

OFI400 Optical Fiber Inspector

User Guide _ Version 1.0

Ascentac www.ascentac.com

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If you have any questions or need any assistance, please contact our service center.

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Please prepare the following information before you contact us and describe the problems.

- Product model and S/N
- Warranty information

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1. Safety Information

Read all safety information carefully before using this product to ensure personal safety and proper use.

- Assure the power supply conforming to the specification of this product and qualified for the country of use.
- Use batteries that meet the specifications of this product.
- Do not use damaged power cords, accessories or other peripheral equipment.
- Make sure the product is operated on the permitted ambient conditions.
- Never directly look into the optical outputs interface.
- Dangerous laser radiation: A



2. Introduction

Ascentac OFI400 Series, Optical Fiber Inspector, is used to inspect the cleanliness of fiber-optic connector end-faces before attaching them to equipment or patch panels. The poor optical signal performance and potential equipment damage can be avoided.

Ascentac OFI400 Series can verify whether fiber end-faces are contaminated or damaged. It characterizes detectable resolution less than 1 μ m and 400X magnification. The real-time image of fiber-optic end-face can be shown on mobile devices via a USB port or Wi-Fi. This intelligent inspector is compatible with Android and IOS.

Ascentac OFI400 Series removes the guesswork from fiber inspection and provides reliable and objective Pass/Fail result. It helps technicians exclude problems related to contaminated connector end-faces and markedly improves the quality of optical fiber networks.



2.1 Features

- Automatic image centering for real-time viewing
- Auto analysis (Pass/Fail result) based on IPC 8497-1 or IEC 61300-0-35 standard
- Compatible with Android and IOS via Wi-Fi or USB connection
- 400X magnification & Less than 1 µm resolution
- Generate detailed reports
- Compile with CE/CEM and ROHS standards

2.2 Application

- Cleanliness inspection for fiber-optic connector end-face
 - SC, FC, LC or E2000 PC or APC Male or Female
 - ST PC Male or Female
 - MU PC Male or Female
 - MT RJ Male or Female
 - MPO PC or APC Female



3. Layout

3.1 Appearance



3.2 Instruction

ltem	Function	Description
	Dower on loff	Long press for three seconds to turn
	Fower on/on	on/off the inspector.
1		Continuously short pressing two times to
	Connection mode switch	switch the connection mode after
		turning on the inspector.
2	Illuminator	Short press to turn on/off the illuminator.
2	Display made switch	Short press to switch the display mode
3	Display mode switch	(brightness or contrast)
A	Тір	Interchangeable
D	Facurawhaal	Rotate the wheel back or forth to adjust
D	FOCUS WHEEK	the focus
C	Micro USB interface	Connecting the inspector with your
	MICIO-03D IMENACE	device or charging



3.3 LED Indicator

ltem	LED Indicator	LED Status	Description
	III. main ator	Off	Default
a	liuminator	On	Illuminator is turned on.
2	Connection	Blue	Wi-Fi (default)
d	mode	Green	USB
		Off	Default
			1. The light is on in green for 3
			seconds when the inspector is
			turned on.
С	Batteries	Croon	2. The light is on in green for 5
		Gleen	seconds when the illuminator is
			turned on or turned off.
			(The fewer lights, the lower the
			power.)
		Off	Default
d	Pass/Fail	Red	Fail
		Green	Pass
		Off	Default
е	Charging	Red	Charging
		Green	Fully-charged



4. Display

4.1 Connection





4.2 Test





5. Operation

5.1 Power-on

Long press [🔄] key for three seconds to turn on the inspector.

5.2 Power-off

Long press [] key for three seconds to turn off the inspector.

5.3 Illuminator

Shor press [66] key to turn on or off the illuminator.

5.4 Switch Connection Mode

Continuously short pressing [] key two times to switch the connection mode after turning on the inspector.

Connection mode indicator:

- Blue: Wi-Fi
- Green: USB

Note

Default: Wi-Fi connection.



5.5 Switch Display Mode

Short press [] on the inspector to switch the display mode (brightness mode or contrast mode).

5.6 Change Tip

Firmly hold the tip with one hand and rotate the retaining nut with the other hand. When the retaining nut is loosened, the tip can be removed.



5.7 Charging

Micro-USB interface on the inspector is for charging.



