Anritsu Advancing beyond

Video Inspection Probe
G0306C

Contents

G0306C Product Introduction

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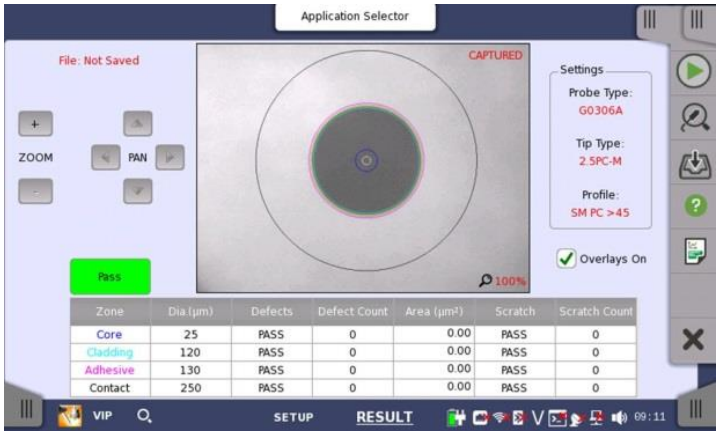
Scratches and stains to optic fiber ferrule endfaces are often said to have a negative impact on transmission quality.

The Video Inspection Probe G0306C can be connected to an MT1000A/MT1040A Network Master Series, MT9085 Series ACCESS Master, MT9090A Network Master Series (µOTDR module) and PC, to show the state of a ferrule endface.

This function is effective for determining whether a ferrule endface is clean, and whether connector replacement is necessary due to connector scratches.



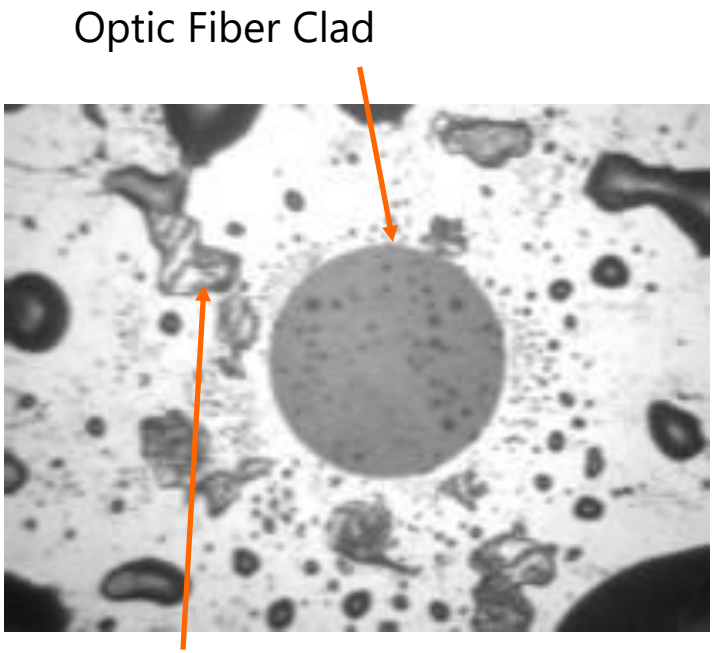
G0306C Supported

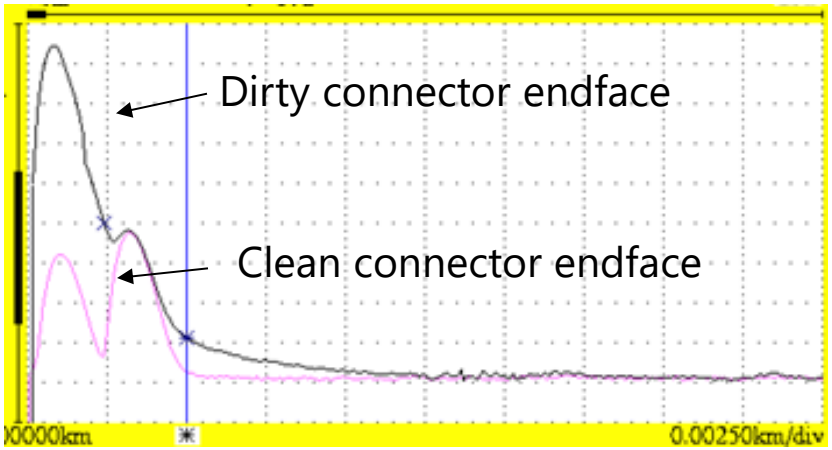
- Access Master MT9085 Series (v1.14 or late)
- Network Master Pro MT1000A/MT1040A (v12.05 or late)
- Network Master MT9090A (MU909014/15: µOTDR) (v4.01 or late)
- Windows 7/8/10 (32 bit, 64 bit) PC for MX900030A (v1.05 or late)

When a Connector Endface is Dirty...

When a connector endface is dirty, it tends to produce a greater amount of reflection.

A good connection can be maintained by cleaning connector endfaces.



