Brochure



FVAm Series Benchtop Microscopes

Automated multifiber connector inspection and analysis

The new FVAm[™] series expands on the industry-leading FV product family from VIAVI Solutions with a completely automated inspection solution for multifiber connectors such as MPO. This all-in-one system automatically inspects and analyzes every fiber of an MPO or other multifiber connector with reliability and speed. With FVAm series benchtop microscopes, manufacturing facilities can ensure optimized quality and performance of MPO trunk cables and assemblies at every stage of production.

Guarantee reliable MPO production quality

Contaminated connectors are the #1 cause of troubleshooting in optical networks. This problem has driven the industry and International Electrotechnical Commission (IEC) to release IEC 61300-3-35, a global standard that establishes acceptance criteria for the quality and cleanliness of the fiber connector end face. With 100% autonomous operation, lab and production technicians have everything they need to inspect and analyze MPO connector end faces to ensure quality.

- Automated focus, panning, and pass/fail analysis, all at the press of a button
- The optional integrated touchscreen display gives users full control to view live images and analysis results, pan across the end face to view each fiber, configure test requirements, and easily navigate results
- Select your desired acceptance criteria including IEC-61300-3-35 or customer-specific requirements

Benefits

- Guarantee reliable MPO production quality
- Optimize production workflows at every stage
- Certify MPO end face quality to customer requirements and industry standards
- Streamline inspection methods with fast and reliable functionality

Features

- Fully automated MPO inspection and analysis
- No PC required for analysis
- Generate certification reports and archive test data
- Locate and identify defects and scratches
- Easily switch between connector configurations with new FMAG series magnetic adapters
- Intuitive UI either on-board or in FiberChekPRO™
- Integrates with VIAVI PCT system
- Available with or without on-board touch screen video display





Optimize production workflows at every stage

Managing clean MPO connections through the production process requires systematic and proactive methods that many technicians find troublesome, confusing and time-consuming. The FVAm is designed with high-volume production use in mind so that inspection can be quickly and easily incorporated at any stage. From ensuring proper MPO end face polish quality, to conducting performance tests, or preparing final shipment, technicians at every stage of the MPO production process can customize the FVAm to to best fit their inspection needs.

| Stage of Production | FVAm functionality | Benefit | | |
|---------------------|--|--|--|--|
| Post Polish | Auto FocusAuto Pan | Run Automated pass/fail analysis to ensure all fibers were currently polished without any scratches or defects | | |
| | Auto Test | Save results if needed | | |
| Mid Span Tests | Auto FocusAuto PanView all fibers at once | Prevent damage to cables during test process | | |
| | | Improve test yields in first pass with fast and proactive inspection methods | | |
| | | Protect your reference cables by ensuring they are safe to connect to DUT | | |
| | | Quickly detect any contamination or problematic MPO end faces BEFORE performing Insertion Loss/Return Loss tests | | |
| | | Protect the quality of your Test Reference Cords during tests | | |
| Final Test | Auto FocusAuto PanAuto TestSave ResultsGenerate Report | Run Automated pass/fail analysis to ensure all fibers pass requirements before packaging and shipment | | |
| | | Generate certification reports to include with product shipments | | |
| | | Keep test results and images on file for all MPO cables manufactured in your facility | | |

Automated inspection with fast results!

FVAm fully automates every step of the multi-fiber inspection and test process, including focus, pan/scroll, and fiber end-face analysis. With the ability to test a 12 fiber MPO connector in under 20 seconds, the FVAm streamlines and simplifies production efficiency.

Legacy/Manual MPO Inspection Process

| | Step | Time |
|-----|-----------------------|------|
| x12 | Focus Image | 0:04 |
| | Scroll/Pan each fiber | 0:04 |
| | Test ONE fiber | 0:03 |
| | Save | 0:02 |
| | TOTAL (1 fiber) | 0:13 |
| | TOTAL (12 fibers) | 2:36 |

Test 144 MPO Connectors: > 6 hours

FVAm MPO Inspection Process

| Time | | |
|------|--|--|
| 0:02 | | |
| 0:08 | | |
| 0:08 | | |
| 0:02 | | |
| | | |
| 0:20 | | |
| | | |

Test 144 MPO Connectors: ~45 minutes

Streamline inspection procedures with time saving capabilities

100% Autonomous MPO inspection and analysis

With built-in features such as a 2.5" color touchscreen, automated scrolling, and end face analysis, the FVAm gives production crews the ability to easily inspect MPO end faces anywhere in their facility. While compatible with external PCs, the FVAm can be configured to operate independently.

