

Datasheet: FI-3000 FiberInspector Pro™

The FI-3000 FiberInspector™ Pro is the industry's most efficient MPO inspection solution. Start with an instant view of the entire fiber endface using the Live View feature.

Then use the simple gesture-based interface to zoom in on each fiber or perform an automated PASS/FAIL analysis in seconds. Its ergonomic design makes it comfortable even when inspecting hundreds of bulkheads and cables. Choose from two user interface and reporting methods. First, the iOS/Android app allows you to inspect your MPO installation using your phone and easily share their inspection results via text or even social media.

Second, pair the FiberInspector with Versiv Cabling Certification System using its user interface and industry-leading LinkWare™ reporting system. With Versiv and LinkWare you can test copper, fiber loss, OTDR and inspection and combine the results into one complete report*.

*Available second half 2019



Eliminate the #1 cause of fiber failure

Endface contamination the leading cause of fiber failures. Dirt and debris cause insertion loss and back-reflection that inhibit optical transmission and cause havoc with transceivers. Fiber loss and OTDR testing can expose this problem, but in many cases, dirty connections make testing fiber time consuming and inaccurate.

Since dirt can be an issue before, during, or after fiber optic certification testing, and migrate from one end-face to another upon mating, both sides of any connection must always be cleaned and inspected. Further, mating contaminated connectors can cause permanent damage as microscopic debris is crushed between end-faces in physical contact. Even factory terminated patch cords or pigtailed must be inspected as protective caps do not keep end-faces clean. Avoiding this common cause of failure, starts with inspecting the end-face and eliminating any contamination before insertion into a bulkhead or piece of equipment. Inspection is critical for MPO based fiber installations as dirt and other debris can be easily moved from one fiber end face to another.

Grab the Most Efficient MPO Inspection Solution

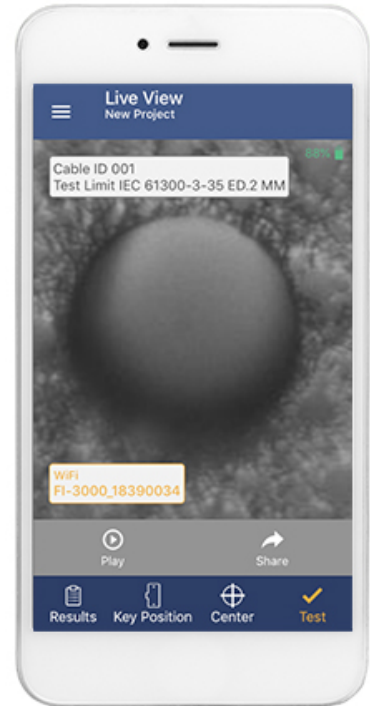
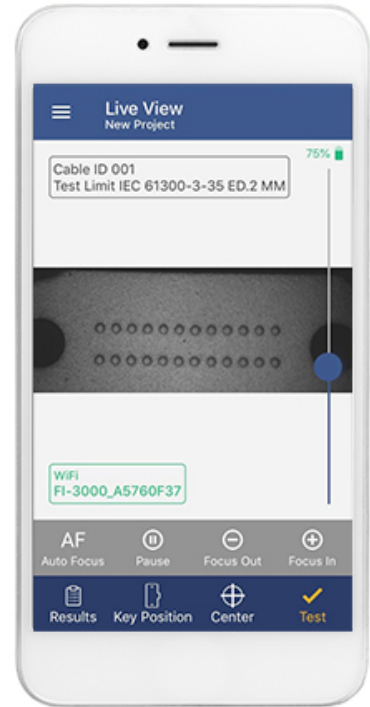
The FI-3000 FiberInspector Pro offers an extensive feature set that makes testing MPO trunks easy and efficient. The multiple camera design with autofocus provides a Live View of the entire endface on your smart phone or Versiv instantly – then use simple touchscreen gestures to look at individual endfaces in real time. Touch “Test”, and in seconds, you’ll get an automated PASS/FAIL result compliant with IEC 61300-3-35. Store results on your phone and share them through text messages or email or use the industry-leading LinkWare platform to store complete project reports including copper, fiber loss, OTDR and endface images*. Compact, ergonomic design with autofocus makes it comfortable and fast even when you’re testing hundreds of cable or ports.

