



MPX3 Portable Fiber End-face Microscope

400x Magnification with Live Video and Long Battery Life

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Product Overview

High-performance, portable fiber end-face inspection microscope designed specifically for field engineers. Combining 400x high-definition magnification with real-time recording and playback, it quickly and accurately inspects the end-face cleanliness and damage of fiber optic connectors (such as SC, FC, LC, and ST). Its exceptionally long battery life (20 hours) and compact, lightweight design make it an indispensable tool for fiber optic network installation, maintenance, and quality assurance, effectively preventing network failures caused by end-face contamination.

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Core Features

- High-precision nondestructive testing : Provides 400x magnification to clearly observe micron-level scratches, stains and defects on the optical fiber end face.
- Real-time video recording and data management : Supports real-time video recording of the inspection process and expands storage via a TF card (8GB standard), facilitating recording, playback and analysis, as well as quality traceability and report generation.
- Full interface compatibility : Intelligently adapts to various mainstream fiber optic connector types such as SC, FC, LC, ST, etc., and is universally compatible with one device.
- Ultra-long battery life : Built-in 4000mAh large-capacity lithium battery supports up to 20 hours of continuous standby, meeting the needs of all-weather field operations.
- Intuitive and easy-to-use operation : Equipped with a 3.5-inch LCD display and a simple interface, it is ready for use without the need for complex training.

Customer pain points & Product selling points

Customer pain points

Fiber optic faults are difficult to locate quickly, as most are caused by end-face

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400x high-definition microscope : reveals tiny dirt and damage, quickly locates the root cause of the



Customer pain points

MPX3 Solutions

contamination, which is invisible to the naked eye.

problem, and reduces network downtime.

The testing process cannot be recorded, making it difficult to define responsibility when problems arise

Real-time recording and playback : Provides "video evidence" for every inspection, facilitating accountability, employee training, and customer report generation.

It is very cumbersome to carry multiple probes or adapters to detect different interfaces on site

Universal interface support : One device is compatible with all mainstream fiber interfaces, eliminating the need for additional adapters and simplifying your toolbox.

The power supply for field work is inconvenient and the equipment often runs out of power

20-hour ultra-long battery life : A full charge can meet multiple days of work, saying goodbye to battery anxiety and focusing on completing maintenance tasks.

Traditional microscopes can only be viewed by one person, and cannot share and discuss problem points

Large-screen display and video output : Supports simultaneous viewing by multiple people and allows for presentations via video output, making collaboration more efficient.

Detailed technical parameters

Parameter Category	Specifications
Magnification	400 X
Detection range (μm)	235 (width) × 95 (depth)
Pixel	307,200
Image sensor	1/3" CMOS
LCD screen	3.5 inches, 960 × 240 resolution



Parameter Category	Specifications
Video frame rate	25 FPS
Video output mode	NTSC/PAL
Recording/playback format	AVI
Storage media	Built-in 8GB, supports TF card expansion
Supported interfaces	SC, FC, LC, ST and other common interfaces
Battery	4000mAh lithium battery
Standby time	About 20 hours
Charging port	Micro USB (DC 5V/2A)
Operating temperature	Not provided, it is recommended to refer to similar specifications
Storage temperature	-18°C ~ 35°C
Product weight	About 0.085 kg
Dimensions (mm)	78 (length) × 22 (width) × 56 (height)

Typical application scenarios

1. Data center : Before connecting the server and switch jumpers, perform end-face quality inspection.
2. Fiber-to-the-home (FTTH) installation and maintenance : Ensure clean fiber connections at the user end to ensure signal quality at the home.
3. Telecom network operation and maintenance : regular inspection and troubleshooting of base stations and trunk fiber optic links.
4. Broadcasting and Television Network : Check the quality of connection points in cable TV fiber optic transmission links.
5. Industrial control and security systems : Ensure connection reliability of mission-critical fiber optic networks.



Why choose the MPX3 Fiber End-face Microscope?

1. Seeing is believing, preventing problems before they occur: Visualize potential connection failures and resolve them before they occur, saving significant subsequent repair costs.
2. More than just "seeing," it's also "recording" : The unique recording function streamlines the inspection process and turns it into evidence, enhancing service professionalism.
3. A true on-site partner : Its amazing battery life and full interface compatibility enable it to cope with a variety of complex on-site environments, making it reliable and worry-free.
4. Extremely simple operation and quick to get started : No professional technical background is required, and it can be used right out of the box, significantly reducing team training costs and time.
5. High return on investment : A single device can effectively reduce the risk of network downtime and improve customer satisfaction, making it an extremely cost-effective quality assurance tool.

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