



# AutoGet Wifi Intelligent Fiber Endface Microscope

## User Manual

Please read this manual thoroughly before use.  
Properly keep this manual with the equipment  
for future reference.

## Introduction

Dear customer :

Thank you for choosing AutoGet Wifi product. This product has high quality and excellent performance. To make full use of this product, please read this manual carefully before using. Whenever you have any questions, please contact us and we are happy to support.

### Symbols

The following symbols are used for the important information in this manual.

### Prompt

The notice and restrictions in the process.

### Attention

- 1.Any change of this manual will not be prior informed. Please kindly understand.
- 2.Every effort was made to ensure the accuracy of the manual. However , If there is no clear, erroneous or ambiguous content founded in the manual, please contact us.

### About the product

- 1.Keep the optics clean.
- 2.Keep the monitor clean. Prevent TFT LCD screen from the sharp cut, or being crushed by the weight.
- 3.Put the device in suit box if no use for long time.
- 4.Please check the battery level of the device before use, If only one battery indicator is on and flashing, please recharge the device before using.

## Product Warranty

### Warranty Term

We warrant that for a period of one (1) year from the shipping date, the product purchased by customer shall be free of defects in material and workmanship under normal authorized use.

### Warranty Content

In the event that we receives notice during the warranty period that any part does not conform to its warranty, our sole and exclusive liability shall be, at its sole option, to either repair or replace the non-conforming part in accordance with this limited warranty.

### Warranty Exception

No warranty will apply if

- 1) Device damage caused by wrong operation;
- 2) Unconventional repair or modification;
- 3) The causes of failure outside of the instrument;
- 4) Used in high temperature and humidity, corrosive gas, harsh conditions such as vibration ;
- 5) Fires, earthquakes and other natural disasters as well as the pollution caused by radioactive substances and harmful substances, and when the other force majeure such as war, riot, crime.
- 6) Consumables and consumable parts.

## About the Manual

1

### Profile

This chapter describes the name and function of each part.

2

### Hardware basic operation

This chapter describes performance characteristics and the basic operation of the equipment.

3

### Software basic operation

This chapter introduces software installation, features, interface and basic operation instructions.

4

### Contact us

This chapter mainly list the contact information.

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# 1 Profile

## 1.1 Check the packaging

Referring the packing list of the products, please check whether all items are contained. If there are any missed items, please contact us immediately.

## 1.2 Product description

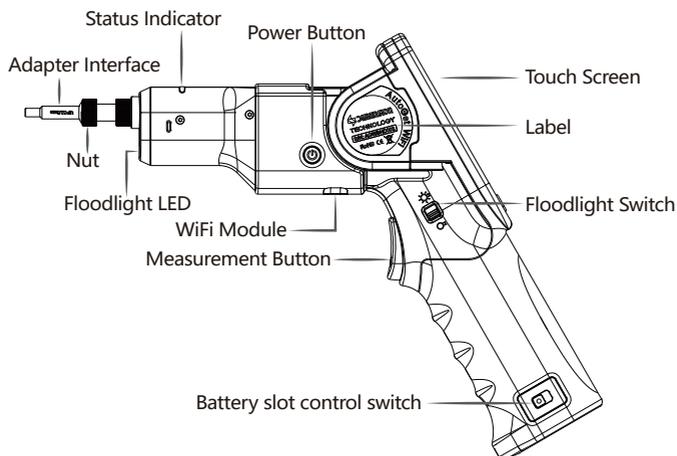


Figure1-1

Adapter interface: Connect different connectors. Nut: To fix the adaptor interface.

Floodlight LED: Assist the operation in dark conditions.

Status Indicator: Indicates the status of the device. The operating status is blue. If the measurement passes, it is green; if the measurement fails, it is red.

Power button: Press and hold the Power Button to turn the power on.

Touch screen: Display image and software operation interface. Label: Indicates important information about the product.

WiFi module:Support wireless transmission.

Floodlight switch: To turn floodlight LED on/off.

Measurement button:Trigger measurement. Battery slot control switch: To load and unload battery.

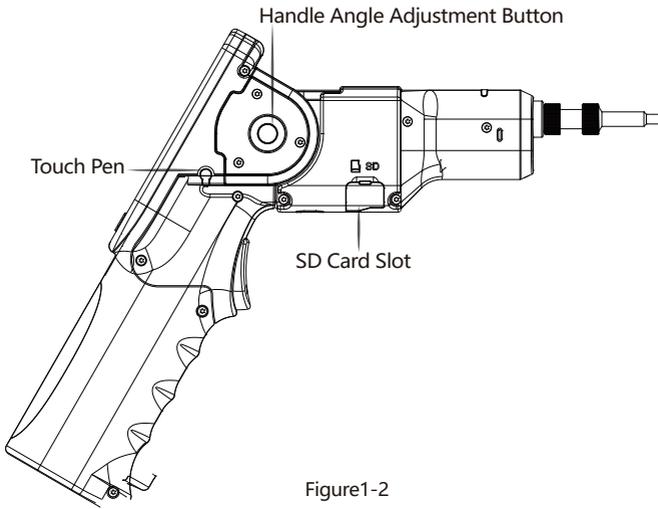


Figure1-2

Touch pen: For touch screens.

Handle angle adjustment button:

SD card slot: Install SD card to store data and reports.

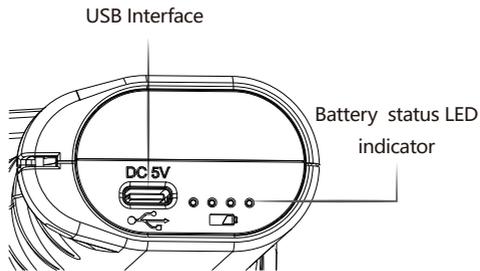


Figure1-3

USB interface: DC 5V, Type C

Battery status LED indicator: Displays the battery power and the storage status during the charging process.