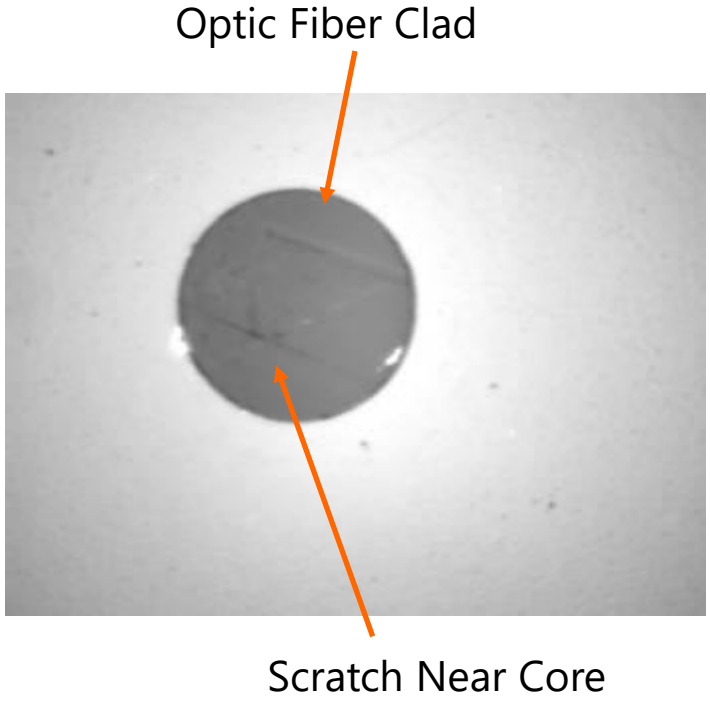


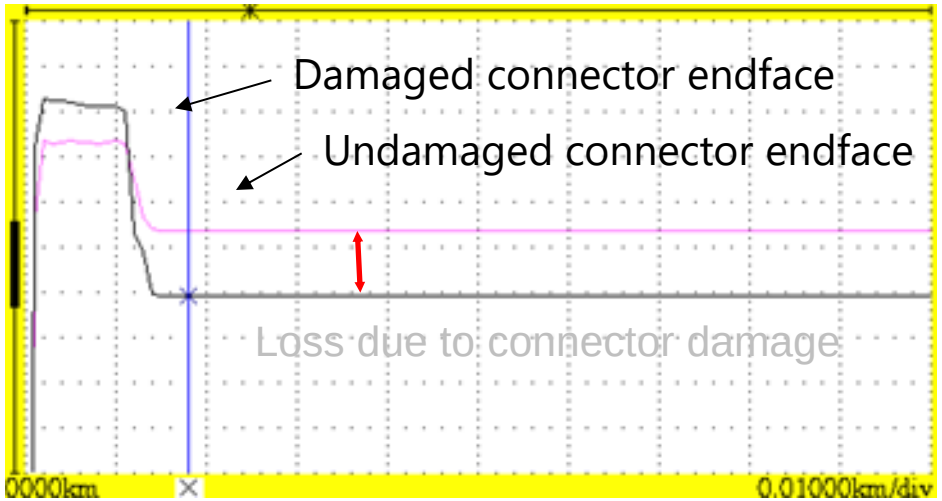
Verification through OTDR Output Port Connection

When a Connector Endface is Damaged...

When a connector endface is damaged, in addition to having a greater amount of reflection, it also tends to exhibit greater splice loss.

When the amount of reflection or loss caused by the damage is high, the connector port needs to be replaced.

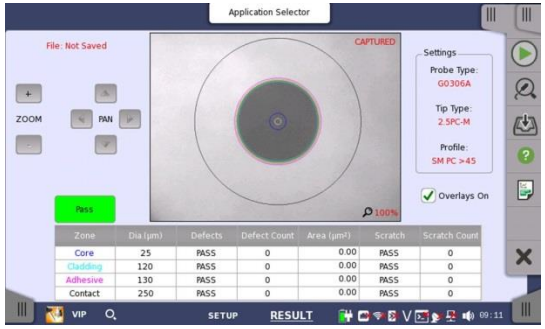




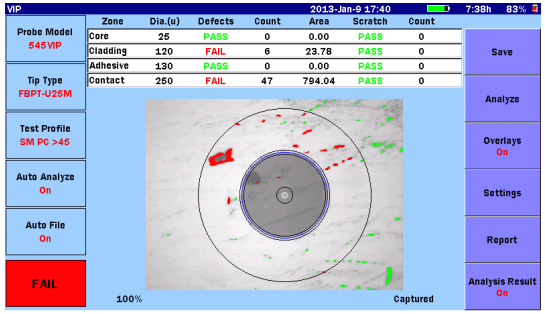
Verification through OTDR Output Port Connection

G0306C Support Products

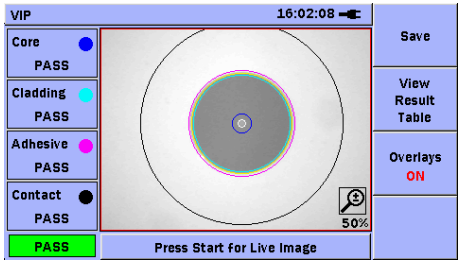
Network Master Pro MT1000A/MT1040A



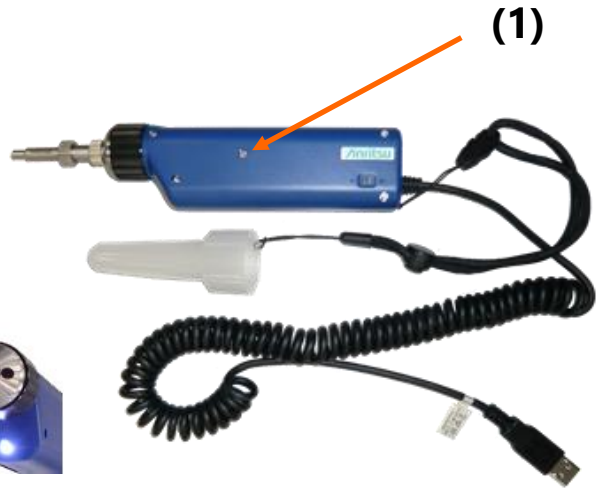
ACCESS Master MT9085 Series



Network Master MT9090A Series
µOTDR: MU909014/15



Video Inspection Probe G0306C



LE Light

Video Inspection Probe G0306C (The following products (1)~(5) are included as standard.)

(1) Video Inspection Probe
(2) Standard Tips
(3) Case of Tips
(4) Standard Soft Case
(5) Operation Manual (Printed)


1.25mm
PC Male


2.5mm
PC Female (FC)


2.5mm
PC Female (SC)


2.5mm
APC Male


1.25mm
PC Female (LC)


2.5mm
PC Male


2.5mm
APC Female (SC)

(2)


(3)

(4)

- **400x digital probe**
- **USB 2.0/1.1 supported**
- **Drivers pre-installed**
- **Auto Pass/Fail analysis**
- **Optional connector tips**

Examples of Tip Connection

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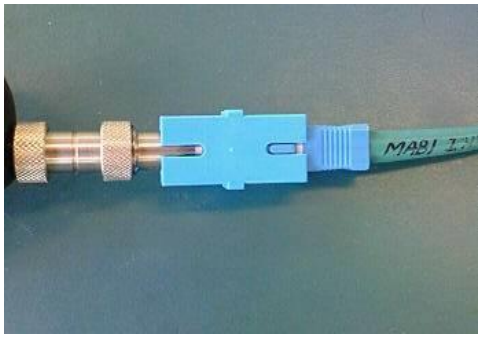
- Tips for bulk type

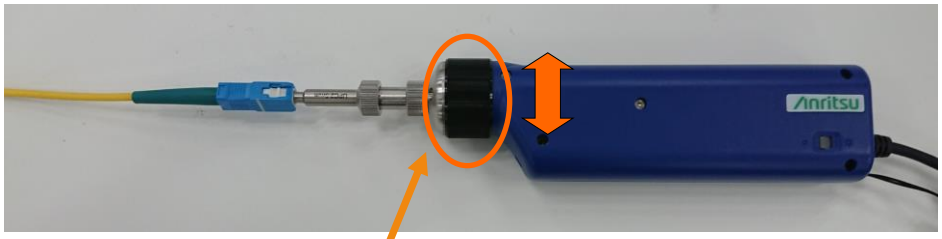
As this figure shows, the ferrule endface of the connected fiber can be checked via this bulk type adapter.



