

V20

User Manual

Fiber Microscope

Please read this manual before operating the device.
Please keep this manual together with the device.



V20

User Manual

Important: INNO Instrument strongly recommends all users to read this manual before operating the V20.

This manual is valid for the following software version:

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Fiber microscope

Handheld fiber microscope enables fiber face inspection
Available in 200(μm) x or 360(μm) x magnification

With this tool, the process of fiber testing can be simplified and performed quickly. Accurate test results can be generated to demonstrate successful pass.



- Test report
- S/W program to use with PC
- Pass/Fail Result
- Image magnification

Importance of a cleaning the connector end interface

It is essential to utilize auto-analysis software to test the connector and assess its quality during the commissioning and installation of the fiber. It is important to save the verification records of the connector for future reference. The end-to-end verification can be achieved by combining the connector test with the fiber verification. The following are the displayed test images.



Passed



Failed

It can also analyze and report data through the corresponding software, as shown in the following picture:

User: Morris	Result	Identity	Serial No.	Serial No.	Serial No.	Serial No.
Serialized	Criteria(Len)	Threshold	Result	Criteria(Len)	Threshold	Result
MS100-25 m1	0.1Size<10	0	0	0.1Size<10	0	0
	0.1Size<12	0	0	0.1Size<12	0	0
MS100-25 m2	0.1Size<10	0	0	0.1Size<10	0	0
	0.1Size<12	0	0	0.1Size<12	0	0
MS100-25 m3	0.1Size<10	0	0	0.1Size<10	0	0
	0.1Size<12	0	0	0.1Size<12	0	0
MS100-25 m4	0.1Size<10	0	0	0.1Size<10	0	0
	0.1Size<12	0	0	0.1Size<12	0	0
MS100-25 m5	0.1Size<10	0	0	0.1Size<10	0	0
	0.1Size<12	0	0	0.1Size<12	0	0

Operation



Fiber interface: Connect the fiber connector to V20 after unscrewing the cap of V20.



USB interface: It is used for connecting to PC and other corresponding instrument.



Rotary knob for adjusting focus: It is used for focusing to make the image clear. In order to enable the function of V20, you just need to connect the V20 with the fiber connector to the instrument or to the PC which is able to communicate with upper computer. After making the image of the fiber, it will become clear by adjusting the rotary knob for focus, allowing you to analyze the image.

Patchcord Tip Adapters

2.5mm / APC



Universal patchcord tip
for 2.5 mm ferrules(APC)

2.5mm / UPC



Universal patchcord
tip for 2.5 mm ferrules(UPC)

1.25mm / APC



Universal patchcord tip
for 1.25 mm ferrules(APC)

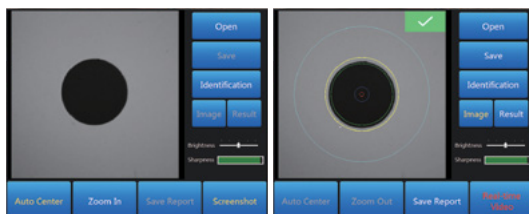
1.25mm / UPC



Universal patchcord tip
for 1.25 mm ferrules(UPC)

Convenient test with PC software

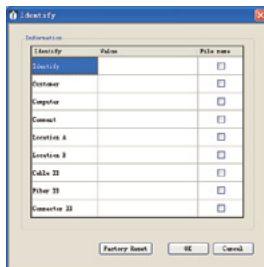
The result of INNO software can be analyzed through the following step: connecting the optical fiber to the device, adjusting the sharpness and then tapping “screenshot”.



Meanwhile, the data can be analyzed in detail.



The corresponding test task can be marked under the identification function.



Test report

V20 Fiber Microscope Report



General Information

File name:	1112.pdf	Checking date:	2017-2-15 15:38:22
Analysis version:	1.0	Analysis date:	2017-2-15 15:38:22
Job ID:		Customer:	
Company:		Comment:	

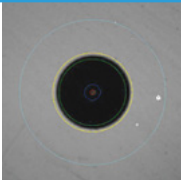
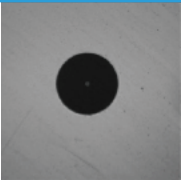
Location

	Location A	Location B
Operator		

Identification

Cable ID	Fiber ID	Location A	Location B	Connector ID

Image



Result

Layering	Layered Diameter (μm)	Scratch			Defect		
		Criterion	Thresh old	Amount	Criterion	Thresh old	Amount
A: Core	0 - 25	$0 \leq \text{size} < \infty$	0	0	$0 \leq \text{size} < \infty$	0	0
B: Cladding	25 - 120	$0 \leq \text{size} < 3$	any	0	$0 \leq \text{size} < 2$	any	0
		$3 \leq \text{size} < \infty$	0	0	$2 \leq \text{size} < 5$	5	0
					$5 \leq \text{size} < \infty$	0	0
C: Coating	120 - 130	—	—	—	—	—	—
D: Jacket	130 - 250	$0 \leq \text{size} < \infty$	any	0	$0 \leq \text{size} < 10$	any	5
					$10 \leq \text{size} < \infty$	0	0

Signature: _____ Date: 2017-2-15 1 / 1

Specifications

Parameters	
Size	150 x 35 x 34mm
Weight	168g
Resolution	3.2μm
Image sensor	640 x 480 (VGA)
Visual test	< 5μm
View angle	200μm*200μm of high magnification
	360μm*360μm of low magnification
Light source	Blue LED
Digital zoom	3 grades
Connector	USB 2.0
Operating temperature	-10°C to 50°C
Storage temperature	-40°C to 70°C
Bulkhead tips	2.5mm (UPC, APC), 1.25mm (UPC, APC)

Maintenance and technical support

Any operation, such as alignment, maintenance or repair of the device, can only be performed by qualified maintenance personnel. Please contact the engineers of [INNO Instrument](#). You can also consult any queries through the following website.

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You dream,
We DESIGN

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