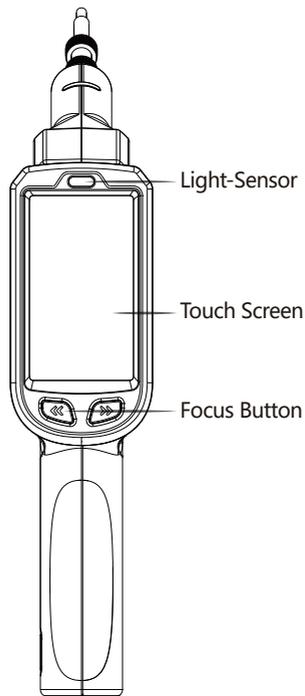


Figure1-4

Light-Sensor: The screen brightness can be adjusted according to the ambient light intensity.

Touch screen: Display image and software operation interface.

Focus button: Manual focus button.

## 2 Hardware basic operation

### 2.1 Features

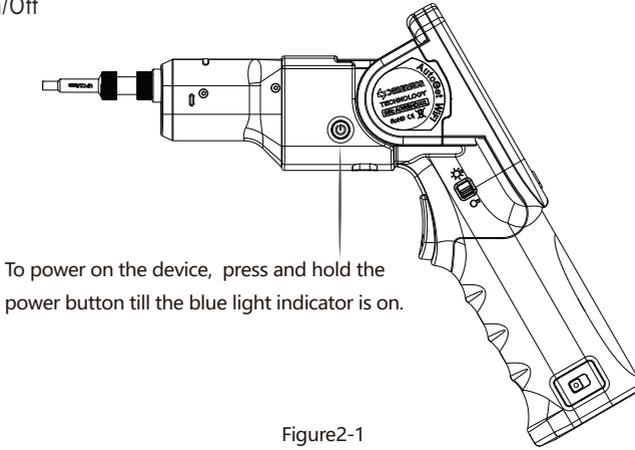
1. Varies of adapters meet different requirements on inspect male fiber connector/female fiber connector, such as FC SC ST E2000 LCMU and TOSA ROSA fiber end-face.
2. AutoGetWiFi has high quality optical component and high resolution CCD sensor.
3. Support SD card storage.
4. Dedicated rechargeable battery, durable for 9 hours continues inspection.
5. User-friendly design, floodlight for use in dark conditions; the use of protective cover in the use of transport process; the rubber edge design to protect from dust and damage from falling and shock.
6. The device is equipped with a quick measurement button function, which can record the measurement of the optical fiber end face at any time by data and report and store it on the SD card.

### 2.2 Performance

Projects	MT Parameters	Common Interface Parameters
Resolution	0.92um	0.52um
Image Sensor	1/1.8" CMOS	
Optical Magnification	×5	×8.72
Display	480X800 3.2" LCD touch screen	
Display Frame Rate	25fps	
Field of View	1440um×1100um (Preview mode) 220um×220um (Measure mode)	620um×620um (Preview mode) 250um×250um (Measure mode) 130um×130um (Core mode)
Image Magnification	—	3 levels
Particle Detection	<1um	
Focusing Mode	Auto	
Signal Output	WiFi 、 USB Type C	
Power Supply	Built-in	Li-ion battery (chargeable、 replaceable)
Life time	9 hours	
Charge Time	4hours (charging current: 2A)	
Charge Adapter	USB DC adaptor 5V/2A, including US,EU,UK,AU...adapters	
Accessibility	With white LED environment lighting, 60° foldable body	
Operating Temp.	-5°C ~ +40°C	
Storage Temp.	-20°C ~ +55°C	
Relative Humidity	<90%(Working/Storage)	
Weight	565g	
Dimensions	281mm×201mm×57mm (foldable)	341mm×67mm×57mm (straight)

## 2.3 Hardware operation

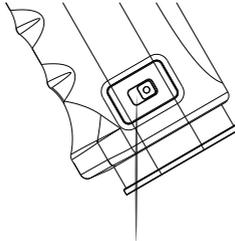
### 2.3.1 Power On/Off



To power on the device, press and hold the power button till the blue light indicator is on.

Figure2-1

### 2.3.2 Remove the battery



When the battery switch is in the position shown in the figure, the battery will automatically pop up, then gently push the battery and then pull it out.

Figure2-2

#### Battery usage:

1. Use a power supply to charge during the shutdown state of the device, and it will take about 4 hours to charge.
2. When the low light of the power indicator is flashing, the equipment needs to be recharged. Otherwise, the equipment will be automatically shut down after a certain time. In order not to affect the performance of the equipment and normal use, please charge in time.
3. In the recharging process, the 4 power indicators will blink in sequence. When the four lights are always bright, the battery is fully charged.

### Battery use precautions:

1. When in use, the battery shall be kept out from heat and high voltage. Avoid children's touching. Do not drop or shock the battery.
2. Do not short the battery. Do not demolish or disassemble the battery. Do not put the battery in the damp place to avoid danger.
3. When the battery was stored for a long period, put it well in its half capacity, and charge it again 3 months later. Do not wrap it with conduct material to avoid the damage caused by the direct contact between the metal and battery. Keep the battery in dry places.
4. Well disposed the disused battery. Do not put it into fire or water.
5. Use the assigned chargers in the recommended operational environment only.
6. The leaking electrolyte will cause the skin uncomfortable. If it drops into eyes, do not rob the eyes. Wash thoroughly in time, and go to hospital for treatment.

