is automatically obtained and saved without the need for any settings or further manipulation.



#### LESS HANDLING, MORE DOING.



#### Smartphone-grade touchscreen

The FIP-500 has an integrated high-quality capacitive color touchscreen designed to be visible in the full sun or in dark areas, from any angle.



#### Connectivity a

The FIP-500 can be connected via Bluetooth® to a smartphone for sharing results.



#### **Quick-connect tips**

Swap tips in a quarter-turn click, a small but life-changing innovation. No loose parts, not a second wasted. Tip switching can be done with one hand, if needed.





#### **Intuitive GUI**

Leveraging the capabilities of the touchscreen, the GUI is very user-friendly for any technician, regardless of their experience.



#### Longer reach

By design, the FIP-500 provides longer reach and better handling for inspection in dense fiber environments or on top of telecom towers.



#### Integrated flashlight

Integrated flashlight to illuminate the port under inspection.



#### WiFi software updates

WiFi connectivity for easy software updates without the need to connect to any external device.



#### TEST ALL DAY WITH LOTS OF BATTERY LIFE AND MEMORY



#### Long battery life

The FIP-500 is powered by a Lithium-Polymer rechargeable battery which can support a full day of continuous use.



#### High storage capacity

With an internal memory that can save up to 1800 MPO test results or 10 000 single-fiber test results, there is no need to stop and offload results. Bluetooth connectivity ensures that these results can be shared easily.

These features, added to an ergonomic hand grip, all come together in helping the technician to close jobs all day without any interruption. This battery life and memory space combo is unique in the industry, and will give field teams equipped with the FIP-500 yet another solid advantage on the competition.

#### COST OF OWNERSHIP

The FIP-500 not only removes the hassles from connector inspection but every aspect of it has been designed to make savings in time and expenses, lowering its overall cost of ownership.



#### No training required

Zero-button, fully automated inspection combined to an intuitive GUI makes it easy for any technician to make the most of the FIP-500, without training.



#### Less tips and no loose parts

By default, the FIP-500 provides a longer reach than regular tips, reducing the overall number of tips that a technician needs to carry around. The simple yet innovative quarter-turn mechanism to switch between any tips means that there are no loose parts when changing them, hence lowering the risk of losing items.



#### Field-replaceable batteries

The battery is field-replaceable, so no need to send it back to the factory when the battery reaches the end of its lifecycle (counted in years).



#### **Future-proof**

The FIP-500 supports the inspection of MPO connectors with up to 4 rows by default. Periodical releases will enable new software functionalities.



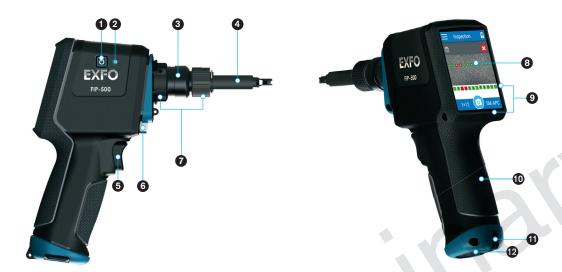
#### Warranty

Comes with 3 years of warranty with EXFO's proven ruggedness.



#### PRODUCT OVERVIEW

- 1 Power button
- 2 Battery led status
- Optical head to switch between multi-fiber and single-fiber
- 4 Interchangeable tip to fit connector
- 5 Trigger (for optional use)
- Dual-function LED:
- 6 Pass/Fail status White flashlight to illuminate the port under inspection
- Quick-connect mechanism to attach optical head and tip
- 8 Touchscreen
- 9 Protective bumper around screen
- Bumper material with texture on the handle to ensure
- 11 Hook for wrist strap
- USB C port for recharge (under handle)





SPECIFICATIONS		
End-to-end inspection and analysis time	MPO-12: <10 s MPO-24: <14 s	
Field of view	1.9 mm x 4.8 mm	
Camera sensor	2 sensors of 5 megapixel	
Light source	2 violet LEDs at 405 nm	
Lighting technique	Coaxial, pulsed	
Display	2.4 in IPS color LCD 166 dpi + capacitive touchscreen	
CPU	1.4 GHz dual core	
Size (H x W x D)	196 mm x 230 mm x 59 mm (7 $^3/_4$ in x 9 $^1/_{16}$ in x 2 $^5/_{16}$ in)	
Weight	600 g (1.32 lb)	
Connectivity	Bluetooth® and WiFi	
Battery type	Lithium-ion polymer (Li-Po) rechargeable battery	
Autonomy	>7 hours	
Connector	USB-C	
Local storage capability	Multi-fiber: 1800 measurements	Single-fiber: 10 000 measurements

GENERAL SPECIFICATIONS	
Temperature operating	0 °C to 40 °C
Temperature storage	-20 °C to 60 °C
Humidity range	0 % to 95 % non-condensing



ACCESSORIES (INCLUDED)	
GP-2300	Protective cap and cord assembly
GP-2269	USB-A to USB-C cable (for charging only-no data transfer)
GP-2227	USB AC adapter (includes interchangeable plugs for Australia, Europe, North America and UK)

ACCESSORIES (SOLD SEPARATELY OR INCLUDED WITH KITS)		
GP-10-071	Small size soft carrying case	



#### **ORDERING INFORMATION** FIP-500-KIT-X FIP-500 kits FIP-500 kit 1 = MPO UPC inspection: Includes FIP-500-1 with interchangeable multi-fiber optical head (OHMF), MPO/UPC SmarTip (STIP-MPO-U), soft carrying case (GP-10-071) FIP-500 kit 2 = MPO APC inspection: Includes FIP-500-1 with interchangeable multi-fiber optical head (OHMF), MPO/APC SmarTip (STIP-MPO-A), soft carrying case (GP-10-071) FIP-500 kit 3 = MPO UPC & APC inspection: Includes FIP-500-1 with interchangeable multi-fiber optical head (OHMF), MPO/UPC SmarTip (STIP-MPO-Ú), MPO/APC SmarTip (STIP-MPO-A, soft carrying case (GP-10-071) FIP-500-1-XX-XX-XX Single-fiber tips (bulkhead) <sup>d</sup> Model $\label{eq:STIP-SC-A} STIP-SC-A = SmarTip \ for \ SC/APC \ bulkhead \ connector$ FIP-500 STIP-OTAP-A = SmarTip for OptiTap bulkhead connector Configuration a -Supports interchangeable optical heads Optical head b ... OHMF = Multi-fiber optical head OHSF = Single-fiber optical head Multi-fiber tips ° ■ STIP-MPO-U = MPO/UPC Smartip STIP-MPO-A = MPO/APC Smartip STIP-OTIP-A = OptiTip/APC SmarTip STIP-QODC12-U = QODC-12/UPC Smartip STIP-QODC12-A = QODC-12/APC Smartip

a. More that one optical head or SmarTip can be ordered together with the FIP-500.

STIP-U2.5-U = SmarTip for universal 2.5-mm/UPC patchcord STIP-U2.5-A = SmarTip for universal 2.5-mm/APC patchcord

Example: FIP-500-1-OHMF-OHSF-STIP-MPO-U-STIP-MPO-A-STIP-U2.5-A-STIP-U2.5-U

b. Both optical heads can be purchased together.

Single-fiber tips (cord) c .

- c. Multi-fiber optical head required.
- d. Single-fiber optical head required.

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