

G0306A USB 400x Video Inspection Probe

G0306A

USB 400x Video Inspection Probe

Product Introduction

March 2014

Anritsu Corporation

G0306A Product Introduction

VIP Series Support Products

Mainframe	G0306A (Fixed x400 type)		OPTION-545VIP (Selectable x200 /x400 type)	
	Live View	Pass/Fail Analysis	Live View	Pass/Fail Analysis
MT9090A Network Master™				
MU909014x/15x (μOTDR)	✓ (Ver.2.13 or later) *1		✓	✓ (Ver.2.10 or later) *1
MU909011x (DCFL)			✓	
MU909020A (OCA)			✓	
MU909060Ax (GigE)			✓	
ACCESS Master Series				
MT9083x2 Series ACCESS Master	✓ (Ver.1.09 or later) *1		✓	✓ (Ver.1.03 or later) *1
MT9083x/83x1 Series ACCESS Master			✓	
Others				
MX900030A with Windows PC *2		✓		
Windows PC software *3				✓

*1: Mainframe's software version

*2: PC analysis software for G0306A (Support Windows XP, Windows 7(32bit, 64bit) and Windows 8(32bit, 64bit))
The MX900030A is available from the Anritsu public web site.

*3: PC analysis software for OPTION-545VIP (Support Windows XP)

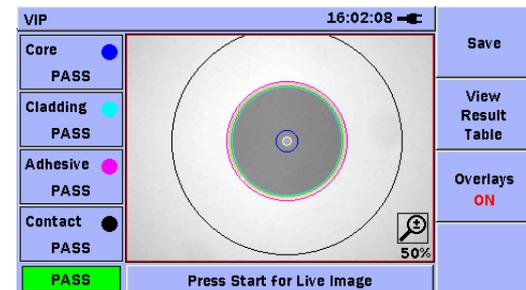
G0306A Product Introduction

G0306A Video Inspection Probe

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

The G0306A can be connected to an MT9083x2 Series ACCESS Master, MT9090A Network Master Series (μ OTDR 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.



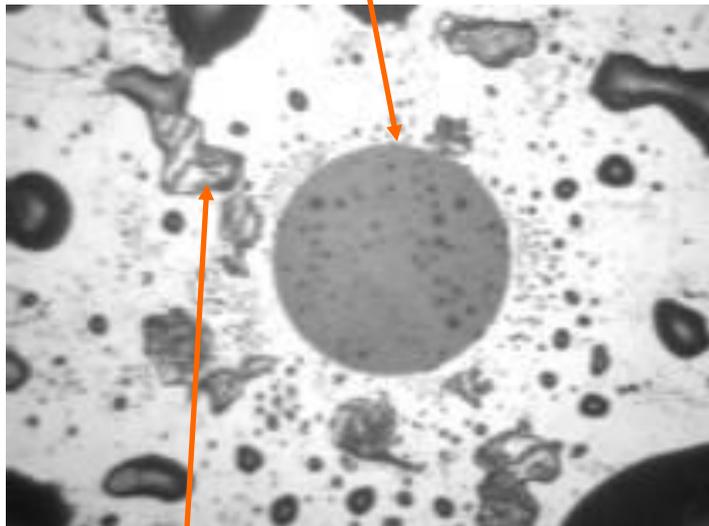
G0306A Product Introduction

When a Connector Endface is Dirty...

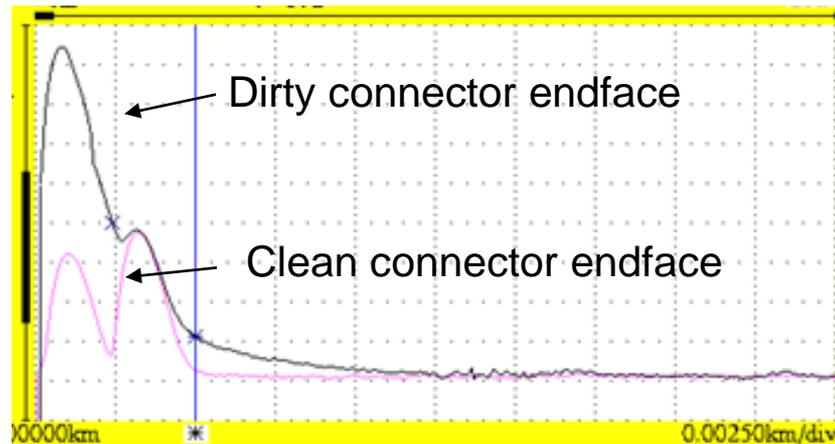
When a connector endface is dirty, it tends to produce a greater amount of reflection.