### 2.3.3 Handle angle adjustment

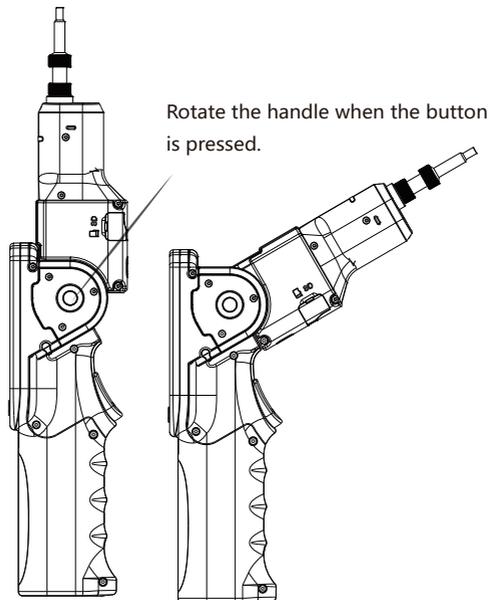


Figure2-3

### 2.3.4 Install WiFi module

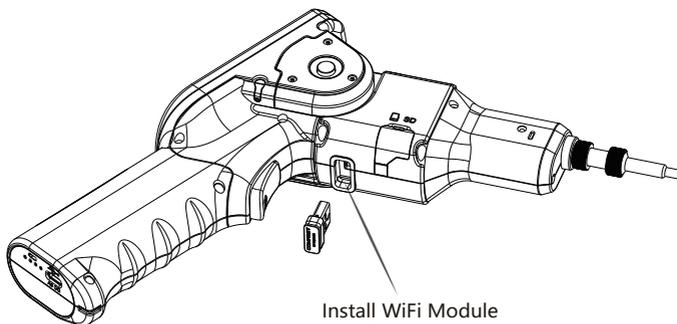


Figure2-4

### 2.3.5 Measurement

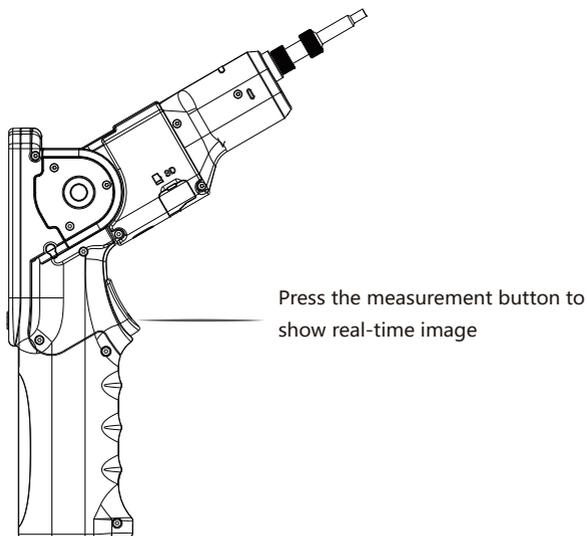
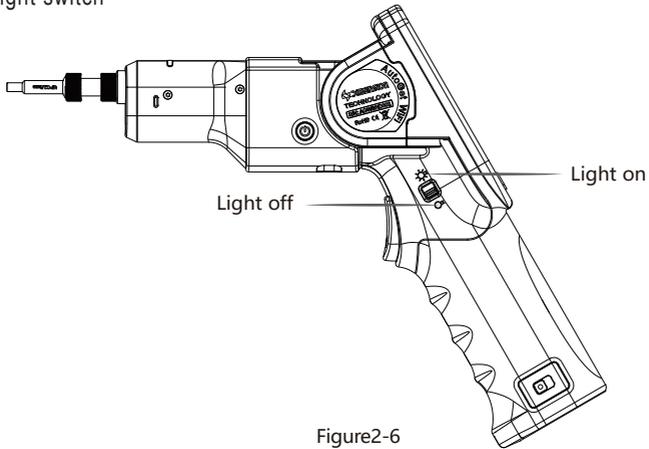


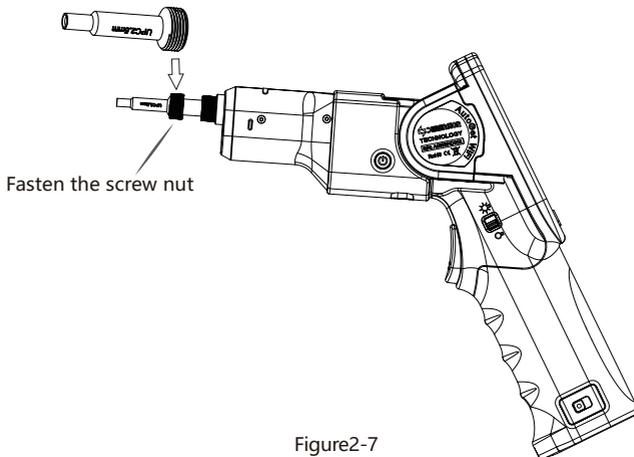
Figure2-5

### 2.3.6 Floodlight switch



Turn on the light switch to illuminate when the outside light is dark.

### 2.3.7 Replace the adapter



Replace the adapter:

1. Loosen the lock nut of the adapter.
2. Remove the adapter.
3. Insert a new adapter.
4. Groove alignment.
5. Re-tighten the lock nut

### 2.3.8 MT adapter use

The rotation nut on the MT adapter marks the values 1, 2, and 3, and the mark values are aligned with the dots, respectively, and the measurement buttons are used for image acquisition.

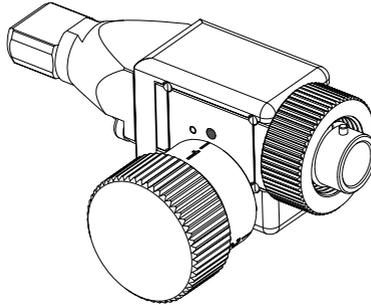


Figure2-8

**NOTE:**

1. The installation method of the MT adapter is the same as that of the single fiber adapter.
2. The MT PC adapter is used in the same way as the MT APC adapter.

## 3 Software basic functions

### 3.1 Software installation and update

#### 3.1.1 Device software installation and update

1. Copy the software that needs to be updated to the AutoGetWifi device SD card root directory, and then install the SD card to the AutoGetWifi device card slot.
2. Start the AutoGetWifi device and enter the Software Settings - About interface, click Upgrade. After the upgrade is complete, it prompts you to restart the device.
3. After the reboot is complete, go to the about interface, click Restore factory settings, and follow the prompts to restart the device. After the reboot is complete, the software update is complete.

**Note:**

1. If there is no updateable software in the SD card, the system will prompt "No upgradeable version found in SD Card"

#### 3.1.2 PC software installation and update

The PC software directly double-clicks the installer and installs it as prompted until the installation is complete.

## 3.2 Device software interface

### 3.2.1 Device software main interface

Power on the device, enter the software main interface.