5.8 Fiberscope

5.8.1 Android

5.8.1.1 Android Setting

- 1. Turn on the inspector first, and then turn on Wi-Fi on your devices.
- 2. Search for the Wi-Fi SSID (XX_XX:XX) same as the inspector and enter the password "12345678".
- 3. Make sure the connection successful at least one time.





5.8.1.2 Download and Install the APP

Go to [] to search for "**Fiberscope**". Download and install our APP.

5.8.1.3 App Opening and Permission Setting

- 1. Make sure your device is connected to the Internet before open the application for the first time.
- 2. After opening the application, you shall manually allow or deny location and access rights under Android version 6.0 or above.



5.8.1.4 Input Serial Number

Open the APP, Fiberscope, and input your serial number.



Note

- 1. The serial number will be attached with the inspector.
- 2. One device, one serial number. The serial number is only required to be entered at the first time to enable the application.



• Successful



• Fail (Please contact our service center.)





5.8.1.5 Connection Mode

Select the connection mode first.





5.8.1.5.1 USB Connection

- 1. Make sure the connection mode of the inspector is USB mode first. (Refer to Chapter 5.4)
- 2. Take a USB cable to connect with your device. Allow "Fiberscope" to access the USB device by tapping [OK].



3. Tap [USB] to access the home screen of test.





5.8.1.5.2 Wi-Fi Connection

- 1. Make sure the connection mode of the inspector is Wi-Fi mode first. (Refer to Chapter 5.4)
- 2. Tap the Wi-Fi SSID (XX_XX:XX) of the inspector to access the home screen of test.

	荸 🖹 97% 🖡 上午10:02	<u>ି</u> ନି କ (> ₪‡≋	📓 99% 🛿 上午9
	-	=	Fiber Scop	e Test
	5	Real-	time Video	Result
Select the method	of connection			
Rescan				
Rescan				
VSB				
✓ USB		A	ore	_
VSB VI-Fi PaulAP	 ■ ■ ■ ■ ■ 	A 0.	ore -25 µm	
VISB VI-FI PaulAP		A C A O- B C	ore -25 μm Hadding	-
 ✓ USB ➢ Wi-Fi PaulAP ✓ FE_A7:23:2C 	 ○ ○ ○ ○ ○ ○ ○ 	A C 0. B C 23	tore -25 μm ladding 5-120 μm	-
 ✓ USB ◇ WI-Fi PaulAP ✓ FE_A7:23:2C weitech 2.4G 	 • •<	A C 0- B C 24 C A	tore -25 μm Iadding 5-120 μm dhesive 20-130 μm	-
VSB Vi-Fi PaulAP FE_A7:23:2C weitech 2.4G	 ○ ○	A C B C C A 11	ladding 5-120 μm dhesive 20-130 μm	

Note

1. If you can't connect, please first turn on Airplane Mode, then turn your Wi-Fi back on and try to connect.



5.8.1.6 Test

1. On the display of Real-time Video, manually rotate the focus wheel on the inspector to focus the lens.



2. After focusing, the system will automatically perform the inspection.





- 3. The test result will be displayed after the inspection is finished.
 - PASS



• FAIL





Note

- On the display of Real-time video, [Test] button can't be tapped. The system will automatically confirm whether it is focusing and do the inspection.
- On the display of Result, tap [Test] button to test again or tap [_______] to return to the display of Real-time video.
- 3. On the display of Real-time video, short press [201] on the inspector to switch the display mode (brightness mode or contrast mode).
- 4. The default setting is that the system will automatically do the inspection after it determines that the focus is completed.

However, users can turn on "**Manual focus**" in "**SETTINGS**". Users are still required to rotate the focus wheel until the image on the display of Real-time video is clear, and then manually tapping [**Test**] button to enable the system to start the inspection.



5.8.1.7 Save Result

When the test is done and the test result will show on the screen, tap [\equiv] > [SAVE RESULT].





5.8.1.8 Report

Tap [\equiv] > [REPORT]. The report includes the information about connector types, test result of each area, detailed analysis, test configuration, testers, etc.





