# 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

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
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<tr>
<td>Best-in-class optical performance</td>
<td>For accurate and repeatable results</td>
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<tr>
<td>Zero-button inspection</td>
<td>100% automated from insertion to data saving</td>
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<td>(auto-detect, auto-brightness, auto-focus, auto-center, auto-capture, auto-analysis, auto-save and auto-reset*)</td>
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<td>Fastest inspection in the industry</td>
<td>Within 10 seconds for MPO-12 from connection to analyzed result</td>
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<td>Supports MPO</td>
<td>With up to 4 rows of 8/12/16 fibers with the same tip</td>
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<td>Wide array of adapter tips for single-fiber and multi-fiber connectors</td>
<td>E.g., LC, SC, ST, OptiTap®, OptiTip®, MPO</td>
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<tr>
<td>Smartphone-grade 2.4-inch color touchscreen</td>
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<td>Quick-connect design</td>
<td>Quarter-turn click for switching between any tips</td>
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<td>On-board connector endface analysis</td>
<td>As per IEC standards</td>
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<td>Test all day without any interruption</td>
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<td>• Long-lasting battery</td>
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<td>• Stores up test results locally - 2000 (MPO-12) or 10 000 (single-fiber)</td>
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<td>PDF reporting via mobile devices</td>
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## APPLICATIONS

- Central offices, exchanges and headends
- Data centers
- Wireless (e.g., 5G, FTTA, DAA, small cells)
- Fiber-to-the-home (FTTH)

## RELATED PRODUCTS

- Cleaning kits

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* Auto-detect and auto-reset available in Q1 of calendar year 2022.
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.

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

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.

Inspecting an MPO-12?
Simply insert a connector in the FIP-500 and—within 10 seconds—a pass/fail result is automatically obtained without the need for any settings or further manipulation.

a. Auto-detect and auto-reset available in Q1 of calendar year 2022.
<table>
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<tr>
<th>LESS HANDLING, MORE DOING.</th>
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| **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**  
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. |

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**EXFO**
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 2000 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
3. Optical head (to switch between multifiber and single-fiber)
4. Interchangeable tip to fit multifiber connector
5. Trigger (for optional use)
6. Dual-function LED:
   • Pass/Fail status
   • White flashlight to illuminate the port under inspection
7. Quick-connect mechanism to attach optical head and tip
8. Touchscreen
9. Protective bumper around screen
10. Bumper material with texture on the handle to ensure good grip
11. Hook for wrist strap
12. USB C port for recharge
13. Interchangeable tip to fit single-fiber connector
### SPECIFICATIONS

| **End-to-end inspection and analysis time**<sup>a</sup> | MPO-12: 10 s  
MPO-24: 15 s  
Single-fiber: 4 s |
| **Field of view** | Multi-fiber: 1.9 mm x 4.8 mm  
Single-fiber: 0.75 mm x 0.75 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 |
| **Connectivity** | Bluetooth<sup>®</sup> and WiFi |
| **Battery type** | Lithium-ion polymer (Li-Po) rechargeable battery |
| **Autonomy** | 11 hours<sup>b</sup> |
| **Connector** | USB-C |
| **Local storage capability** | Multi-fiber: 2000 measurements  
Single-fiber: 10 000 measurements |

### GENERAL SPECIFICATIONS

| **Size (H x W x D)** | 196 mm x 230 mm x 59 mm (7 ¾ in x 9 1/16 in x 2 5/16 in) |
| **Reach**<sup>c</sup> | 99 mm (2 15/16 in) |
| **Weight**<sup>d</sup> | 580 g (1.28 lb) |
| **Temperature** | Operating: –10 °C to 40 °C (14 °F to 104 °F)  
Storage: –20 °C to 60 °C (–4 °F to 140 °F) |
| **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
- GP-2299: Compartmented plastic case for STIP and optical heads

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<sup>a</sup> Typical.  
<sup>b</sup> Typical. Measured in eco mode - backlight 35% - Bluetooth/WiFi OFF.  
<sup>c</sup> From FIP-500 body to the extremity of the adapter tip.  
<sup>d</sup> FIP-500 weight including optical head for multi-fiber (OHMF) and MPO UPC tip (STIP-MPO-U). Excluding the protective cap (GP-2300).
## ORDERING INFORMATION

### FIP-500 KIT-XX

**FIP-500 KIT-1** = MPO UPC inspection: Includes FIP-500-1 with interchangeable multifiber optical head (OHMF), MPO/UPC SmarTip (STIP-MPO-U), soft carrying case (GP-10-071)

**FIP-500 KIT-3** = MPO UPC and APC inspection: Includes FIP-500-1 with interchangeable multifiber optical head (OHMF), MPO/UPC SmarTip (STIP-MPO-U), MPO/APC SmarTip (STIP-MPO-A), soft carrying case (GP-10-071)

### FIP-500-1-XX-XX-XX-XX

**Model**

- FIP-500

**Configuration**

- Supports interchangeable optical heads

**Optical head**

- OHMF = Multifiber optical head
- OHSF = Single-fiber optical head

**Multi-fiber tips**

- STIP-MPO-U = MPO/UPC SmarTip
- STIP-MPO-A = MPO/APC SmarTip
- STIP-MPO-A-KL = Keyless MPO/APC SmarTip
- STIP-OTIP-A = OptiTip/APC SmarTip
- STIP-QODC-12-U = QODC-12/UPC SmarTip
- STIP-QODC-12-A = QODC-12/APC SmarTip

**Single-fiber tips (cord)**

- STIP-U2.5-U = SmarTip for universal 2.5 mm, UPC patchcord
- STIP-U2.5-A = SmarTip for universal 2.5 mm, APC patchcord
- STIP-U1.25-U = SmarTip for universal 1.25 mm, UPC patchcord
- STIP-U1.25-A = SmarTip for universal 1.25 mm, APC patchcord

**Single-fiber tips (bulkhead)**

- STIP-LC-A = SmarTip for LC/APC bulkhead connector
- STIP-LC-U = SmarTip for LC/UPC bulkhead connector
- STIP-SC-FC-U = SmarTip for SC/APC bulkhead connector
- STIP-SC-A = SmarTip for SC/APC bulkhead connector
- STIP-OTAP-A = SmarTip for OptiTap bulkhead connector


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