- Tips for universal type

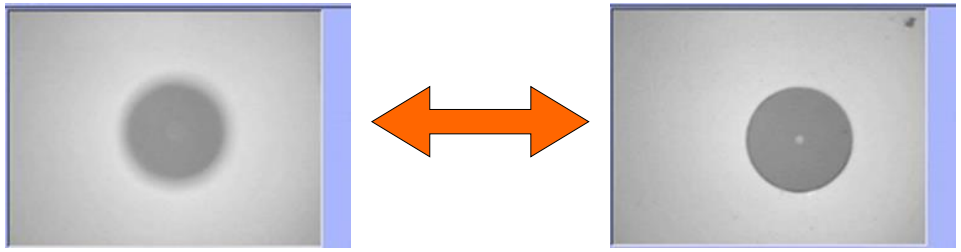
As this figure shows, the universal type tip can be used to directly plug into the ferrule for test.

Basic Operation



Scroll up or down to adjust the focus.

Fixed 400x focus



Network Master Pro Measurement Example (1/4)

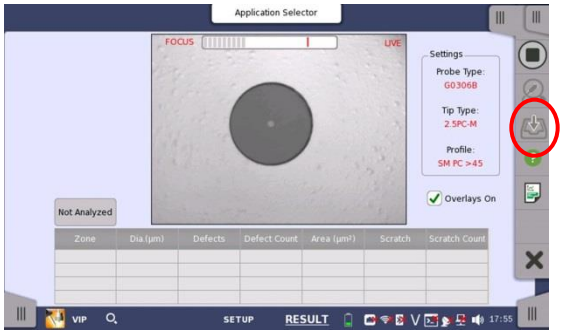
1. The VIP USB terminal is connected to the MT1000A/MT1040A series instrument's USB port.

2. The power is turned on.
"Video Inspection Probe" is selected from the utilities menu.

*Before starting, select the appropriate tip for the connector adapter and ferrule type to be connected to.

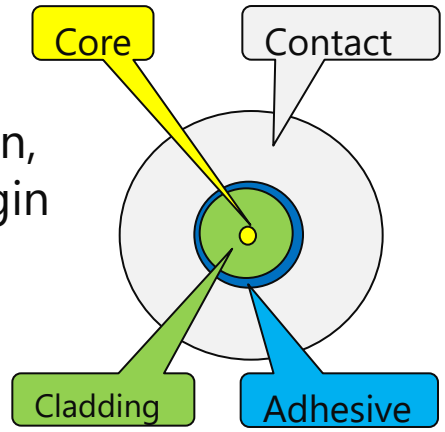
:*Photo is the MT1000A

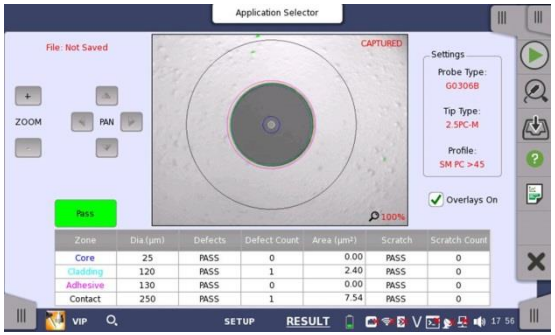
Network Master Pro Measurement Example (2/4)



Measurement Sequence

Adjust the focus in the Live screen, and press the Start button to begin analysis.

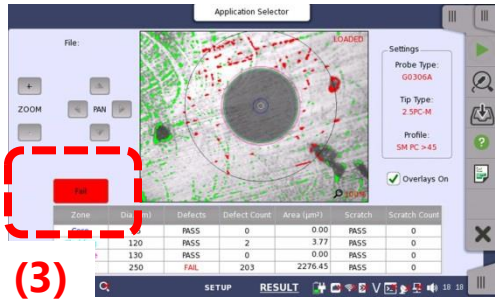




When analysis completes, the following information appears:
- Core
- Cladding
- Adhesive
- Contact

As well as a pass/fail determination for the total area for each.

Network Master Pro Measurement Example (3/4)



(3)

Fail

From the Table View, you can identify “defects” or “scratches” on the end of the fiber.

Zone	Dia.(μm)	Defects	Defect Count	Area (μm²)	Scratch	Scratch Count
Core	25	PASS	0	0.00	PASS	0
Cladding	120	PASS	2	3.77	PASS	0
Adhesive	130	PASS	0	0.00	PASS	0
Contact	250	FAIL	203	2276.45	PASS	0

(1) (2)

(1) Defects in each area.
(2) Scratches in each area.
(3) Overall determination for each area merging (1) and (2)

Pass

Zone	Dia.(μm)	Defects	Defect Count	Area (μm²)	Scratch	Scratch Count
Core	25	PASS	0	0.00	PASS	0
Cladding	120	PASS	0	0.00	PASS	0
Adhesive	130	PASS	0	0.00	PASS	0
Contact	250	PASS	0	0.00	PASS	0

The automatic pass/fail determination is made in accordance with the IEC61300-3-35 standard.

Network Master Pro Measurement Example (4/4)

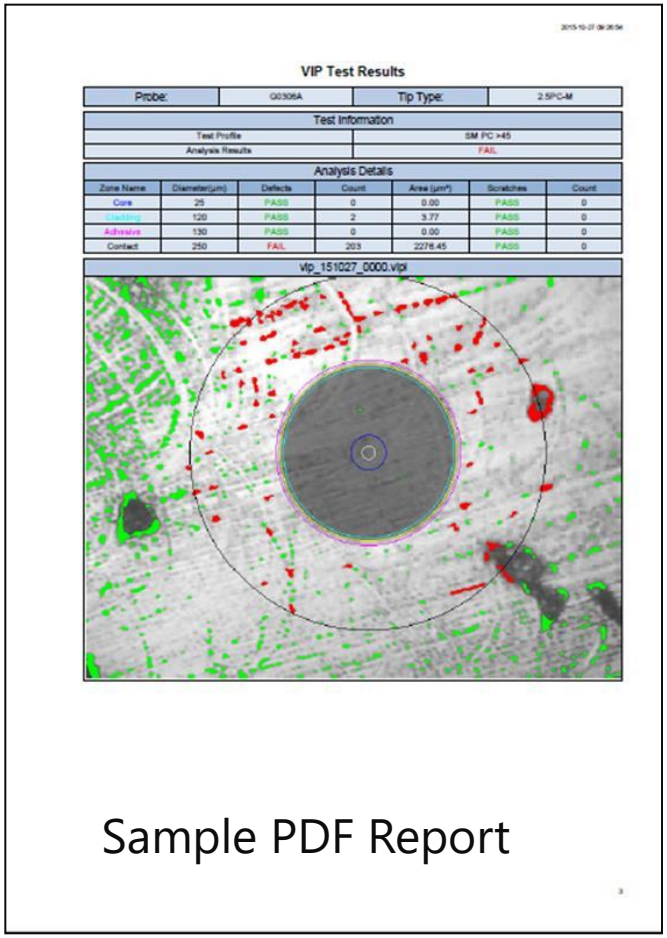
Saving the Measurement Results

You can manage the measurement results in either of the following ways.

Save to File
- Screen capture (PNG format)
- VIP data file (file with .vipi extension)

Load from File
- PNG file
- VIP data file (file with .vipi extension)

You can also create a PDF report on the system.