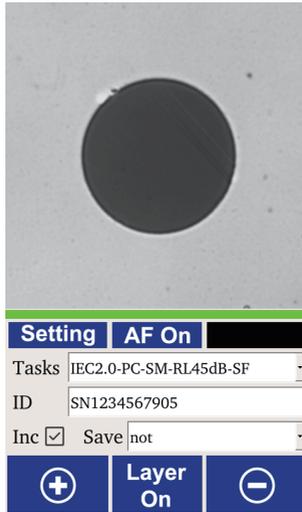


Figure3-1

Image display area: Display real-time images and measurement results.

Image sharpness: The progress bar green indicates that the image is in a clear state. Setting:

Software system settings and measurement task settings.

ID: ID number will be saved in data, report file

INC: The ID number is automatically increased after the measurement.

AF On: Auto focus switch.

Measurement results area: PASS or FAIL. Task: Measurement tasks can be selected. Save: Data or report saving mode.

+: Image enlargement for easy viewing of end face details.

-: Image reduction ferrule visible area becomes larger.

Layer on: When the mask layer is on, the measurement result is displayed as an image; When the layer is off, only the actual measured image is displayed.

### 3.2.2 Device software measurement task setting

Click “Setting” on the interface to enter the measurement task setting interface as follows:

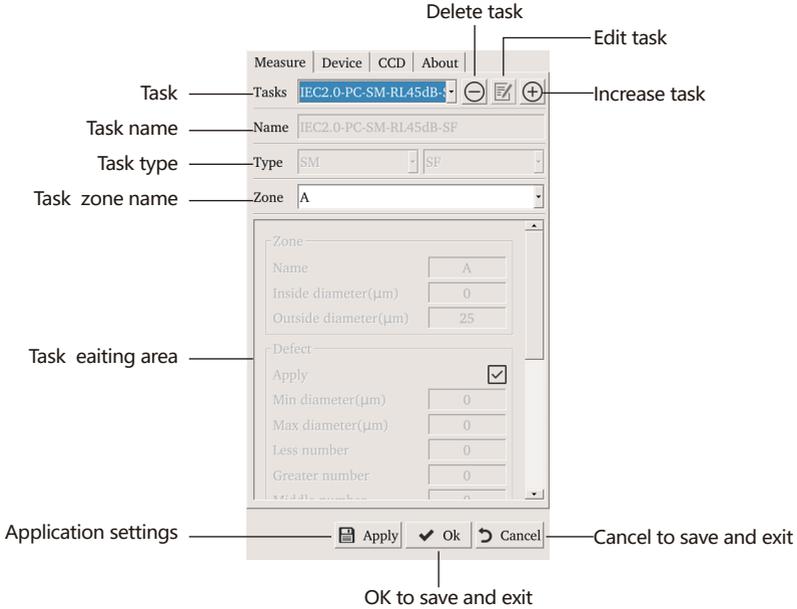


Figure3-2

**Task:** The default measurement task cannot be deleted or modified, and the measurement task can be customized based on the default measurement task.

**Type:** Measurement task types are divided into SM, MM, SF, MF, and are selected according to actual measurement requirements.

**Scratch, defect application:** After checking, the measurement function of the spot or scratch of the current measurement area takes effect.

**Sensitivity:** Sensitivity can be adjusted according to the actual image conditions.

**Apply:** Apply the settings of the current change.

**OK:** Save the changed settings then exit.

**Cancel:** Cancel the changed settings and exit.

### 3.2.3 Device softwareSettings

Click “Setting - Device” on the interface to enter the device setting interface as follows:

The screenshot shows a software settings window with the following elements:

- Navigation tabs: Measure, Device (selected), CCD, About
- Image brightness: A slider set to 120 (range 120-220) and a dropdown menu set to "Single fiber" with a value of 185.
- LCD brightness: A slider set to 1 (range 1-100) and a checked "Auto" checkbox with a value of 50.
- System time: A text field showing "29 May 2019 23:18:26" with edit and refresh icons.
- System will auto shutdown: A dropdown menu set to "never".
- Data and report information section:
  - Company: Text field with "Dimension123" and an edit icon.
  - Describer: Text field with "Fiber endface inspection123" and an edit icon.
  - Operator: Text field with "Admin123" and an edit icon.
- Bottom buttons: Apply, Ok, and Cancel.

Figure3-3

**Image brightness:** The user can adjust according to the actual image brightness, select the SF corresponding to adjust the image brightness under the SF measurement task, and select the MF corresponding to adjust the image brightness under the MF measurement task.

**LCD brightness:** Users can manually adjust according to the needs of the actual use of the scene, or you can check the "Auto" device to automatically adjust according to the brightness of the external environment.

**If button no operate, shutdown:** By default, the measurement function will not be turned off within 30 minutes, and "Never", "10 minutes" and "20 minutes" will be selected.

**System Time:** Displays the current time, day, month, year, hour, minute, and second.

**Data and report information:** company, description, operator, can be customized, you need to click the edit button again after the customization is completed or click the apply button to save.

### 3.2.4 Device software CCD Verification

Click the interface "Settings - CCD" to enter the CCD Verification interface, the purpose is to eliminate the inherent dirty spots on the CCD.

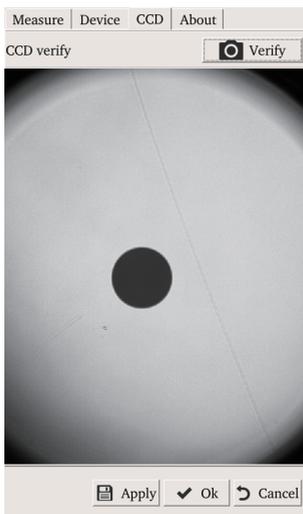


Figure3-4

### 3.2.5 About

Click "Setting - About" on the interface to enter the about interface as follows:



Figure3-5

**Note:**

It is necessary to restart the device after restoring factory settings.

**Check the software update:** Before updating the software, you need to copy the installer to the SD card, click Update, and follow the prompts to upgrade. For details, see 3.1.1.