- Total endface visibility with Live View from full trunk to individual endface
- Integrates with Versiv / LinkWare for simple operation and documentation or with mobile phones for testing and sharing*
- Automated PASS/FAIL results in less than two seconds per fiber
- Multiple Autofocus/AutoCentering Camera design for real time imaging
- Rugged, ergonomic design
- Supports one or two rows of 8,12, or 16 UPC or APC connectors as well as single fibers*

*Versiv, LinkWare, and single fiber support available second half 2019

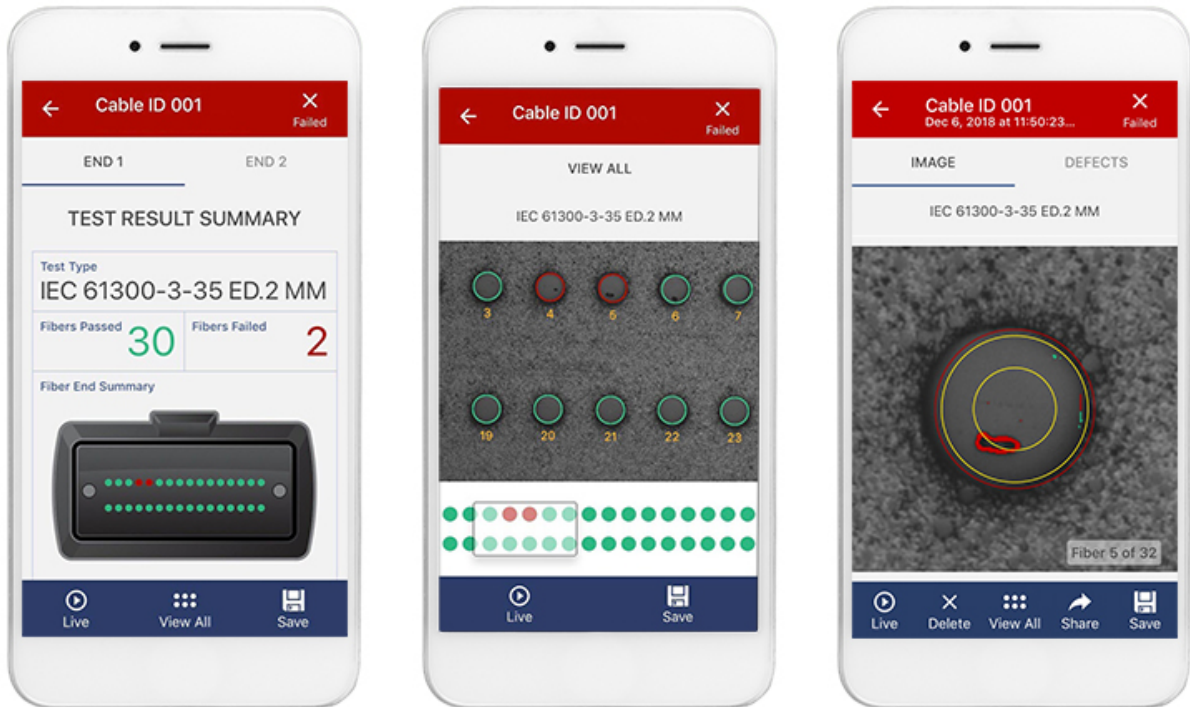
Live View with AutoFocus and AutoCentering For Instant Real Time Visibility

Plug the connector into the FI-3000, touch the autofocus button, and the Live View feature delivers a live view of the fiber endface immediately – with no setup or processing time. Dual cameras provide a single, integrated view of the entire endface. Use simple gestures to zoom into the portion of interest, pan across the connector or just tap the image of a specific fiber for a detailed view.



Automated Pass/Fail testing of MPO trunks and end faces in seconds

Manual inspection of MPO connections can be slow and subject to human error. Manually tracking across multiple fiber endfaces in the connector makes it easy to miss one or more. The FiberInspector's autotest mode examines all fiber endfaces in the connector, grades them as per industry standard IEC 61300-3-35 and provides an overall PASS or FAIL result in less than two seconds per fiber. The gesture-based user interface makes it easy to switch from the summary to a detailed view.



Seamlessly switch from a summary view (left) to an image (center), then use the gesture-based interface to zoom into a view of each individual fiber (right) and pan across the entire connector. Individual fibers are labeled so you know what you're looking at. Red defects are failures, green are acceptable per the selected standard.