5.8.1.9 Create PDF Report

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≡ Fi	ber Scope Test		-	Test
Real-time Vid	eo Result		Fiber Scope	
	0	Ŀ	SAVE	
			REPORT	
			CREATE PDF REPORT	
A Core 0-25 μm	FAIL	ø	RECORD	PASS
		C)	CONNECTOR	
B 25-120 µr	n PASS	6	TEST CONFIGURATION	PASS
C Adhesive	PASS	*	SETTINGS	PASS
D 130-250 µ	ım FAIL		CONNECT	FAIL
•			\bigcirc	

1. Tap [\equiv] > [CREATE PDF REPORT].

2. Check the box to output the test report as PDF file, and then tap [OK].





- ତ 🖸 🖓 🖓 ⊖ … 🔃 ≑ 📽 95% 🛛 上午10:33 ≡ Fiber Scope Test PASS Real-time Video Result page 1 of 3 oscentac Inspection Report Sat Feb 23 11:09:13 GMT 08:00 2019 Inspection Information Fiber ID fiberr_4 Connector Ine Core 0-25 µm 0ssize< 0ssize-0ssize<3 3ssize<+ Cladding 25-120 µm EAII 0ssize42 2ssize45 5ssize44 **Core** 0-25 μm A PASS Contact 130-250 µm Cladding 25-120 µm 0ssize<10 В PASS Configuration Information Connector Type SC Simples SM (#125) 3.0mm Test Configuration IIC SM SF UPC ORL 2 45 dB (61300-3-35, 1.0) Adhesive 120-130 µm PASS Contact 130-250 µm FAIL D FAIL \checkmark \bigcirc page 2 of 3
- 3. PDF file is outputted.



5.8.1.10 Record



1. From a home screen, tap [\equiv] > [RECORD].

2. Select the report you would like to view and tap [OK] to open the report or select the report you would like to delete and tap [DELETE] to delete it.





5.8.1.11 Connector



1. From a home screen, tap [\equiv] > [CONNECTOR].

2. Select the connector type.





5.8.1.12 Test Configuration



1. From a home screen, tap [\equiv] > [TEST CONFIGURATION].

2. Select the test configuration.

📃 🎖 🗢 🚟 🔍 🔋 🕅 🕯 🕅 100% 🕅	上午11:26
Test Configuration: IEC MM SF PC (61300-3-35, 1.	0)
IEC SM SF UPC ORL ≥ 45 dB (61300-3-35, 1.0)	0
IEC SM SF PC ORL ≥ 26 dB (61300-3-35, 1.0)	0
IEC SM SF APC (61300-3-35, 1.0)	0
IEC MM SF PC (61300-3-35, 1.0)	۲
IEC SM SF UPC ORL ≥ 45 dB ENLARGED C	0
IEC SM SF PC ORL ≥ 26 dB ENLARGED C	\bigcirc
IEC SM SF APC ENLARGED C	\bigcirc
IEC MM SF PC ENLARGED C	\bigcirc
IPC SM SF NEW PC (8497-1, 12-2005)	\bigcirc
IPC SM SE FIFI D PC (8497-1	(



5.8.1.13 Settings



1. From a home screen, tap [\equiv] > [SETTINGS].

2. Input the related information which will be shown on test report, such as Tester, Fiber ID and Cable ID.

<u>ि</u> 🔲 छि छ		[];₹	📓 96% 🖻 上午10:17
Setting			
Tester Name	Paul		
Fiber ID			Increment
Cable ID	_		
Manual Focus			
		\bigcirc	



Note

- Tap the checkbox next to "Increment" to enable the file name of the test report to be numbered sequentially such as Fiber_001, Fiber_002 and Fiber_003.
- For Manual Focus, please refer to Chapter 5.8.1.6 Note
 5.



5.8.2 IOS

5.8.2.1 IOS Setting

1. Turn on the inspector first, and then turn on Wi-Fi on your devices.

-II 遠傳電信	10:49 AM	€ 64%
Settings	Wi-Fi	
Wi-Fi		
NETWORKS		
Chailease_V	Vhitelist	? (i)
CTTPPP		a 🗢 i
FE_A6:45:4	E	🔒 🗢 🚺
iiiiMac		🕯 🗢 🚺
Kaitek1		🔒 🔶 🚺
LAPTOP-E6	GJLPT7U 9023	🔒 🤶 🚺
Ledlink-Pub	blic	🔒 🤶 🚺
Myvita		🔒 🤶 🚺
NETGEAR2	8-5G	🔒 🤶 🚺
TP-I edlink		