**Restore factory settings:** Click Restore to restore the system settings, follow the prompts to restart.

**Software version information:** Displays the current software version number.

### 3.3 Device software operation instructions

#### 3.3.1 SF measurement

In the real-time image display state, press the device measurement button to measure. After the measurement is completed, the measurement result is displayed. Press the measurement button again to display the real-time image.

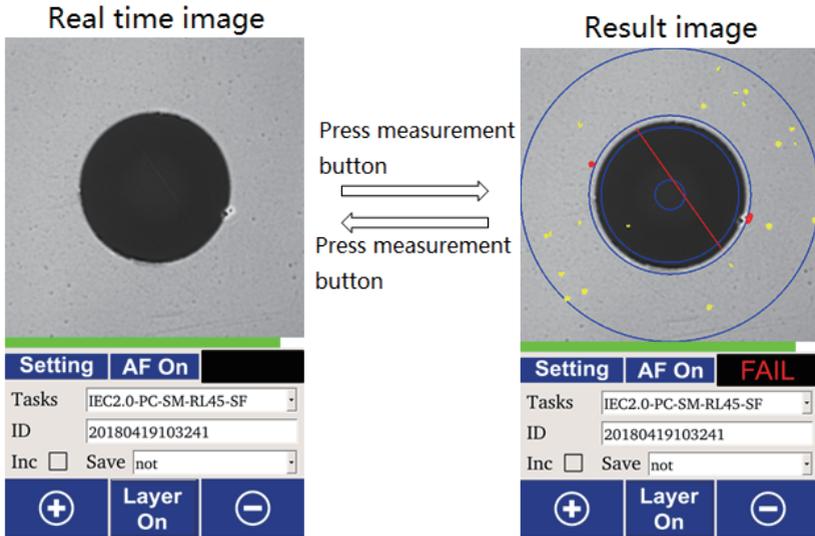


Figure3-6

#### 3.3.2 MT measurement

For image acquisition, it is necessary to match the MT adapter rotary nut mark value 1, 2, 3, and collect in three stages, and finally display the measurement results of the MT.

The measurement steps are as follows:

1. Select a measurement task.

Before selecting the MT measurement task, make sure that AF is ON and the Layer is ON. The following is an operation example under task IEC2.0-PC-MM-MT12.

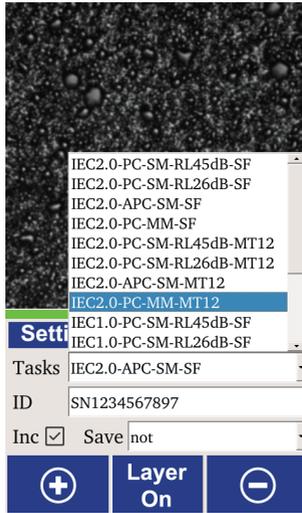


Figure3-7

2. Enter the MT12 measurement interface

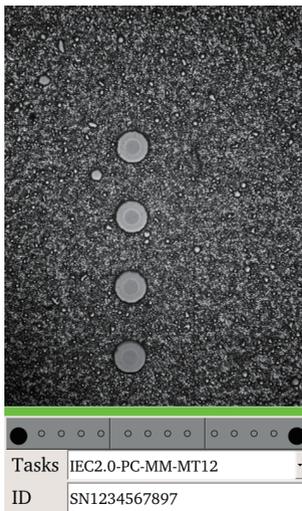


Figure3-8

### 3.First image acquisition

The MT interface rotation nut mark value 1 is aligned with the dot. The device measurement button is used to trigger image acquisition. If the acquisition fails or there are other abnormalities, please select the Redo or Cancel measurement button.

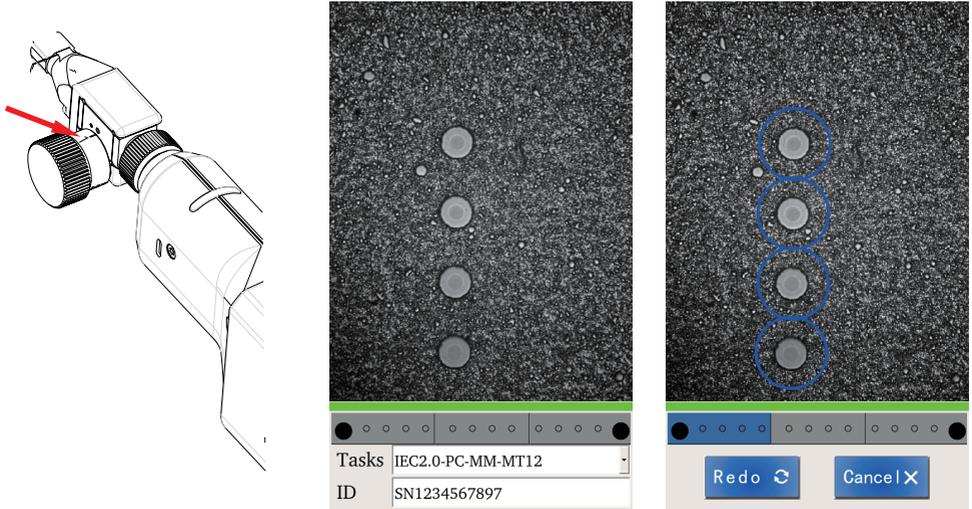


Figure3-9

### 4.Second acquisition image

The MT interface rotation nut mark value 2 is aligned with the dot. The device measurement button is used to trigger image acquisition. If the acquisition fails or there are other abnormalities, please select the Redo or Cancel measurement button.