Sample PDF Report

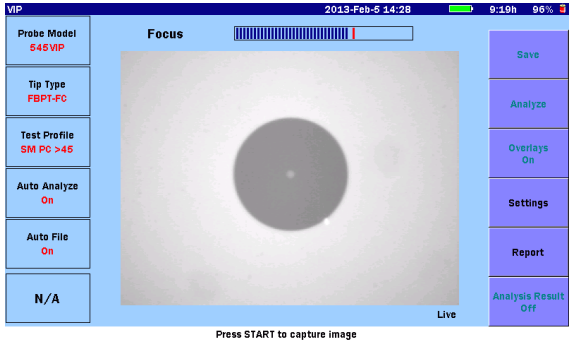
ACCESS Master Measurement Example (1/4)

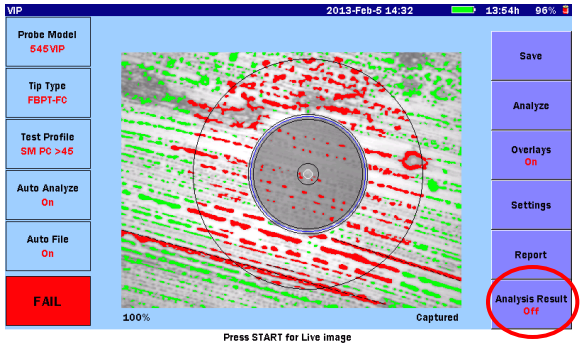
1. The VIP USB terminal is connected to the MT9085 series instrument's USB port.

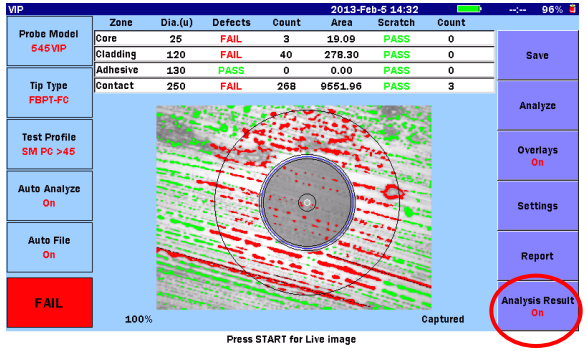
2. The power is turned on.
"Video Inspection Probe" is selected from the top menu.

*Before starting, select the appropriate tip for the connector adapter and ferrule type to be connected to.

ACCESS Master Measurement Example (2/4)

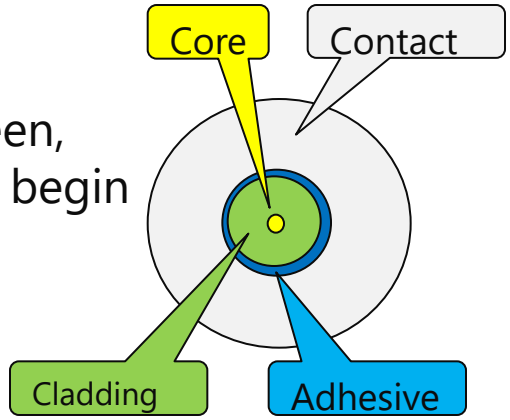






Measurement Sequence

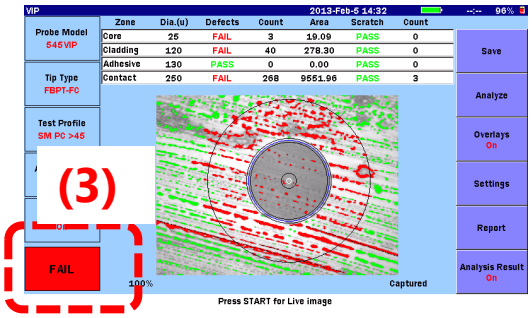
Adjust the focus in the Live screen, and press the Start button to begin analysis.



When analysis completes, the following information appears:
- Core
- Cladding
- Adhesive
- Contact

As well as a pass/fail determination for the total area for each.

ACCESS Master Measurement Example (3/4)



FAIL

Zone	Dia.(u)	Defects	Count	Area	Scratch	Count
Core	25	FAIL	3	19.09	PASS	0
Cladding	120	FAIL	40	278.30	PASS	0
Adhesive	130	PASS	0	0.00	PASS	0
Contact	250	FAIL	268	9551.96	PASS	3

(1) (2)

PASS

Zone	Dia.(u)	Defects	Count	Area	Scratch	Count
Core	25	PASS	0	0.00	PASS	0
Cladding	120	PASS	0	0.00	PASS	0
Adhesive	130	PASS	0	0.00	PASS	0
Contact	250	PASS	0	0.00	PASS	0

From the Table View, you can identify “defects” or “scratches” on the end of the fiber.

(1) Defects in each area.
(2) Scratches in each area.
(3) Overall determination for each area merging (1) and (2)

The automatic pass/fail determination is made in accordance with the IEC61300-3-35 standard.

ACCESS Master Measurement Example (4/4)

Saving the Measurement Results

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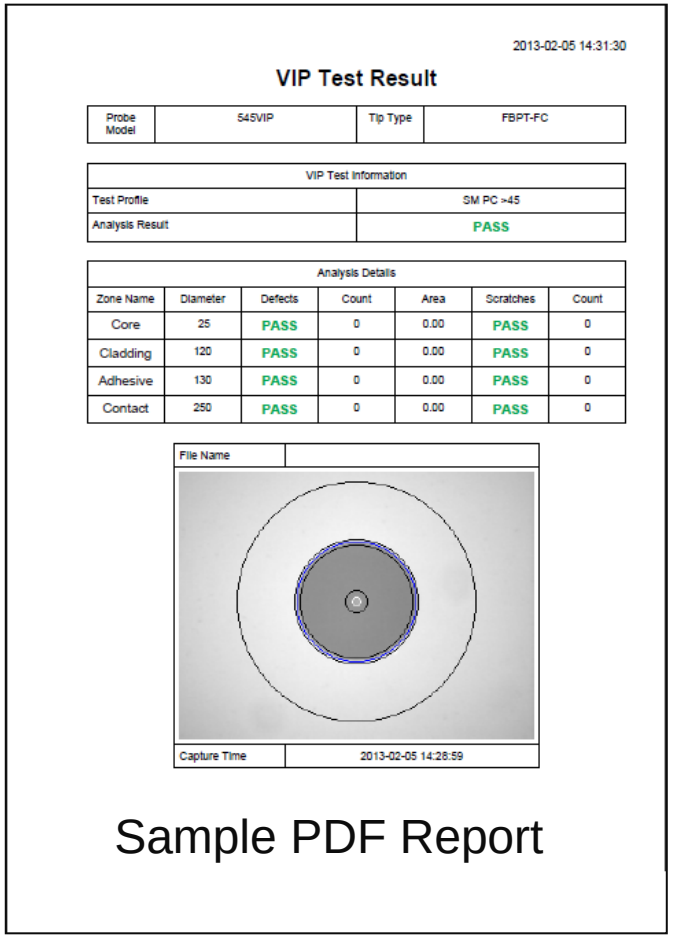