A good connection can be maintained by cleaning connector endfaces.

Optic Fiber Clad



Oil, Dust

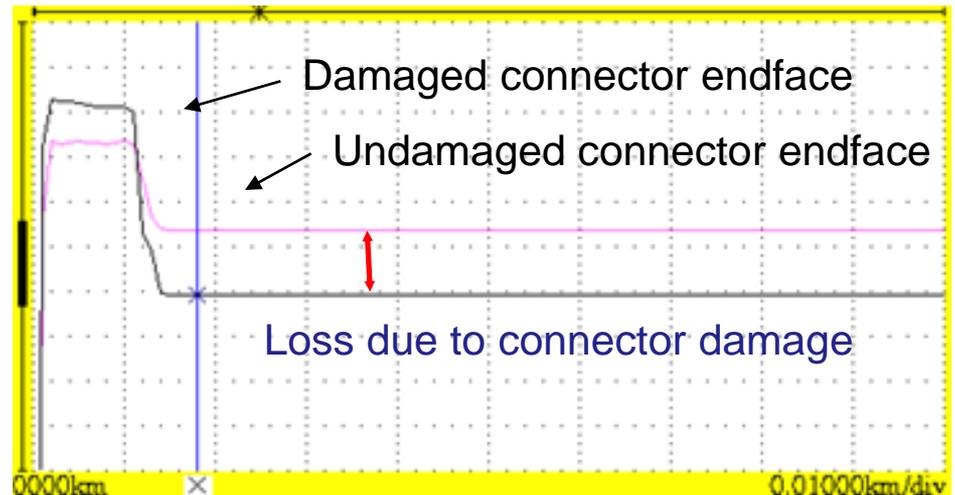
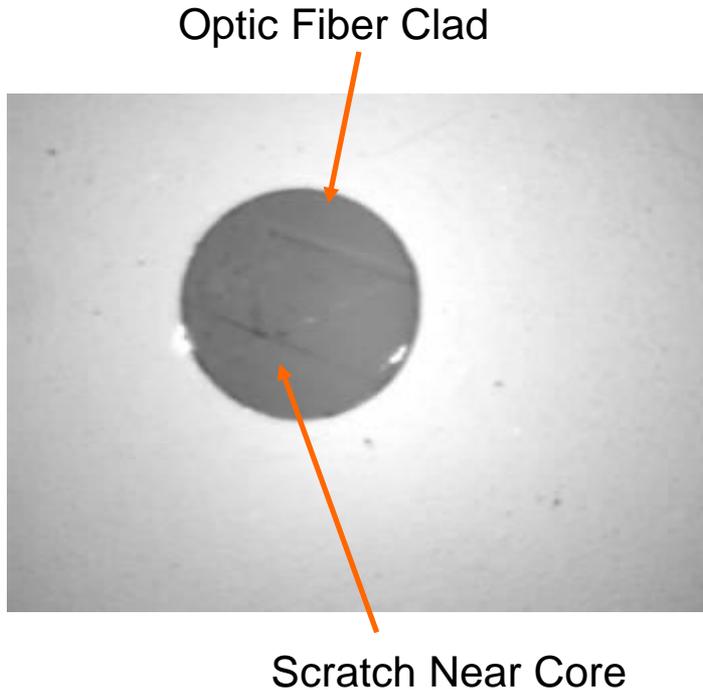


Verification through OTDR Output Port Connection

G0306A Product Introduction

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.



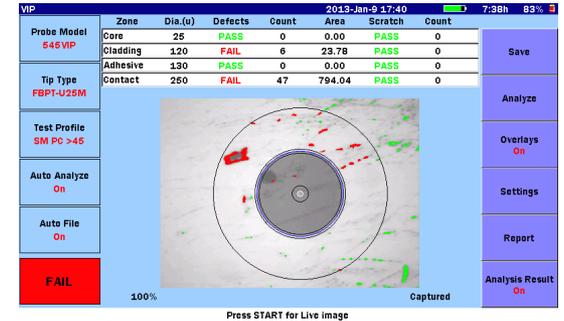
Verification through OTDR Output Port Connection