1. Interchangeable tips support one or two rows of 8, 12, or 16 UPC or APC connectors as well as single fibers*
2. PortBright™ illumination for dark and crowded patch panels
3. Protective cover with tether

*Single fiber support available second half 2019

4. AutoFocus Control
5. PortBright on/off
6. LED's indicate PASS/FAIL and Wi-Fi connection
7. Start an automated test without reaching for your Versiv or smartphone
8. Auto-off saves battery life
9. Ergonomic design comfortable for inspecting cables or ports
10. Rugged design for constant field usage
11. USB port for charging Li-Ion battery and connecting to Versiv

Test Results with Graphical Indication of Problem Areas

When an endface fails, the FI-3000 shows which fibers failed, and highlights the areas that caused the failure: contamination, pits, chips and scratches. By understanding the cause of the failure, the user can determine the type of cleaning needed or if the connector is damaged beyond repair.

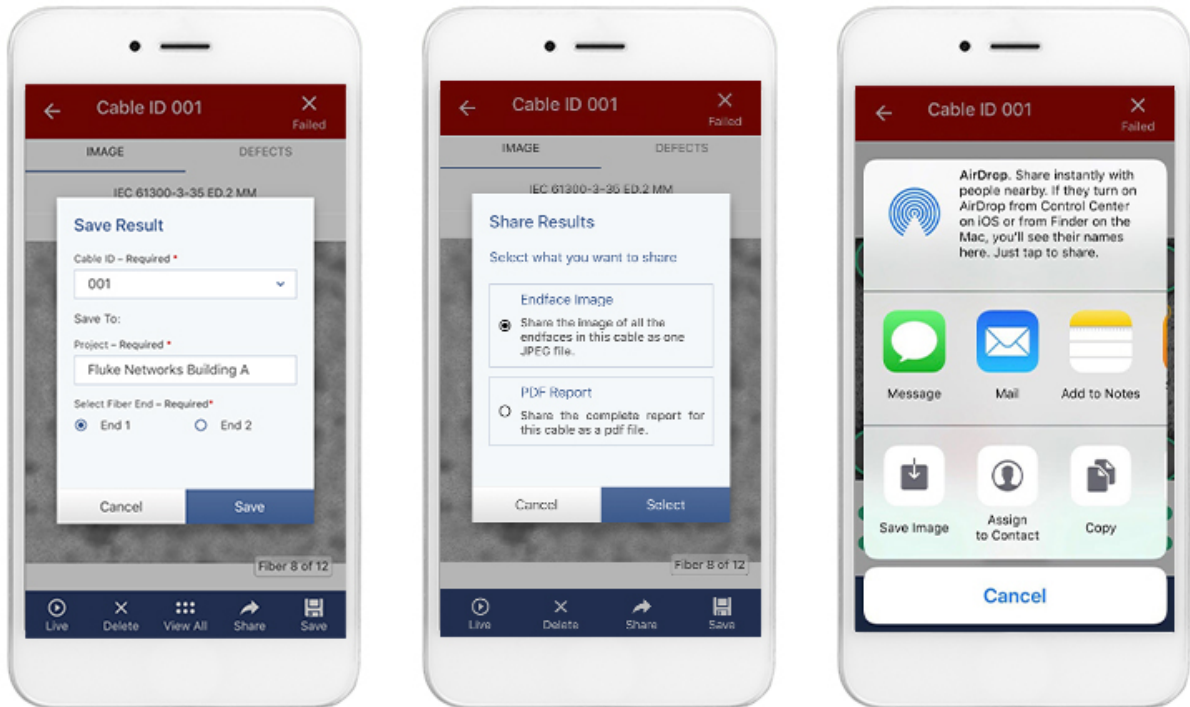
Lightweight, Ergonomic Design with Holster

The FI-3000's unique design makes it easy to inspect both bulkheads and trunk cables. The compact and lightweight (326 g / 11.5 oz) design means you can use it all day without fatigue. The built-in PortBright™ illumination makes it easy to find the right port in dense patch panels in dim data centers or dark wiring closets. All FI-3000 models include a holster which provides convenient access to the camera as well as storage for inspection tips and a QuickClean™ cleaner.



iOS and Android Apps for Simple Data Sharing

The FI-3000 can be connected over Wi-Fi to iOS or Android devices for small jobs or a quick inspection. The FiberInspector app (FI-IN) shows simple PASS/FAIL results, but also gives you complete control over the FI-3000, so you can zoom in or out of each endface and pan across a Live View of the entire endface. FI-IN supports naming and storing of results in the device – or send them as an image or PDF report to others on the team for quick, simple collaboration.



