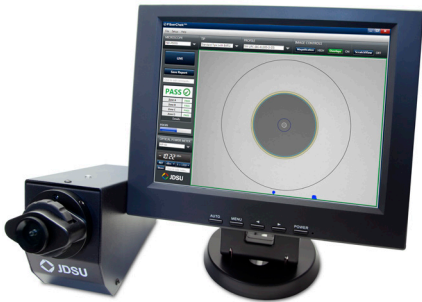


# FVD Benchtop Microscope and FiberChekPRO™

## Benchtop Microscope and Automated Inspection & Analysis Software



PC / display not included.

### Key Features

- FiberChekPRO software pre-programmed to comply with International Electrotechnical Commission (IEC) acceptance criteria standards for single-mode and multimode connectors
- Implements standards for inspection and grading throughout every stage of fiber handling
- Ensures consistent results by removing human subjectivity from fiber inspection and grading
- Identifies and characterizes each defect and contamination particle, and determines their location relative to the fiber core
- Archives results and images as HTML or PDF format and generates integrated reports
- Plugs directly into PC/laptop via USB 2.0 connection

### Applications

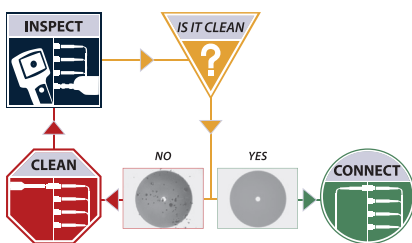
- Inspect and analyze patch cords and jumper cables in manufacturing and quality assurance environments
- Automatically capture and analyze fiber end face images, and obtain a PASS/FAIL result according to pre-configured criteria
- Standardize fiber inspection and analysis process

### FVD Benchtop Microscope and FiberChekPRO

FiberChekPRO is an advanced application that determines the acceptability of optical fiber end faces through automated inspection and analysis. It identifies and characterizes defects and contamination and determines their location relative to the fiber core. It then provides a PASS or FAIL result according to a pre-configured failure criteria setting. It is an intuitive, effective, and practical solution for fiber end face grading and inspection.

The FVD-Series digital fiber microscope is used to inspect the polished surface or cleaved ends of fiber optic connectors. This high-resolution benchtop inspection microscope is ideally suited for post-polish inspection of high-quality end faces and can repeatedly detect scratches that may be missed by human technicians, delivering the level of sensitivity long sought in the industry. The FVD requires a connector adapter and PC to supply power to the unit through the USB 2.0 port.

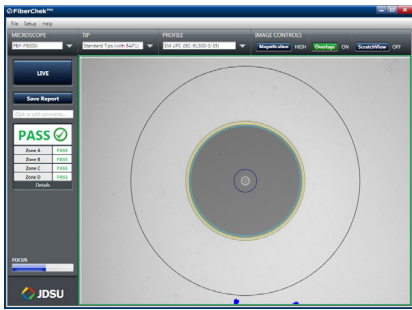
### Inspect Before You Connect<sup>SM</sup>



**Contamination is the number 1 reason for troubleshooting optical networks.** Proactive inspection and cleaning of fiber connectors can prevent poor signal performance, equipment damage, and network downtime.