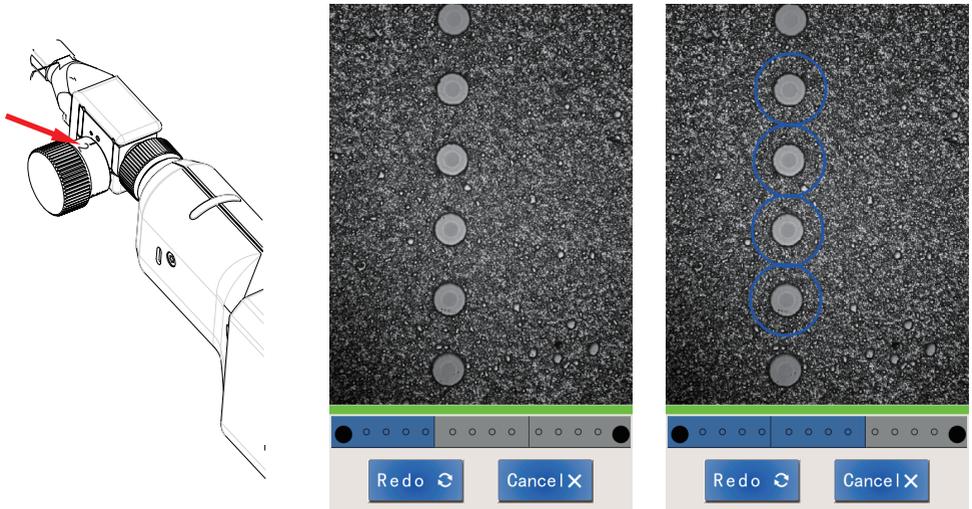


Figure3-10

5. Third acquisition image

The MT interface rotation nut mark value 3 is aligned with the dot. The device measurement button is used to trigger image acquisition. If the acquisition fails or there are other abnormalities, please select the Redo or Cancel measurement button.

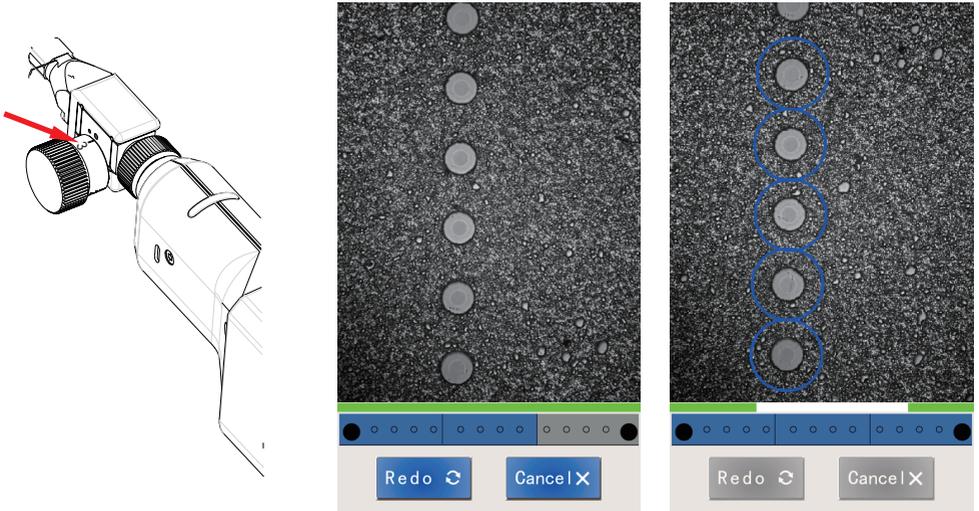


Figure3-11

6. View measurement results

After 3 times of image acquisition, the system automatically analyzes and displays the measurement results. The measurement results can be viewed by clicking the toggle button as shown below. The user can also view the complete measurement report by setting the auto save measurement report path.

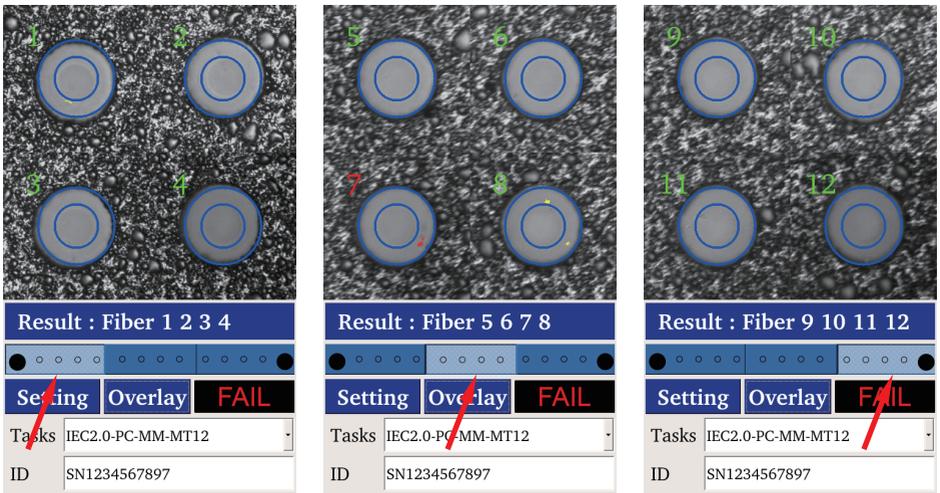


Figure3-12

Measurement failures can be selected by selecting "Redo" or "Cancel ":

1. Unrecognized fiber

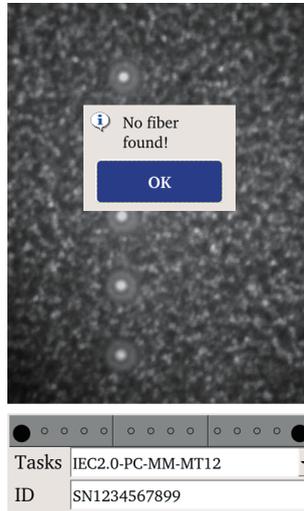


Figure3-13

2. Failed to find the center

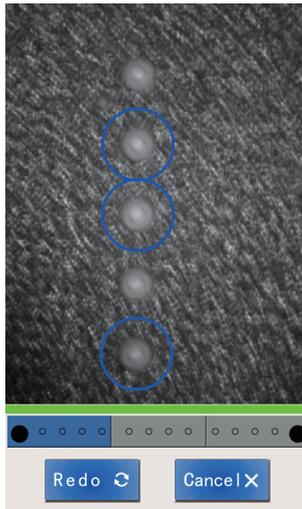


Figure3-14

### 3. Not detected all areas

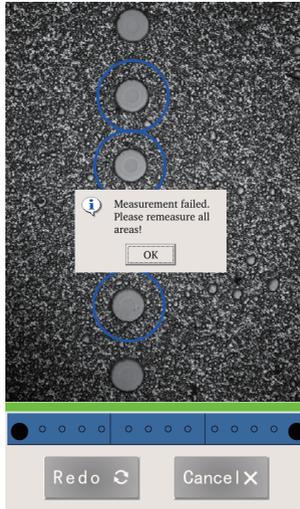


Figure3-15

#### Note:

1. When measuring multi-core MT, please perform image acquisition in strict accordance with the position of the rotating nut mark values 1, 2, and 3. If the image is not collected in the required order, the measurement will fail.
2. Failure to detect all fibers will result in measurement failure.
3. The image is not clearly focused, and the captured image cannot be analyzed normally, which will cause the test to fail.

