EXFO FIP W- Launch

Technical note on Field Of View (F.O.V) and magnification

EXFO’s FIP-4500 has a unique triple magnification feature. This enables the user to optimize the connector area viewed on screen depending on the application.

- The high magnification mode is optimized to get the maximum magnification regardless of the screen size.
- The medium magnification mode allows to see defects outside of the 250µm contact zone. Defects outside of the contact zone can indicate issues.
- The low magnification mode provides the largest FOV for multi-fiber applications & enables the most performance auto-centering mechanism of the industry.

Field of view (F.O.V or FOV)

This specification refers to the area of the fiber visible by the inspection probe. The F.O.V is specified as horizontal and vertical length. If no image cropping is performed by the device software, a larger FOV will show a similar fiber size on the display.

A larger field of view will be very useful when inspecting multi-fiber connectors, for example a 100µm FOV will show 16 fibers at the same size for a single core OM2 fiber or up to 8 fibers for a dual core OM3, greatly facilitating the inspection.

Comparison between three magnification modes

<table>
<thead>
<tr>
<th>Magnification</th>
<th>Field of View (F.O.V.)</th>
<th>Connector Image</th>
<th>Closest competitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW MAGNIFICATION</td>
<td>312 x 312µm</td>
<td><img src="image" alt="LOW MAGNIFICATION" /></td>
<td>Low magnification mode EXFO can see a larger area of the fiber (15x more)</td>
</tr>
<tr>
<td>MEDIUM MAGNIFICATION</td>
<td>625 x 625µm</td>
<td><img src="image" alt="MEDIUM MAGNIFICATION" /></td>
<td></td>
</tr>
<tr>
<td>HIGH MAGNIFICATION</td>
<td>304 x 304µm</td>
<td><img src="image" alt="HIGH MAGNIFICATION" /></td>
<td>Maximum magnification is 20x more than EXFO</td>
</tr>
</tbody>
</table>
I understand that inspection is important but:
• My techs cannot bring this everywhere
• I want to maximise our Smart Devices investment

While competitors brought incomplete solutions, EXFO perfected the art of inspection…

Introducing the FIP-435B:
The ONLY 100% automated wireless probe on the market
A TRULY WIRELESS SOLUTION

The new FIP-435B offers everything the FIP-430B features, PLUS…

Cloud connectivity through smart device

Android Devices

FIP-435B
Self powered
Wireless
FULLY Automated

Wi-Fi Connectivity Between Smart Device and FIP

SCREENLESS inspection = UNIQUE to EXFO!

Enablers: 100% automated + P/F LED on the probe

User performs connector certification with Phone in his pocket

PASS

 Goes to the next inspection WITHOUT looking at the screen

FAIL

 Looks at the SD screen to see the problem

DIRTY = CLEAN

DAMAGED = REPLACE
User performs connector certification with Phone in his pocket

FTTA / Remote Radio Head (RRH)
SCREENLESS OPERATION

Belt Holster
Bring it everywhere!

- FIP-425B or FIP-435B
- IBC Cleaner
- Tips
- Smart phone
- FLS-140 VFL (or Pen)
Applications
Who would benefit of an automated Wi-Fi inspection solution?

2 Workflow Integration & Process compliance

- Some large operators already made the switch to smart device for their field crews. (Android)
  - Connectivity: Connected via SmartDevice to operator Server/OSS
  - Comply with operator process and requirements – Workflow integration and optimization

Applications
Who would benefit of an automated Wi-Fi inspection solution?

3 EVERYBODY CAN USE IT
(FTTx, CO, Private networks, Data Center etc..)

Connectors are the first critical elements to validate
  - BYOD – Anyone with an Android Device can turn it into a full blown inspection solution
  - 100% Automated – Even if not familiar with fiber optics and rarely use inspection tools
  - Complement an existing solution without having to add an extra platform
Key Benefits

• **USP:** 100% Automated / One-Step process
• **USP:** Screen less usability / Single hand operation

• Use it anywhere
  – No excuse to avoid inspection!
• **Full featured ConnectorMax2 Mobile software**
  – Not only a subset of CMAX2
• **Onboard Battery with unmatched Autonomy**
  – No need for external power pack; Work a full day without recharge
  – 8h with FIP-425B and 6h with FIP-435B
• **Comply to operator process and requirements**
  – Workflow integration, process compliance and optimization & data sharing

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### Full featured ConnectorMax2 Mobile software

**ConnectorMax2 Mobile**

› Support FIP-425/35B via wireless connection.
› Automatic processing.
› 3 inspection modes.
› Results identification.
› Live Video Display.
› Results review.
› Automated FIP firmware upgrade.
› Measurement file management.
› Upload results to: [EXFO Connect](#)
› Report generation: CMax2 and PDF
› Support of 6 official languages.
Feature Set
Smart Device Related

- Voice documentation
- Hand writing
- GPS positioning
- Results sharing
- Screen Rotation
- Two-finger image zoom (pinch to zoom)
- Results swiping
- Distribution through Google Play and Good.com

ConnectorMax2 Mobile
Full featured software

« Live » and « Capture » windows

- Focus Meter
- Live video
- FIP Battery Indicator

Captured and/or analyzed image
Pinch to zoom on captured results
ConnectorMax2 Mobile
Full featured software

*Full Analysis results; supports screen orientation*

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ConnectorMax2 Mobile
Full featured software

*Time saving features for documentation*

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**Voice**

**Handwriting**

**Keypad**
### Product Positioning

<table>
<thead>
<tr>
<th>Feature</th>
<th>EXFO FIP-400</th>
<th>EXFO FIP-410B</th>
<th>EXFO FIP-420B</th>
<th>EXFO FIP-430B</th>
<th>EXFO FIP-425B</th>
<th>EXFO FIP-435B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Connectivity</strong></td>
<td>Analog cable</td>
<td>FT8 PC via USB adapter</td>
<td>FDT-950</td>
<td>FT8, PC via USB adapter</td>
<td>FDT-950</td>
<td>FT8, PC via USB adapter</td>
</tr>
<tr>
<td><strong>Compatibility</strong></td>
<td>FTB, PC via USB adapter</td>
<td>FDT-950</td>
<td>FTB, PC via USB adapter</td>
<td>FDT-950</td>
<td>FTB, PC via USB adapter</td>
<td>FDT-950</td>
</tr>
<tr>
<td><strong>Analysis</strong></td>
<td>Phase OUT soon</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td><strong>Auto center</strong></td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td><strong>P/F indicator</strong></td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td><strong>Auto focus</strong></td>
<td>NO</td>
<td>NO</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
</tr>
</tbody>
</table>

### Questions?

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