2013-02-05 14:31:30

VIP Test Result

Probe Model	545VIP	Tip Type	FBPT-FC

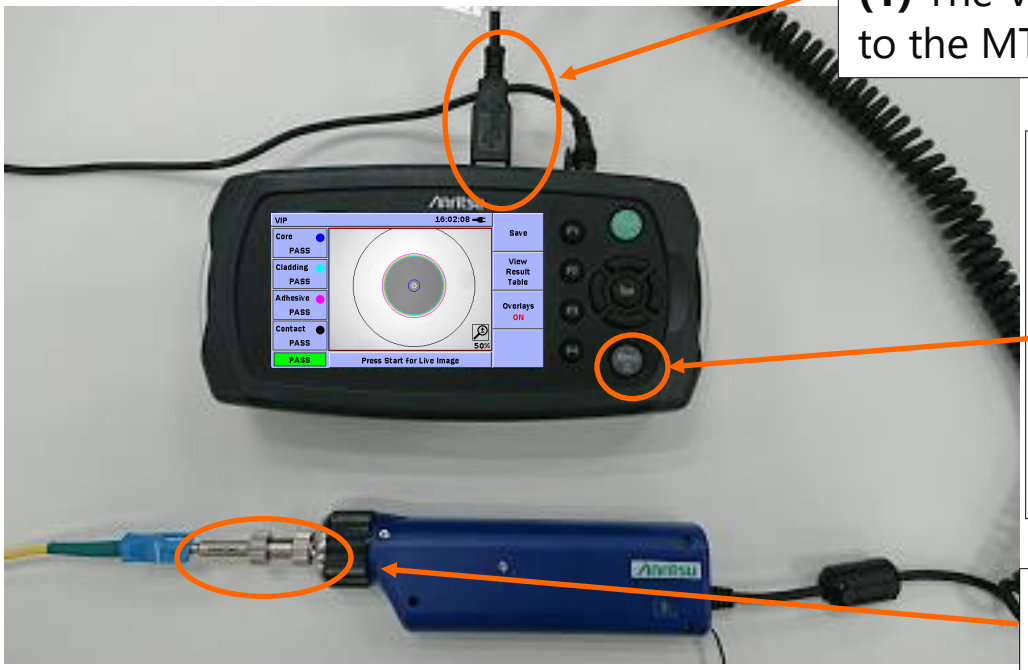
VIP Test Information	
Test Profile	SM PC >45
Analysis Result	PASS

Analysis Details						
Zone Name	Diameter	Defects	Count	Area	Scratches	Count
Core	25	PASS	0	0.00	PASS	0
Cladding	120	PASS	0	0.00	PASS	0
Adhesive	130	PASS	0	0.00	PASS	0
Contact	250	PASS	0	0.00	PASS	0

File Name	
Capture Time	2013-02-05 14:26:59

Sample PDF Report

MT9090A µOTDR (MU909014/15) Measurement Example (1/4)



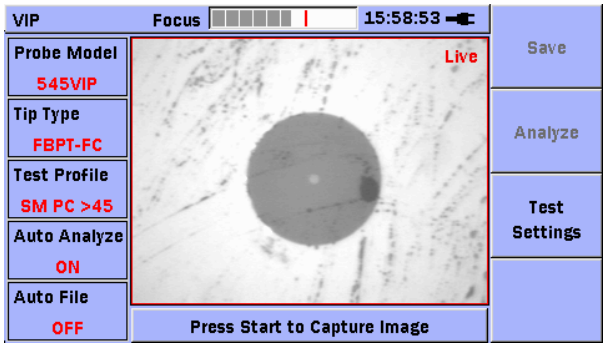
(1) The VIP USB terminal is connected to the MT9090A's USB port.

(2) The power is turned on. When unit has started up, the VIP screen will be displayed automatically.

*The screen will also be displayed automatically if the VIP USB terminal is connected after the MT9090A has been started.

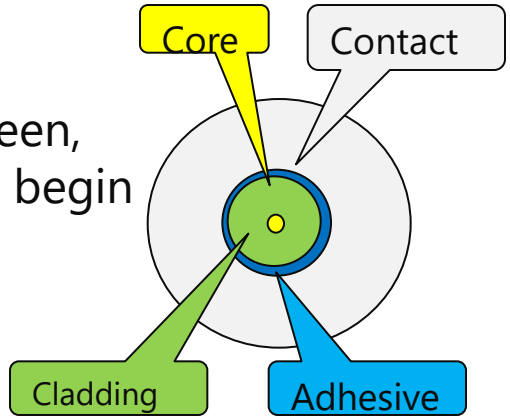
*Before starting, select the appropriate tip for the connector adapter and ferrule type to be connected to.

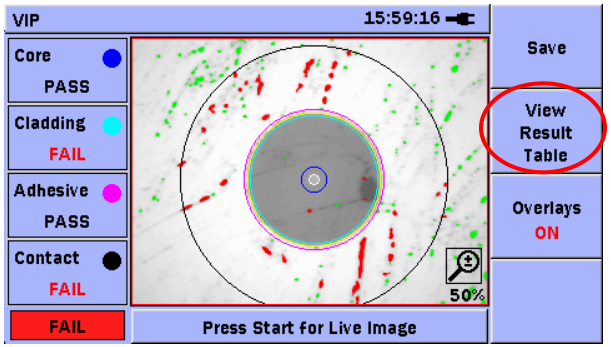
MT9090A µOTDR (MU909014/15) Measurement Example (2/4)

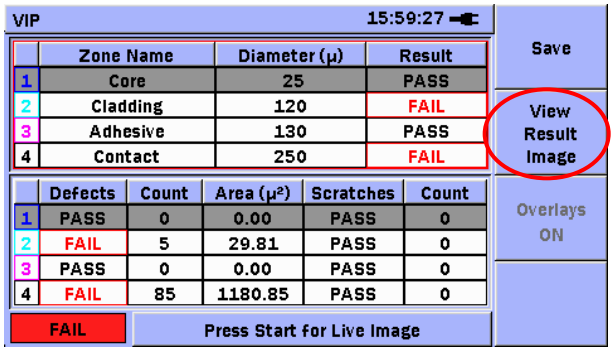


Measurement Sequence

Adjust the focus in the Live screen, and press the Start button to begin analysis.