Save results on your phone or share them with others.

Detailed Reporting

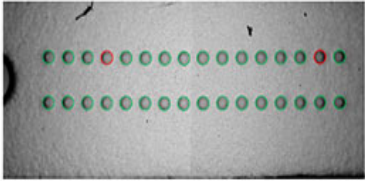
Generate detailed PDF reports from your phone or Versiv tester. Versiv and LinkWare also support integrated reports including Tier 1 (Loss) and Tier 2 (OTDR) tests. (Integrated tests using Versiv and LinkWare available second half 2019.)

Cable ID: MPO SAMPLE **Test Summary: FAIL**
 Date / Time: 04/14/2017 09:40:49 AM End1 Name: Board Room
 Cable Type: OM3 Multimode 50 End2 Name: Data Closet

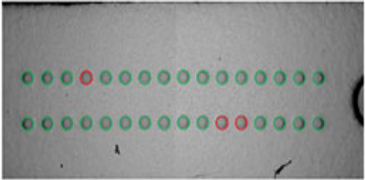
MPO Summary End Type: 2x16(32 Fibers)

FiberInspector End 1	PASS 30	FAIL 2
FiberInspector End 2	PASS 29	FAIL 3

MPO Endface Image End 1
FAIL
 Date / Time: 04/12/2017 03:04:12 PM
 Test Line: EC 61300-3-31 ED 1 MM
 Linkis Version: 5.0
 Operator: FNET FIBER GURU
 OptPower Pro (1846001 V1.0 Build 3)



MPO Endface Image End 2
FAIL
 Date / Time: 04/12/2017 03:04:12 PM
 Test Line: EC 61300-3-31 ED 1 MM
 Linkis Version: 5.0
 Operator: FNET FIBER GURU
 OptPower Pro (1846001 V1.0 Build 3)




LinkWare™ PC Version 10.0

Cable ID: MPO SAMPLE **Test Summary: FAIL**
 Date / Time: 04/14/2017 09:40:49 AM End1 Name: Board Room
 Cable Type: OM3 Multimode 50 End2 Name: Data Closet

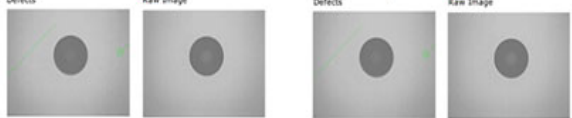
MPO SAMPLE-01 Fiber 1 of 32 **Test Summary: PASS**
Endface Image End1 **Endface Image End2**

Defects Raw Image Defects Raw Image



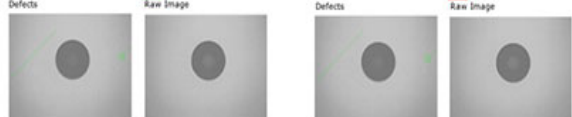
MPO SAMPLE-02 Fiber 2 of 32 **Test Summary: FAIL**
Endface Image End1 **Endface Image End2**

Defects Raw Image Defects Raw Image



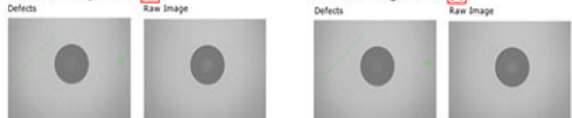
MPO SAMPLE-03 Fiber 3 of 32 **Test Summary: FAIL**
Endface Image End1 **Endface Image End2**

Defects Raw Image Defects Raw Image



MPO SAMPLE-04 Fiber 4 of 32 **Test Summary: FAIL**
Endface Image End1 **Endface Image End2**

Defects Raw Image Defects Raw Image



LinkWare™ PC Version 10.0

Summary or detailed reports are available.

Integrates with Versiv and LinkWare™ for Project Management and Reporting*

For those installing multiple MPO trunks as part of a new installation or upgrade, the FI-3000 integrates with the Versiv Cabling Certification System for fast, error free project management and reporting. Versiv's ProjX Management System lets you define each job including the types of cables, identifiers, required tests, and limits. Techs can use the same platform for loss (Tier 1), OTDR (Tier 2) and inspection, reducing training costs and the likelihood of errors. The FI-3000 connects to Versiv via a USB cable.