G0306A Product Introduction

●MT9083x2 Series ACCESS Master



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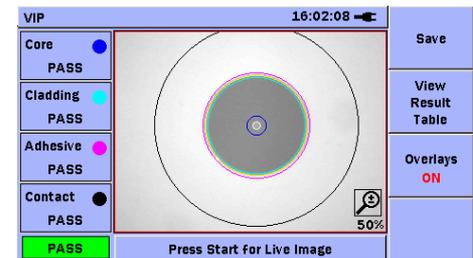


Include Pass/Fail analysis function (Software version 1.09 or later)

●MT9090A Series Network Master μOTDR: MU909014/15

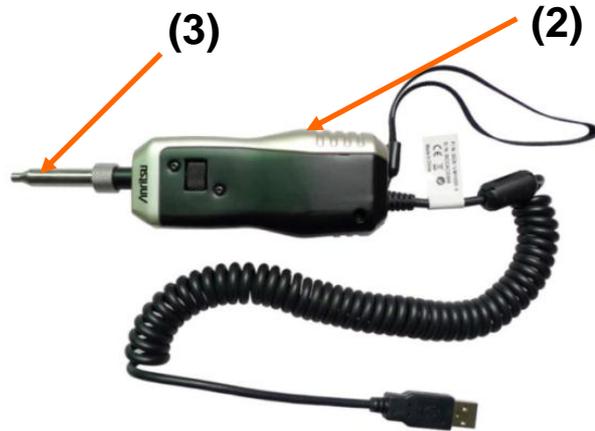


+



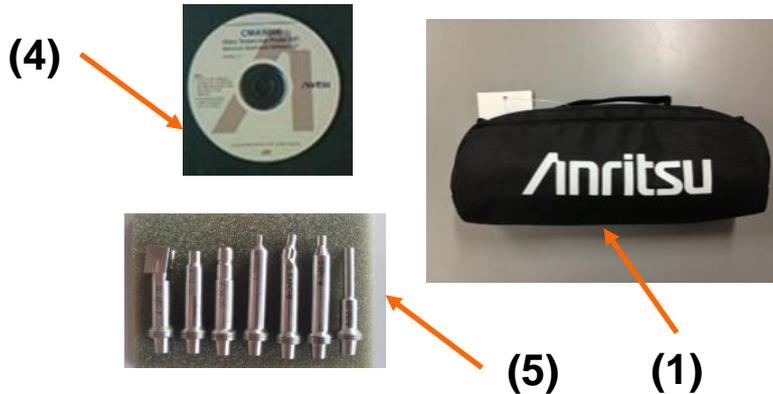
Include Pass/Fail analysis function (Software version 2.13 or later)

G0306A Product Introduction



G0306A Video Inspection Probe

- (1) Standard Soft case
- (2) Video Inspection Probe
- (3) Tip for measurement
- (4) CD include Operation Manual
- (5) Standard Tips



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

G0306A Product Introduction

G0306A Accessories



Tips are connected to the end of the VIP based on the shape of connector (adapter) to be connected. This unit comes standard with 7 types of tips.



1.25mm
PC Male



2.5mm
PC Male



2.5mm
APC Male



1.25mm
PC Female(LC)



2.5mm
PC Female(FC)



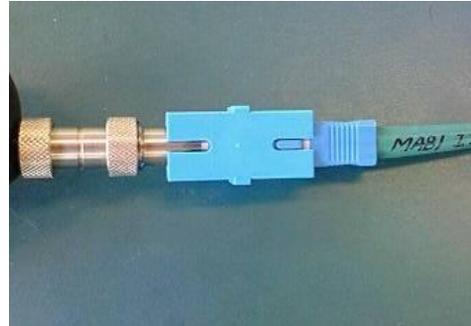
2.5mm
PC Female(SC)



2.5mm
APC Female(SC)