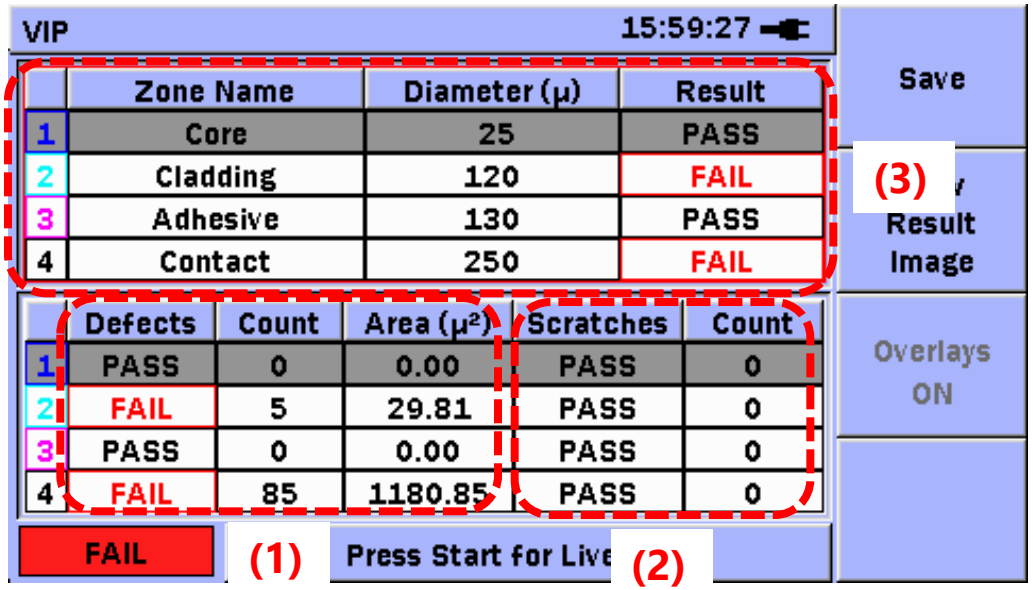




When analysis completes, the following information appears:
- Core
- Cladding
- Adhesive
- Contact

As well as a pass/fail determination for the total area for each.

MT9090A µOTDR (MU909014/15) Measurement Example (3/4)

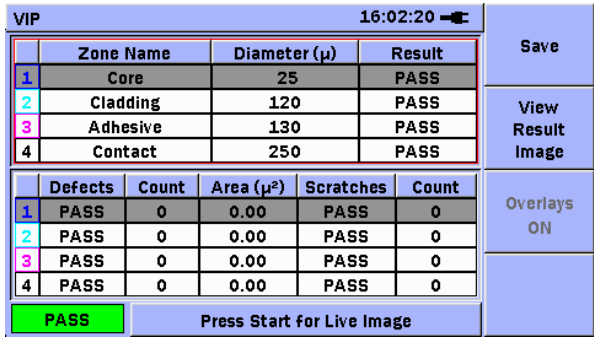


	Zone Name	Diameter (µ)	Result
1	Core	25	PASS
2	Cladding	120	FAIL
3	Adhesive	130	PASS
4	Contact	250	FAIL

	Defects	Count	Area (µ²)	Scratches	Count
1	PASS	0	0.00	PASS	0
2	FAIL	5	29.81	PASS	0
3	PASS	0	0.00	PASS	0
4	FAIL	85	1180.85	PASS	0

From the Table View, you can identify “defects” or “scratches” on the end of the fiber.

(1) Defects in each area.
(2) Scratches in each area.
(3) Overall determination for each area merging (1) and (2)



	Zone Name	Diameter (µ)	Result
1	Core	25	PASS
2	Cladding	120	PASS
3	Adhesive	130	PASS
4	Contact	250	PASS

	Defects	Count	Area (µ²)	Scratches	Count
1	PASS	0	0.00	PASS	0
2	PASS	0	0.00	PASS	0
3	PASS	0	0.00	PASS	0
4	PASS	0	0.00	PASS	0

The automatic pass/fail determination is made in accordance with the IEC61300-3-35 standard.

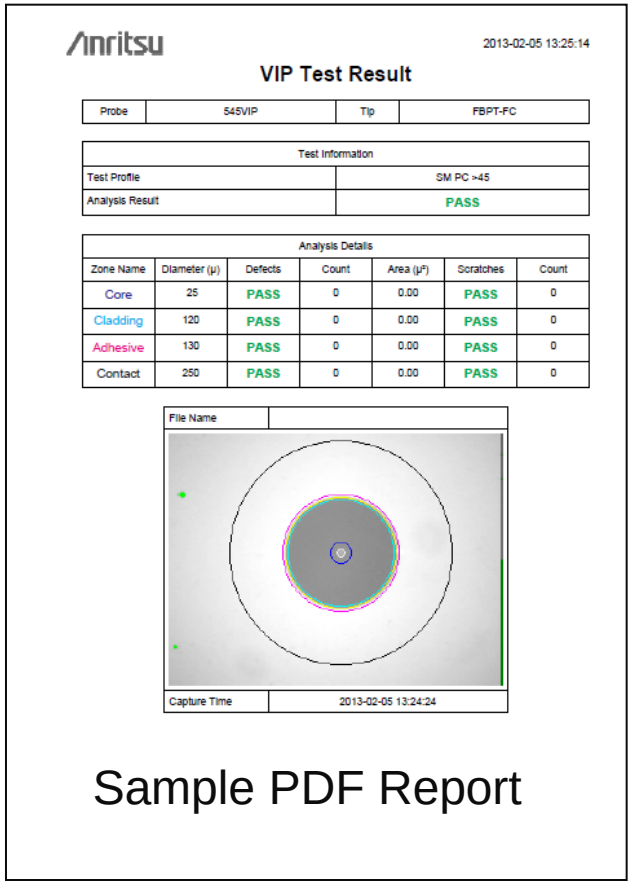
Saving the Measurement Results

You can manage the measurement results in either of the following ways.

Save to File
- Screen capture (PNG format)
- VIP data file (file with .vipi extension)

Load from File
- PNG file
- VIP data file (file with .vipi extension)

You can also create a PDF report on the system.