2. Search for the Wi-Fi SSID (XX_XX:XX) same as the inspector and enter the password "12345678".



3. Make sure the connection successful at least one time.

내 遠傳電信 穼	10:50 AM	€ 64% ■ ·
Settings	Wi-Fi	
Wi-Fi		
✓ FE_A6:45	::4E	a 🗢 i
NETWORKS		
CTTPPP		🕯 🗢 🚺
iiiiMac		🔒 🗢 🚺
Ledlink-P	ublic	🔒 🗟 🚺
Myvita		•
NETGEAF	R28-5G	• 🗟 🚺
weitech_2	2.4G	🔒 🗢 🚺
weitech_5	5G	₽ 🗢 🚺
ZyXEL24	188	🔒 🤶 (i)



5.8.2.2 Download and Install the APP

Go to [] to search for "**Fiberscope**". Download and install our APP.





5.8.2.3 Enter a Product Key

Open the APP, Fiberscope, and enter a product key.



Note

- 1. The product key will be attached with the inspector.
- 2. One device, one product key. The product key is only required to be entered at the first time to enable the application.
- 3. If the product key is invalid, it may be used by other devices or doesn't exist. Please contact our service center.





5.8.2.4 Wi-Fi Connection

 Make sure the connection mode of the inspector is Wi-Fi mode first. (Refer to Chapter 5.4)
 Turn on Wi-Fi, input Wi-Fi SSID (XX_XX:XX) of the inspector and tap [Join]

and tap [Join].



2. The Wi-Fi SSID (XX_XX:XX) of the inspector will display in the record. Tap the Wi-Fi SSID (XX_XX:XX) of the inspector to access the home screen of test.





5.8.2.5 Test

1. On the display of Real-time Video, manually rotate the focus wheel on the inspector to focus the lens.



2. After focusing, the system will automatically perform the inspection.





3. The test result will be displayed after the inspection is finished.

• PASS



• FAIL





Note

- On the display of Real-time video, [<u>Test</u>] button can't be tapped. The system will automatically confirm whether it is focusing and do the inspection.
- 2. On the display of Result, tap [Test] button to test again or return to the display of Real-time video.
- 3. On the display of Real-time video, short press [] on the inspector to switch the display mode (brightness mode or contrast mode).



5.8.2.6 Save Result



When the test is done and the test result will show on the screen, tap [\equiv] > [SAVE RESULT].

5.8.2.7 Report

Tap [\equiv] > [REPORT]. The report includes the information about connector types, test result of each area, detailed analysis, test configuration, testers, etc.





5.8.2.8 Create PDF Report



1. Tap [\equiv] > [CREATE PDF REPORT].

2. Check the box to output the test report as PDF file, and then tap [OK].





3. PDF file is outputted.





5.8.2.9 Record



1. From a home screen, tap [\equiv] > [RECORD].

2. Select the report you would like to view and tap [OK] to open the report or select the report you would like to delete and tap [DELETE] to delete it.

Fiber Scope Test	Connector	Туре		
	SC Simplex SM	1 (9/125) 3.0mn	n	
Real-time Video Result	Connector	Inspection		
	Zone	Standard(µm)	Threshold	Quantity
			Scratch	
Select Report to Open	Core	0≤size<∞	0	0
	0-25 μm		Defeat	
aaa_1		0≤size<∞	0	0
u Feb 27 16:12:08 GMT+08:00 2020			Scratch	
		0≤size<3	Any	0
DELETE OK		3≤size<∞	0	0
DELETE	Cladding	Defeat		
	25-120 µm	0≤size<2	Any	10
		2≤size<5	5	0
		5≤size<∞	0	0
	Adhesive			
	120-130 μm			
			Scratch	
		0≤size<∞	Any	0
	Contact 130-250 um		Defeat	
	100-200 µm	0≤size<10	Any	0
		10≤size<∞	0	0



5.8.2.10 Connector



1. From a home screen, tap [\equiv] > [CONNECTOR].

2. Select the connector type.





5.8.2.11 Test Configuration



1. From a home screen, tap [\equiv] > [TEST CONFIGURATION].

2. Select the test configuration.





5.8.2.12 Setting



1. From a home screen, tap [\equiv] > [SETTINGS].

2. Input the related information which will be shown on test report, such as Tester, Fiber ID and Cable ID.





Note

Tap the checkbox next to "Increment" to enable the file name of the test report to be numbered sequentially such as Fiber_**001**, Fiber_**002** and Fiber_**003**.