G0306A Product Introduction

Examples of Tip Connection



●Tips for bulk type

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



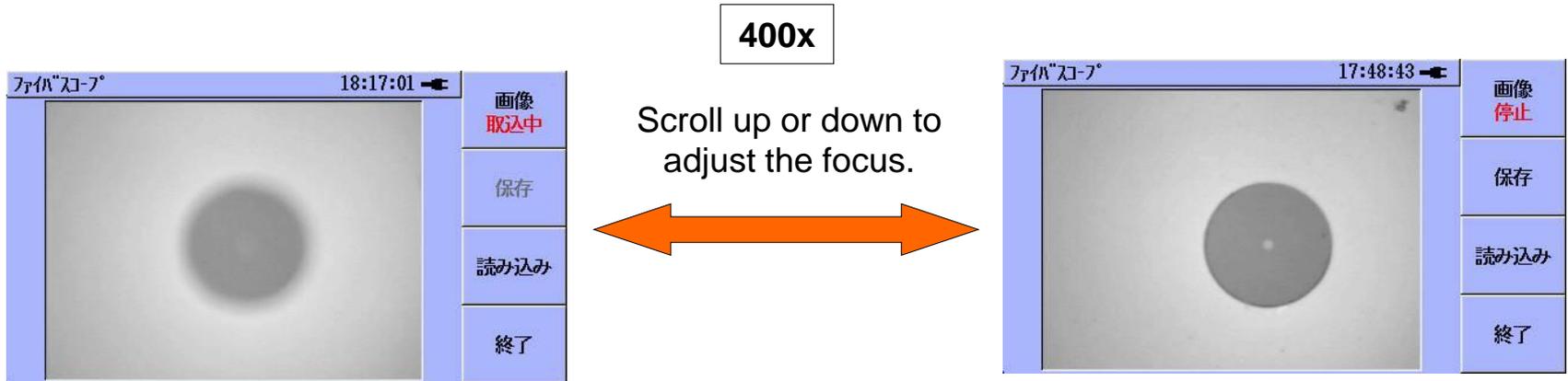
●Tips for universal type

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

Connected to OTDR output port ferrule endface

G0306A Product Introduction

Basic Video Inspection Probe Operation



Fixed 400x focus

G0306A Product Introduction

MT9083x2 Series ACCESS Master Measurement Example



1. The VIP USB terminal is connected to the MT9083x2 series instrument's USB port.

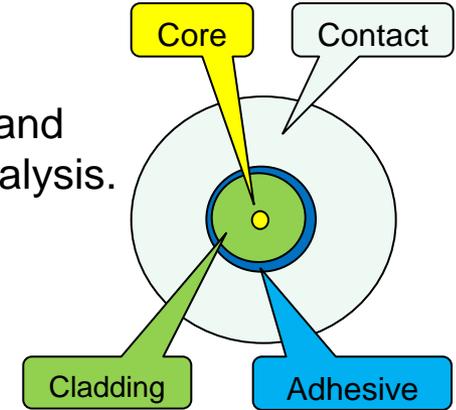
2. The power is turned on.
"Video Inspection Probe" is selected from the top menu.

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

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Measurement Sequence

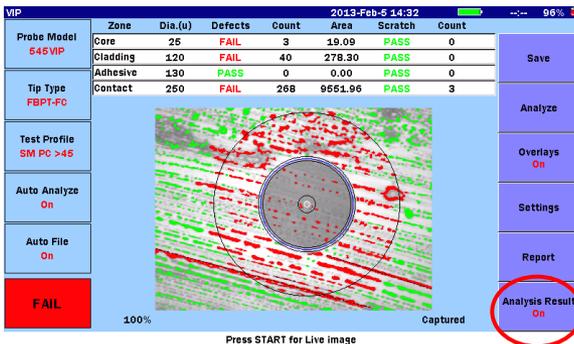
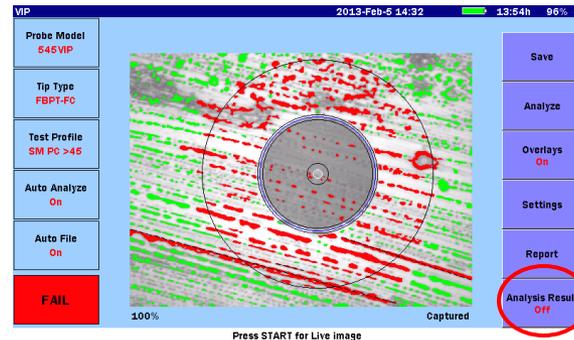
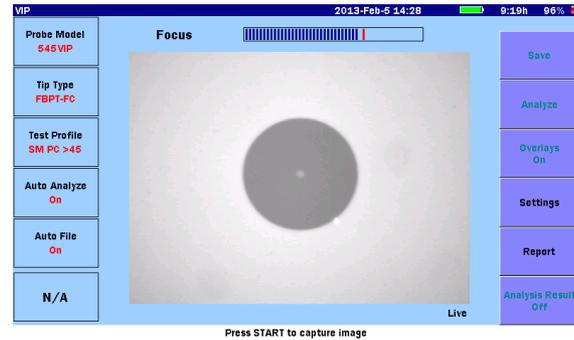
Adjust the focus in the Live screen, and press the Start  button to begin analysis.