2

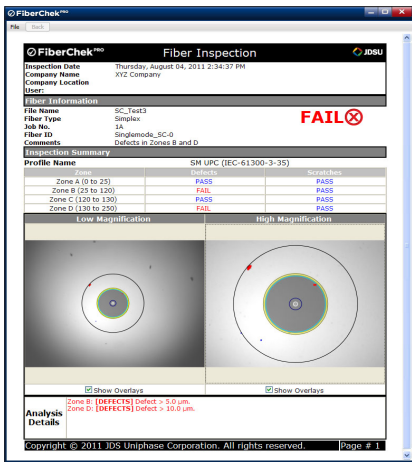


FiberChekPRO User Interface

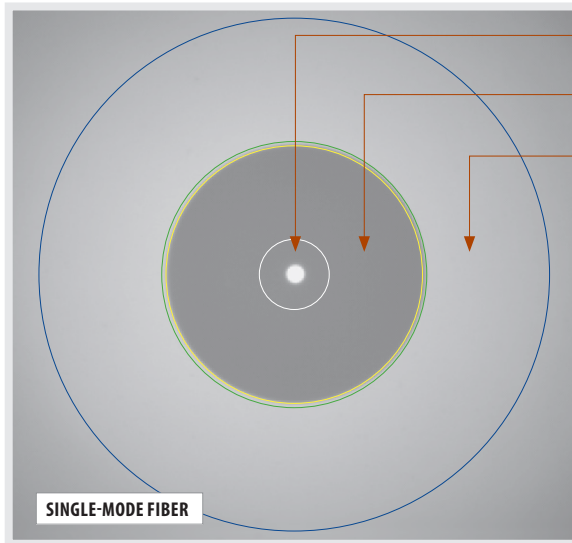
As different types of defects are located and identified, FiberChekPRO measures the size of each feature, determines its location relative to the core, and analyzes the collected data to obtain a PASS or FAIL result based on parameters configured for each pre-defined setting.

Because defects and contamination on or near the core surface typically affect the light transmission most significantly, they require the most aggressive examination. FiberChekPRO defines the concentric areas around the core as Zones, which let users establish failure criteria by evaluating various defect categories, including Contamination, Pit/Chip and Scratches.

*Note: Zones are a series of concentric circles that identify areas of interest on the connector end face. The inner-most zones are more sensitive to contamination than the outer zones.*



FiberChekPRO HTML Summary Report



- A CORE Zone
- B CLADDING Zone
- C FERRULE/CONTACT Zone

**Benefits**

- Eliminates human subjectivity for consistent, standardized result when inspecting and grading fiber
- Configurability allows for user-defined PASS/FAIL criteria settings
- Standardizes inspection, analysis, and grading process throughout fiber networks
- Records and archives results in HTML or PDF format

**FiberChekPRO Automated Procedures**

1. Acquires the fiber image
2. Analyzes the image
3. Finds defects and their location to fiber core
4. Measures and evaluates the defects within each specified Zone
5. Determines whether defects within the Zones are acceptable according to the pre-configured failure criteria for each Zone
6. Displays the results as PASS or FAIL
7. Saves or prints all relative results in designated directory or printer, respectively



### FVD Benchtop Specifications

Dimensions	17.8 x 7.9 x 11.7 cm (7.0 x 3.1 x 4.6 in)
Weight	1.36 kg (3.0 lbs)
Live image	800 x 600; 15 fps
Connector	USB 2.0
Cord length	183 cm (6 ft)
Camera sensor	1280 x 1024 black and white, 1/3-in (1.27 cm) CMOS
Particle size detection	< 0.5 µm
Light source	Blue LED, 100,000+ hour life
Lighting technique	Coaxial
Power source	USB port
Certification	CE
Warranty	1 yr

### Field of View Values (µm)

	High-mag	Low-mag
<b>FVD-2400</b>	Horizontal: 185 Vertical: 140 Diagonal: 230	Horizontal: 300 Vertical: 225 Diagonal: 375
<b>FVD-2400-L</b>	Horizontal: 200 Vertical: 150 Diagonal: 250	Horizontal: 325 Vertical: 245 Diagonal: 400
<b>FVD-2200</b>	Horizontal: 400 Vertical: 300 Diagonal: 500	Horizontal: 640 Vertical: 480 Diagonal: 800
<b>FVD-2080</b>	Horizontal: 1060 Vertical: 800 Diagonal: 1325	Horizontal: 1710 Vertical: 1280 Diagonal: 2135

### Ordering Information

<b>FVD-2400</b>	Digital fiber inspection benchtop microscope (400X); USB 2.0; FiberChekPRO software; FMA adapter: universal 2.5 mm connectors
<b>FVD-2400-L*</b>	Digital fiber inspection long working distance (LWD) benchtop microscope (400X); USB 2.0; FiberChekPRO software; FMA adapter: universal 2.5 mm connectors
<b>FVD-2200</b>	Digital fiber inspection benchtop microscope (200X); USB 2.0; FiberChekPRO software; FMA adapter: universal 2.5 mm connectors
<b>FVD-2080</b>	Digital fiber inspection benchtop microscope (80X); USB 2.0; FiberChekPRO software; FMA adapter: universal 2.5 mm connectors

*\*Select FVD-2400-L when inspecting multi-fiber, or ribbon, connectors with guide pins.*

### Test & Measurement Regional Sales

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