

Columbia Fiber Optic End-Face Inspection Instrument Remote Monitoring Type



Overview

Cleave quality inspection. High precision interferometers for checking the end face quality of cleaved optical fibers and for cleave process optimization.

Key Takeaways

The Columbia FIP-920 is a portable fiber optic inspection probe with high-definition imaging, remote monitoring capability, and automated defect detection features.

Overview

The Columbia FIP-920 Fiber Optic Inspection Probe is designed to inspect fiber end-faces with high precision, ensuring connectors and bare fibers are free from contamination, scratches, or defects that could degrade optical performance. It is particularly suitable for remote monitoring applications, allowing technicians to capture, store, and review fiber end-face images without being physically present at the inspection site. Key Features High-Definition Display: Equipped with a 3.5" TFT LCD, the probe provides clear, detailed images of fiber end-faces, making it easier to identify even the smallest particles or scratches. Zoom Functionality: Users can zoom in and out to closely examine the fiber core and surrounding areas. Image Capture and Storage: The device includes an SD card for recording live images, which can be reviewed or transferred via SD card reader or USB cable, supporting remote analysis.



Battery Life: Up to 8 hours of battery operation allows flexible field use without immediate access to power. **Portability:** Lightweight and compact, the probe is suitable for both laboratory and field inspections.

Applications

Connector and Bare Fiber Inspection: Ensures fiber end-faces meet quality standards before splicing or mating connectors, reducing insertion loss and reflection issues. **Remote Monitoring:** Captured images can be analyzed off-site, enabling centralized quality control and documentation. **Network Maintenance:** Ideal for verifying fiber cleanliness and detecting defects during installation or maintenance of optical networks.

Compliance and Standards

The FIP-920 supports inspection practices aligned with industry standards such as IEC 61300-3-35, which defines cleanliness and defect criteria for fiber end-faces. This ensures consistent and repeatable results across different operators and inspection scenarios.

Advantages

High Accuracy: Detects micro-particles, scratches, and edge chips that could affect optical performance. **Efficiency:** Rapid inspection and automated image capture streamline quality control processes. **Versatility:** Suitable for single-mode, multi-mode, and multi-fiber (MPO/MTP) connectors.

Remote Capability: Enables off-site review and documentation, supporting modern network management and maintenance workflows. The Columbia FIP-920 combines portability, high-resolution imaging, and remote monitoring capabilities, making it a reliable tool for ensuring fiber optic network quality and performance in both laboratory and field environments.

Article Content

End Face Inspection

Cleave quality inspection. High precision interferometers for checking the end face quality of cleaved optical fibers and for cleave process optimization. Crisp and clear fringe patterns and software with

Fiber Endface Inspection – connectors, bare fiber ends,

Various instruments are used for inspecting bare or connectorized fiber endfaces: fiber microscopes, videoscopes and interferometric analyzers.

End Face Inspection Microscopes

The new D Scope EFI for MTP/MPO and multifibers field connectors is a cost effective microscope for inspecting fiber optic patchcords and cassettes.

FI-7000 FiberInspector Pro Fiber Optic Inspection

The FI-7000 FiberInspector Pro is a fiber optic inspection scope that allows you to inspect and certify fiber optic connector end-faces in 1 seconds so you can get

Fiber Inspection Scope Products

Shop fiber optic inspection scopes, including single- and multi-fiber inspection products from trusted brands like Dimension, Domaille, Viavi, and Jonard.

Fiber Optic Inspection Scopes

FS offers a range of fiber microscopes such as 400X Microscope, 200X Microscope, inspection probe for fiber optic inspection

Fiber End Face Inspection

We also offer two scanning white-light interferometers (SWLI) that enable detailed measurements of the connector end face for inspection and quality-control

Endface Inspection-DIMENSION

Dimension is committed to building a series of portable fiber optic end face probes/microscopes, becoming ideal tools for inspecting fiber connector end-face

Fiber Inspection and Cleaning

1-second automated PASS/FAIL certification of fiber optic connector end-faces. The complete solution for precision end-face fiber optic cable cleaning. Fiber Optic Scope Camera inspects and verifies that

Fiber Inspection. Fiber Optic Inspection Scope and Probe

The standard contains pass/fail requirements for fiber inspection and analysis of the end face of an optical connector, specifying separate criteria for different types of connections (for example, SM-PC,

Wireless Fiber Optic End Inspection Instrument | FiberMania

The Wireless Fiber Optic End Inspection Instrument provides high-resolution, 200x magnification for precise fiber optic end face inspection. It offers wireless connectivity (USB and WiFi) with Android

Remote Visual Inspection | RVI Resources | Evident

What is remote visual inspection? Remote visual inspection, also known as RVI, is a nondestructive testing (NDT) technique that uses visual aids to inspect areas of infrastructure from a distance that

Product Catalog

VIAVI offers a comprehensive portfolio of portable fiber optic test instruments and monitoring system solutions to cover all your network lifecycle needs for field testing, from installation and provisioning

Remote Fiber Testing and Monitoring | EXFO

Description EXFO's remote fiber testing & monitoring solutions are built based on fixed OTDR test equipment placed at strategic central locations across the network. The condition of fiber optic

Sumix | Fiber inspection microscopes overview

Fiber Inspection Microscopes Microscopes for network maintenance, lab and manufacturing to inspect the end face of single and multi-fiber connectors for

Endface Inspection-DIMENSION

Endface Inspection- Dimension is committed to creating a series of optical fiber end-face defect inspection products. For the fiber optic manufacturing and

Interferometric End Face Inspection

Interferometric end face inspection is a non-destructive and non-contact technique to inspect the optical fiber's end face, ensuring the quality and reliability of optical

Fiber End-face Visual Inspector

EASYCHECK Integrated Fiber End-face Visual Inspector Easycheck is an integrated fiber endface inspector developed by Dimension Technology; it combines optical microscope and monitor in a

Related Video Reference

This video was associated with the source search result. Verify technical details against current product documentation and project requirements.

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This document is for preliminary research. Verify specifications against current standards, product documentation and project requirements.