Anritsu

2013-02-05 13:25:14

VIP Test Result

Probe	545VIP	Tip	FBPT-FC

Test Information	
Test Profile	SM PC >45
Analysis Result	PASS

Analysis Details

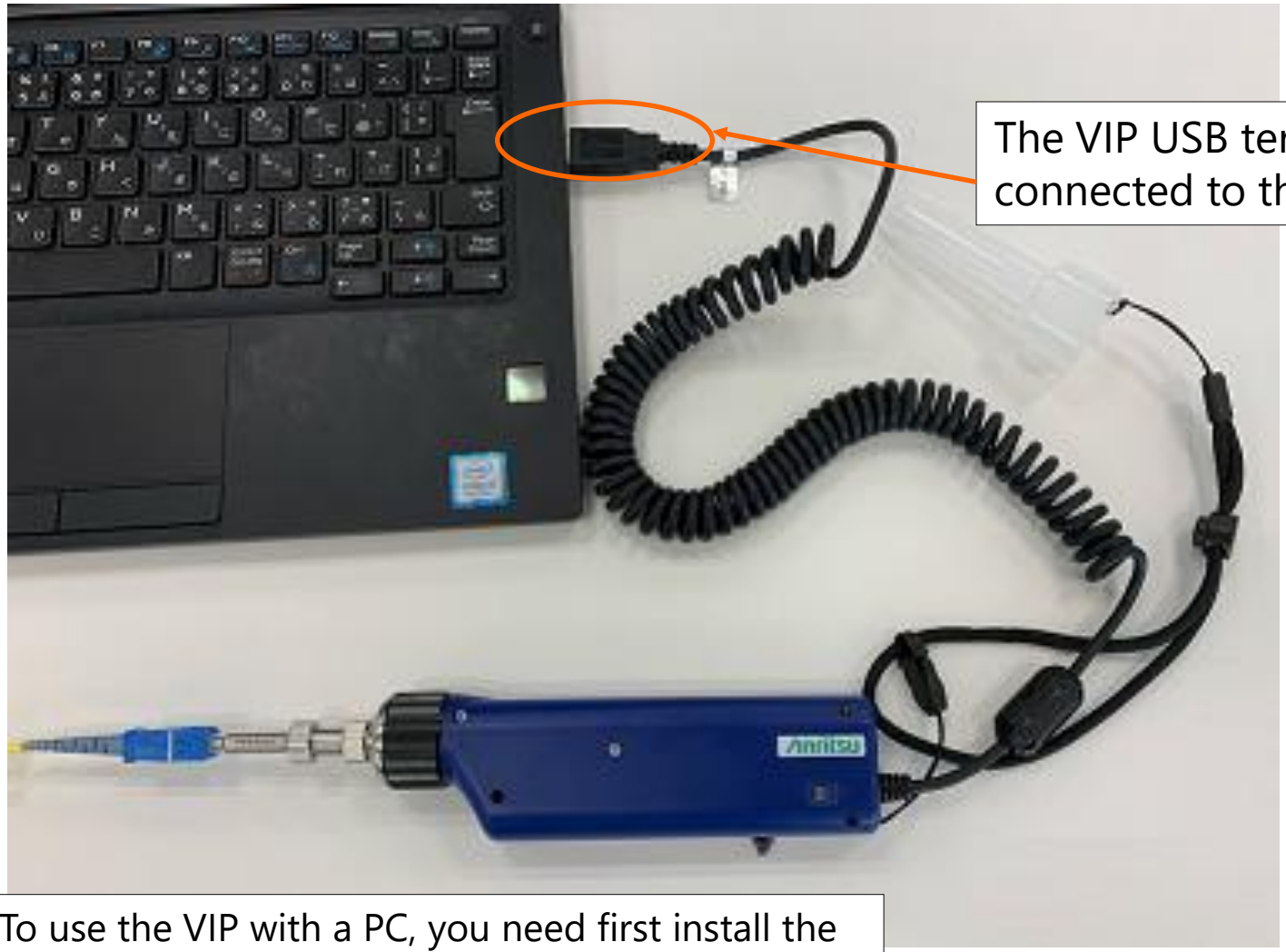
Zone Name	Diameter (µ)	Defects	Count	Area (µ²)	Scratches	Count
Core	25	PASS	0	0.00	PASS	0
Cladding	120	PASS	0	0.00	PASS	0
Adhesive	130	PASS	0	0.00	PASS	0
Contact	250	PASS	0	0.00	PASS	0

File Name	

Capture Time	2013-02-05 13:24:24

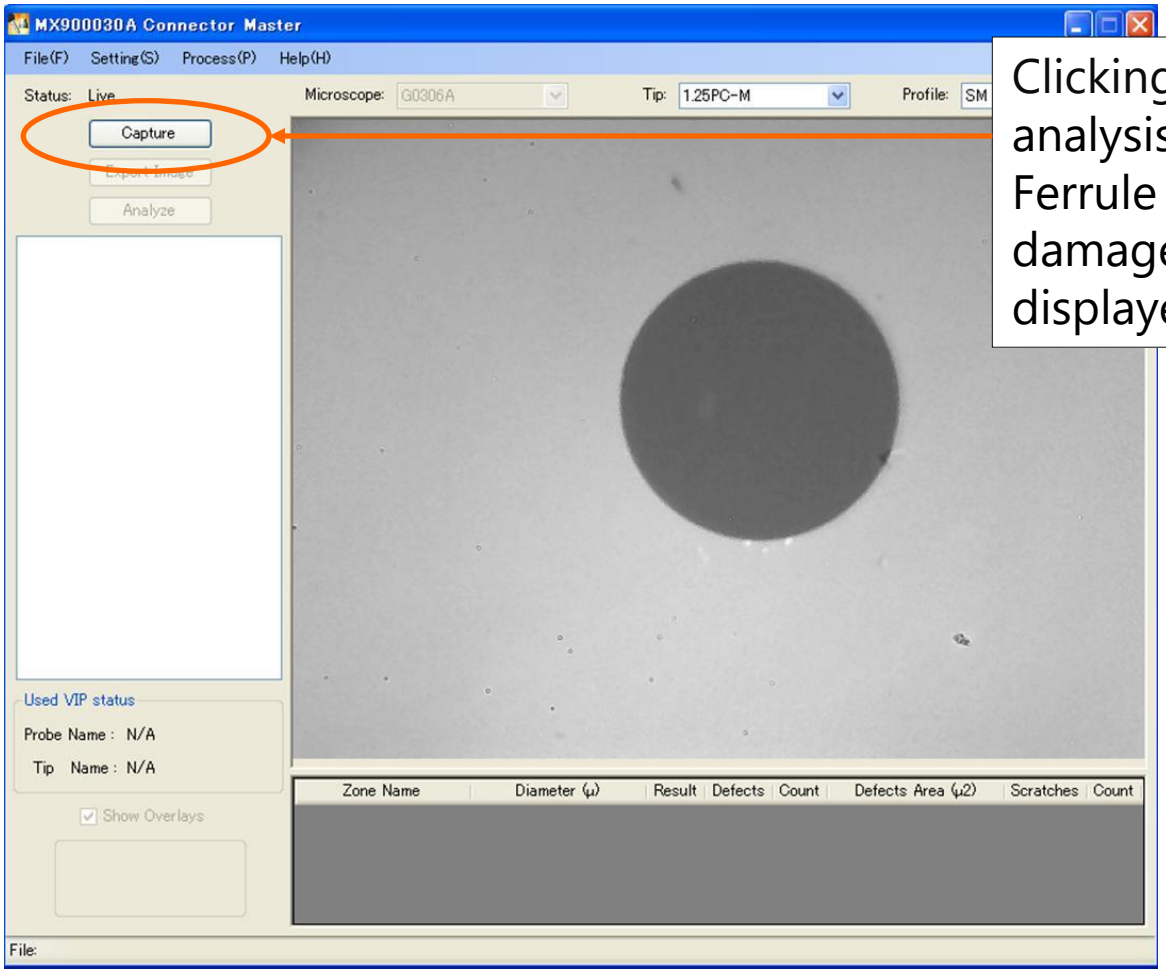
Sample PDF Report

Examples of Measurement with the Windows PC (1/3)



To use the VIP with a PC, you need first install the software MX900030A.