Versiv features a large, high resolution display that lets you see the results clearly. The gesture based Taptive™ screen makes it easy to pan across or zoom in and out of the Live View image.

The FI-3000 also works with Fluke Networks LinkWare – the defacto industry standard for documenting cabling systems. LinkWare lets you combine Tier 1, Tier 2 and inspection results into a single report for full documentation of every link in the system. The cloud-based version, LinkWare Live, makes it easy to track progress of the job from your smartphone or PC and share results with customers.

Tips for Every Need

The FI-3000 comes standard with tips for inspecting 12/24 UPC and 12/24 APC endfaces. An accessory tip is available for 16/32 UPC configurations. The FI-3000 addresses your single-fiber inspection needs with the same autofocus, auto-centering, auto-grading and Live View features as MPO*. Optional tips will be available to support LC, SC, 1.25 mm, 2.5 mm and E2000.

**Single fiber support available second half 2019*

Ordering Information

FI-3000 Wireless Models, Tips, Adapters, and Accessories	
Model	Description
FI-3000	FI-3000 FiberInspector Pro MPO Probe and Tip Set (12/24 UPC and 12/24 APC)
FI-3000TP-UMPO12F	MPO 12 or 24 UPC tip
FI-3000TP-UMPO16F	MPO 16 or 32 UPC tip
FI-3000TP-AMPO12F	MPO 12 or 24 APC tip
FI-3000-Holster	Holster for the FI-3000 probe
QC-MPO-12/24-1P	QuickClean Cleaner for MPO 12/24 Fiber, Single Pack
QC-MPO-12/24-5P	QuickClean Cleaner for MPO 12/24 Fiber, Pack of 5 cleaners
QC-MPO-16/32-1P	QuickClean Cleaner for MPO 16/32 Fiber, Single Pack
QC-MPO-16/32-5P	QuickClean Cleaner for MPO 16/32 Fiber, Pack of 5 cleaners

Gold Support Models	
Model	Description
GLD-FI-3000	1 year Gold Support for FI-3000
GLD3-FI-3000	3 year Gold Support for FI-3000

Environmental	
Temperature range	Operating: -10° C to +45° C (+14° F to +113° F) Storage: -10° C to +60° C (+14° F to +140° F)
Humidity range	Operating: 0 % to 95 % (32° F to 95° F, 0° C to 35° C) RH non-condensing Storage: 0 % to 95 % (95° F to 113° F, 35° C to 45° C) RH non-condensing
Altitude	Operating: 4,000 m (3,200 m with AC adapter) Storage: 12,000 m
Vibration	2 g, 5 Hz to 500 Hz
Shock	1 meter drop test
Safety	IEC 61010-1: Pollution Degree 2
EMC	IEC 61326-1: Controlled Electromagnetic Environment; IEC 61326-2-1 CISPR 11: Group 2, Class A USA (FCC): 47 CFR 15 Intentional Radiators: This device complies with part 15 of the FCC Rules.

Technical	
MPO Endtype Support	1x8 (8 fibers), 1x12 (8, 10, or 12 fibers), 1x16 (16 fibers), 2x12 (16, 20, or 24 fibers), 2x16 (32 fibers)
Test Limits	IEC 61300-3-35 ED. 2 MM IEC 61300-3-35 ED. 2 SM APC Document Only
Automated Pass/Fail Test Time	Less than 2 seconds per fiber
Camera type	5 Megapixel 1/4-inch CMOS sensor
Field of view	610 µm x 460 µm
Resolution	1 µm
Light source	LED, >100,000 hr life
Endface illumination	Coaxial blue LED
Port illumination	White LED
Battery Type	Lithium-ion; 10.8 hour life
Power Adapter	Input: 100 to 240 VAC ±10 %, 50/60 Hz Output: 15 VDC, 2 A maximum Class II
Wireless Transmission*	Output power: <100 mW Frequency ranges: 2.4 GHz (2412 MHz to 2462 MHz)
Dimensions	6.625 in x 5.375 in x 2.125 in (168 mm x 137 mm x 54 mm) (with no dust cap or adapter tip) Length with dust cap: 7.5 in (191 mm)
Weight	11.5 oz (326 gm) (with dust cap and no adapter tip)

* For more information, go to www.flukenetworks.com/manuals and search for "Radio Frequency Data for Class A".