Review test results on the FVAm

Access test results stored on the device using the built-in color touchscreen and on-board controls. Store over 1,200 fiber images (~100 12-fiber connectors) on-board with the ability to pan across the entire connector end face, view analysis results, toggle overlay views, and view both low & high magnification images.



Test multiple different connector configurations

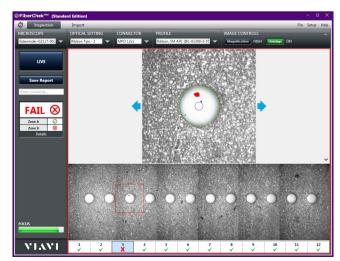
With many pre-configured analysis profiles and adapters, the FVAm can test a wide variety of multi- and single-fiber configurations - including 1x12, 4x4 (SR4), 1x16, 2x12 configurations for MPO connectors, MT ferrules, or QSFP modules or even single-fiber connectors.



Integrates with FiberChekPRO Software

In addition to working as an all-in-one system, the FVAm can also be used in conjunction with FiberChekPRO PC software; giving users several added features and capabilities including the ablity to view all fibers on the endface at the same time. This capability is ideal in midspan testing applications for quickly viewing an endface before connecting to other test devices.





Easily switch connector configurations with new FMAG series adapters

FVAm benchtop microscopes feature the new FMAG series adapters, an innovative new design utilizing a magnetic connection so operators can guickly switch adapter types and ensure precision alignment. Each FMAG series adapter has the ability to inspect both SM (angled polish) and MM (flat polish) connectors. Simply press on the color coded indicator to switch between SM APC (green) and flat polish MM (agua) end face inspection without any hassle.















Ordering Information

| Description | Part Number | | | | | | |
|---|-------------|--|--|--|--|--|--|
| Kitted Packages | | | | | | | |
| FVAm Series Benchtop Microscope with Touch-Screen, FMAG-MPO Adapter | FVAm-1000-S | | | | | | |
| FVAm Series Benchtop Microscope, FMAG-MPO adapter | FVAm-1000 | | | | | | |
| Accessories and Related Items | | | | | | | |
| FMAG Series Adapter, MPO MM/SM, PC/APC | FMAG-MPO | | | | | | |
| FMAG Series Adapter, MT Ferrule MM/SM, PC/APC | FMAG-MT | | | | | | |
| FMAG Series Adapter, MPO QSFP, MM/SM, PC/APC | FMAG-QSFP | | | | | | |
| FMAG Series Adapter, 2.5mm Simplex PC/APC | FMAG-U25 | | | | | | |
| FMAG Series Adapter, 1.25mm Simplex PC/APC | FMAG-U12 | | | | | | |
| FMAG Series Adapter, LC/PC and LC/APC | FMAG-LC | | | | | | |
| FMAG Series Adapter, SC/PC and SC/APC | FMAG-SC | | | | | | |



VIAVI Care Support Plans

Increase your productivity for up to 5 years with optional VIAVI Care Support Plans:

- Maximize your time with on-demand training, priority technical application support and rapid service.
- Maintain your equipment for peak performance at a low, predictable cost.

For more Information: go to viavisolutions.com/viavicareplan

Features *5-year plans only

| Plan | Objective | Technical Assistance | Factory Repair | Priority Service | Self-paced Training | 5 Year Battery and Bag Coverage | Factory Calibration | Accessory Coverage | Express Loaner |
|------------|--|-------------------------|-------------------|---------------------|------------------------|---------------------------------------|------------------------|-----------------------|-------------------|
| BronzeCare | Technician Efficiency | Premium | √ | √ | ✓ | | | | |
| SilverCare | Maintenance & Measurement Accuracy | Premium | √ | ✓ | ✓ | √ * | ✓ | | |
| MaxCare | High Availability | Premium | √ | ✓ | √ | √ * | ✓ | √ | √ |





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