Examples of Measurement with the Windows PC (2/3)

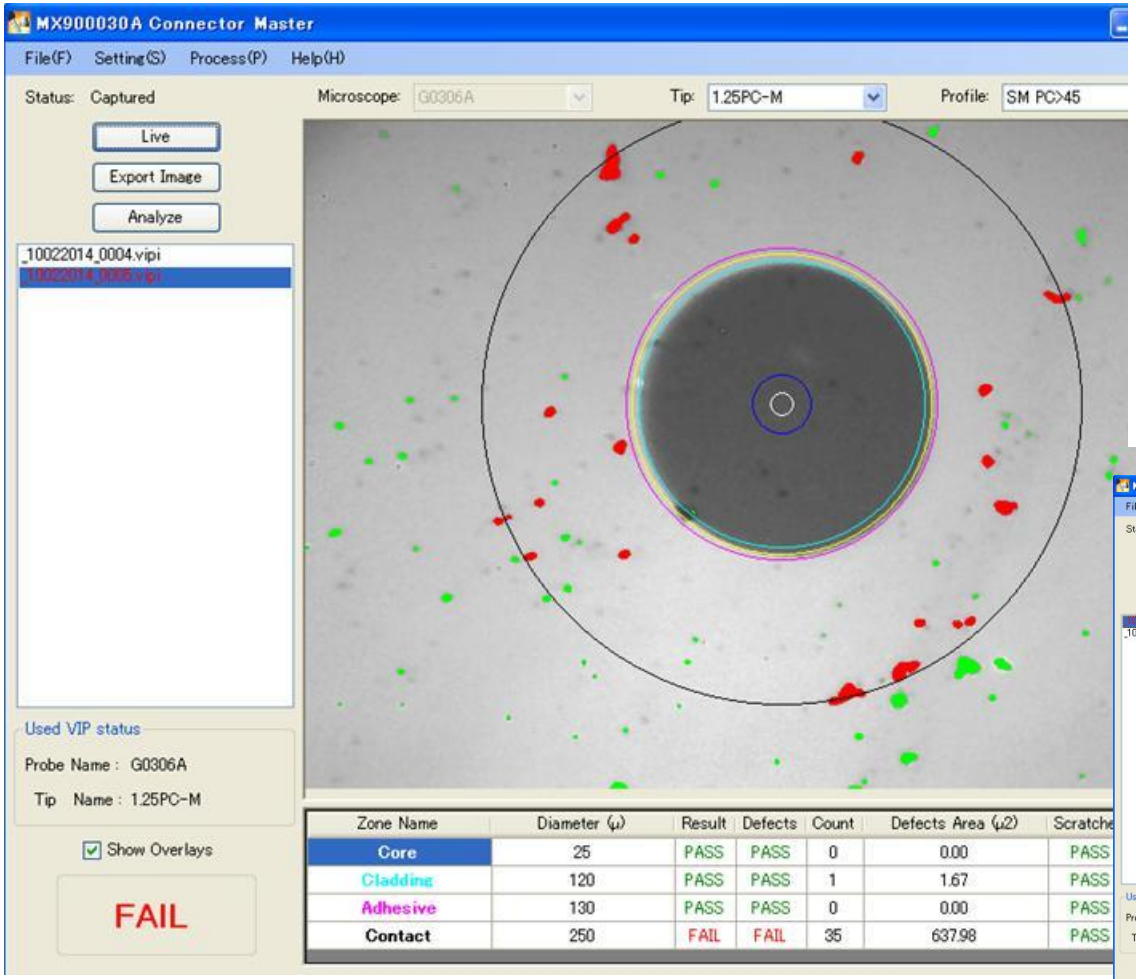


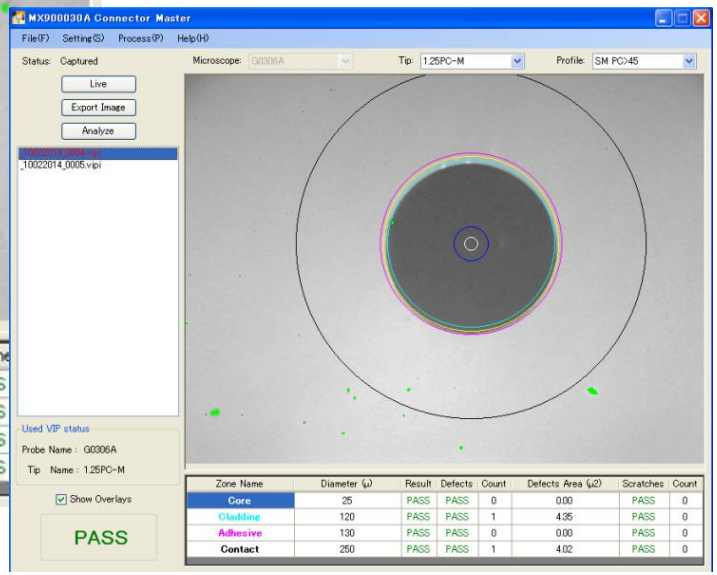
Clicking “Capture” will cause analysis to be performed. Ferrule endface dirtiness and damage levels will be displayed.

Examples of Measurement with the Windows PC (3/3)

When analysis completes, the following information appears:
- Core
- Cladding
- Adhesive
- Contact

As well as a pass/fail determination for the total area for each.





Ordering Information

Model No.	
G0306C	Video Inspection Probe
- Standard accessories -	Operation manual (Printed) Soft Bug Tip case Seven Connector Tips - 1.25 mm PC Male, - 2.5 mm PC Male, - 2.5 mm APC Male - 1.25 mm PC Female(LC), - 2.5 mm PC Female(FC) - 2.5 mm PC Female(SC), - 2.5 mm APC Female(SC)

Application Parts

Model No.	Name		Model No.	Name
H0382A	2.5PC-M		H0388A	1.25APC-M
H0383A	1.25PC-M		H0390A	E2000-PC-F
H0387A	2.5APC-M		H0395A*1	FC-APC-F
H0385A	LC-PC-F		H0397A	MU-PC-F
H0386A	FC-PC-F		H0396A	ST-PC-F
H0384A	SC-PC-F		H0403A	LC65-PC-F
H0398A*1	SC-APC-F		H0393A	LC-PC-F-L
H0391A	E2000-PC-M		H0394A*1	LC-APC-F-L
H0389A	E2000-APC-M			

*1: When checking both ends using these tips, sometimes the screen may display a [FAIL] dialog as follows for APC tips. If the SC-APC-F adapter has a removable structure, disassemble it and test using a 2.5APC-M tip.

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公知 2024-9 MJM No. G0306C-E-L-1-(2.00)