### 3.3.3 Image brightness setting

#### SF image brightness setting.

If the brightness of the SF image is not suitable and you need to adjust it, follow the steps below:

1. Select SF task
2. Go to Settings - Devices, select SF, and then adjust the image brightness. The brightness of the SF image is recommended to be adjusted between 185 and 195.

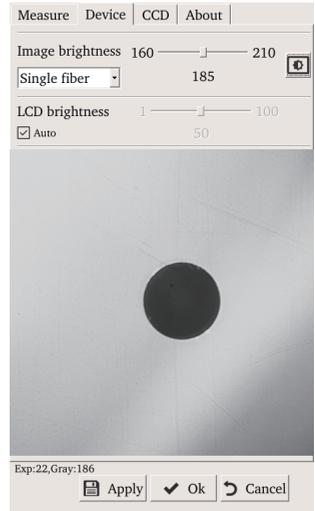


Figure3-16

#### MF image brightness setting.

If the brightness of the MF image is not suitable and you need to adjust it, follow the steps below:

1. Select MF measurement task to return to the main interface of the software.
2. Go to Settings - Devices, select MF, and then adjust the image brightness. The brightness of the MF image is recommended to be adjusted between 75 and 85.

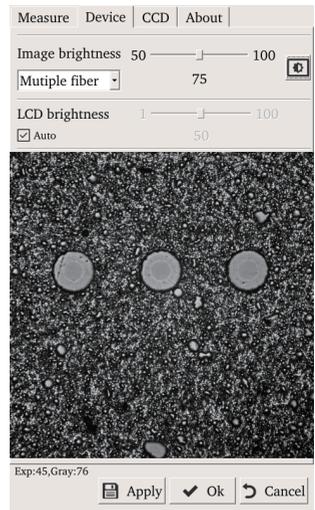


Figure3-17

### 3.3.4 CCD Verification operation

Verification method:

1. The adapter is connected to the clean ferrule of the end face. After clicking the "Verify" button, the prompt "1st image captured, please rotate the fiber and capture again";
2. Click "OK", rotate the ferrule, and click the "Verify" button again, prompting "CCD Verify finished";
3. Click "OK", the interface will display the location of the inherent dirty spots;
4. Intrinsic dirty points are not counted in the measurement results for the next measurement.

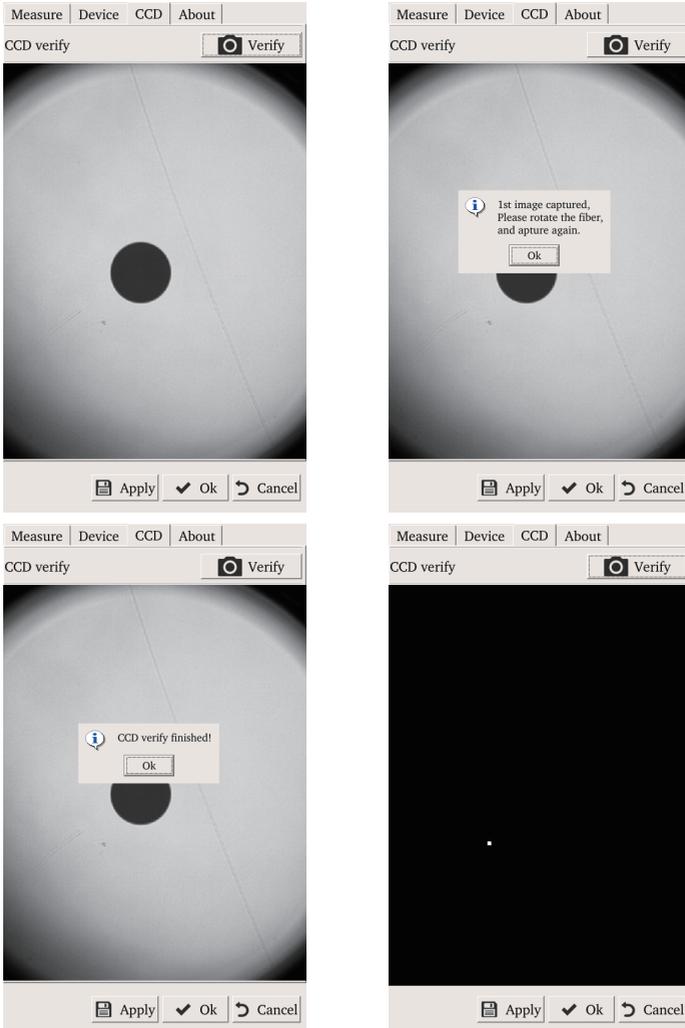


Figure3-18

### 3.3.5 Layer

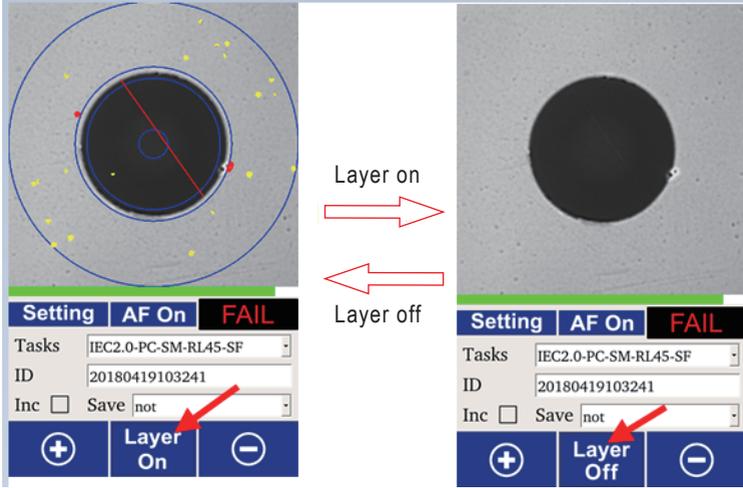


Figure3-19

### 3.3.6 Image magnification and reduction



Figure3-20

### 3.3.7 File view

The storage file format is: data and report, saved in the device SD card.

The file storage method is:

1. Not
2. Data
3. Report
4. Data and report
5. pass data and report
6. fail data and report

## 3.4 PC software interface

### 3.4.1 PC software main interface

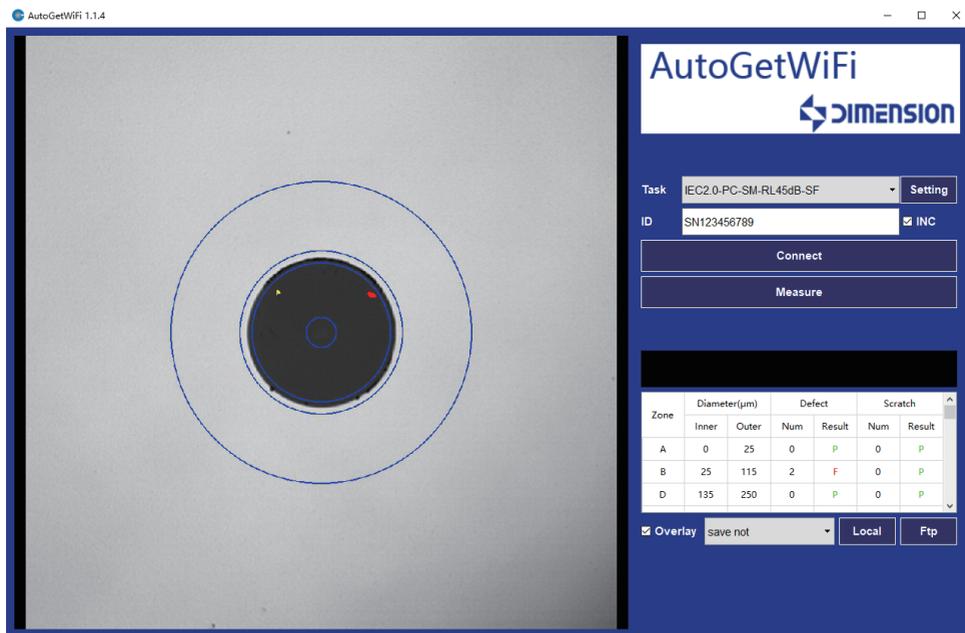


Figure3-21

Image display area: Display measurement results.

Task: Measurement tasks can be selected.

Setting: Software system settings and measurement task settings.

ID: ID number will be saved in data, report file

INC□: The ID number is automatically increased after the measurement.

Connect: Connect or disconnect wifi.

Measurement: Trigger software measurement function.

Measurement results area: PASS or FAIL.

Overlay: Check to display the measurement results in image mode.

Save: Data or report saving mode.

Local: Click to open the path to save data and report.

Device: Click to open SD card of the device.

### 3.4.2 PC software settings

Task setting interface: The task setting function is consistent with the device software task setting function.

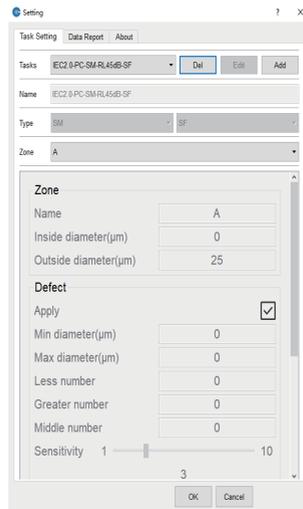


Figure3-22

Data and report setting interface:



Figure3-23

Data and report storage path.

SingleFiber data file name:Default name MeasureDataSF

MultipleFiber data file name:Default name MeasureDataMF

About interface:

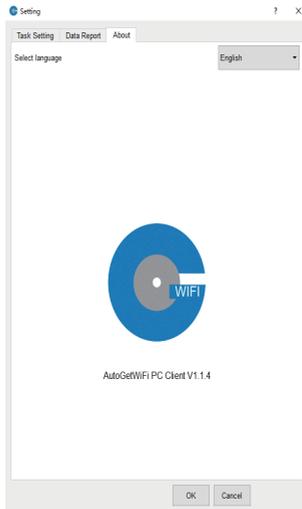


Figure3-24

Language selection: Support Chinese and English.

Software version information: Displays the current software version number.

### 3.4.3 PC software FTP function

Click the “Ftp” button on the main interface of the PC software to open the SD card of the device directly.

FTP usage:

1. PC connection device wifi name;
2. Click “Connect” on the main interface of PC software;
3. Click the “Ftp” on the main interface of the PC software.
4. Open SD card and save the data file in the Measure Result folder.

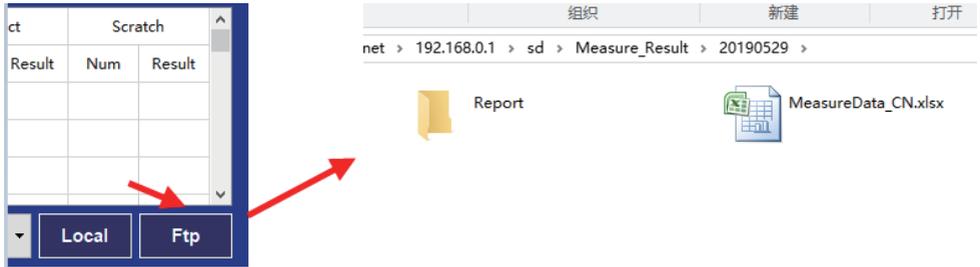


Figure3-25

## 4Contact us

If you have any further questions, please contact Dimension Technology Co., Ltd

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