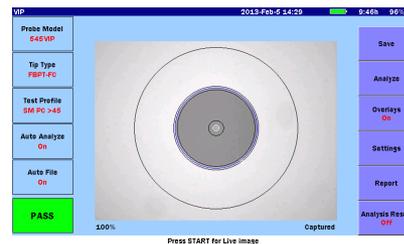
When analysis completes, the following information appears:

- Core
- Cladding
- Adhesive
- Contact

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



Press f6 to toggle between Details (Table) and Image View.



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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

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

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)

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

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

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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.

2013-02-05 14:31:30

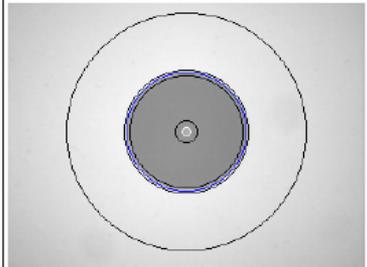
VIP Test Result

Probe Model	545VIP	Tip Type	FBPT-FC
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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 14:28:59

Sample PDF Report

G0306A Product Introduction

Examples of Measurement Using the MT9090A Series μ OTDR (MU909014/15)



(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.

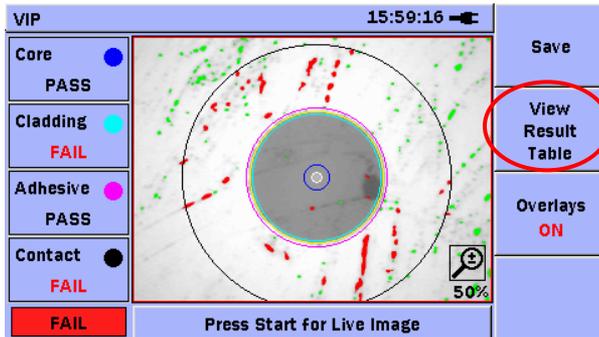
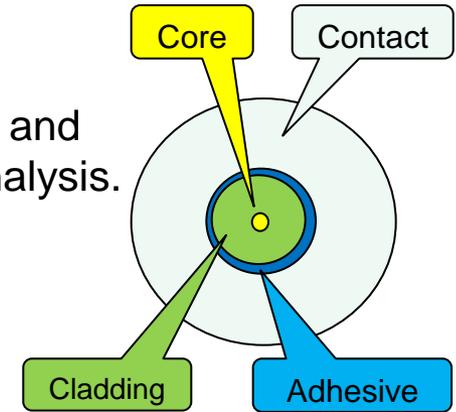
*Before starting, select the appropriate tip for the connector adapter and ferrule type to be connected to.

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Measurement Sequence

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



When analysis completes, the following information appears:

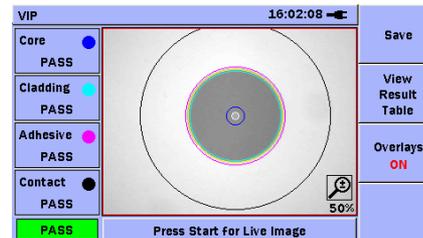
- Core
- Cladding
- Adhesive
- Contact

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

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

	Defects	Count	Area (μ^2)	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	1,180.85	PASS	0

Press F2 to toggle between Details (Table) and Image View.



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VIP 15:59:27

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

Save

(3) View Result Image

	Defects	Count	Area (μ^2)	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

Overlays ON

FAIL (1) Press Start for Live Image (2)

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)

VIP 16:02:20

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

Save

View Result Image

	Defects	Count	Area (μ^2)	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

Overlays ON

PASS Press Start for Live Image

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

G0306A Product Introduction

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

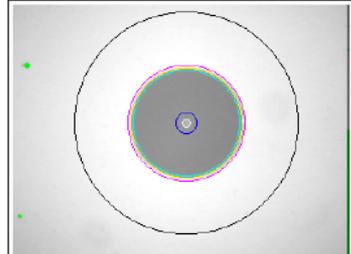
VIP Test Result

Probe	S45VIP	Tip	FBPT-FC
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Test Information	
Test Profile	SM PC -45
Analysis Result	PASS

Analysis Details						
Zone Name	Diameter (μ)	Defects	Count	Area (μ ²)	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

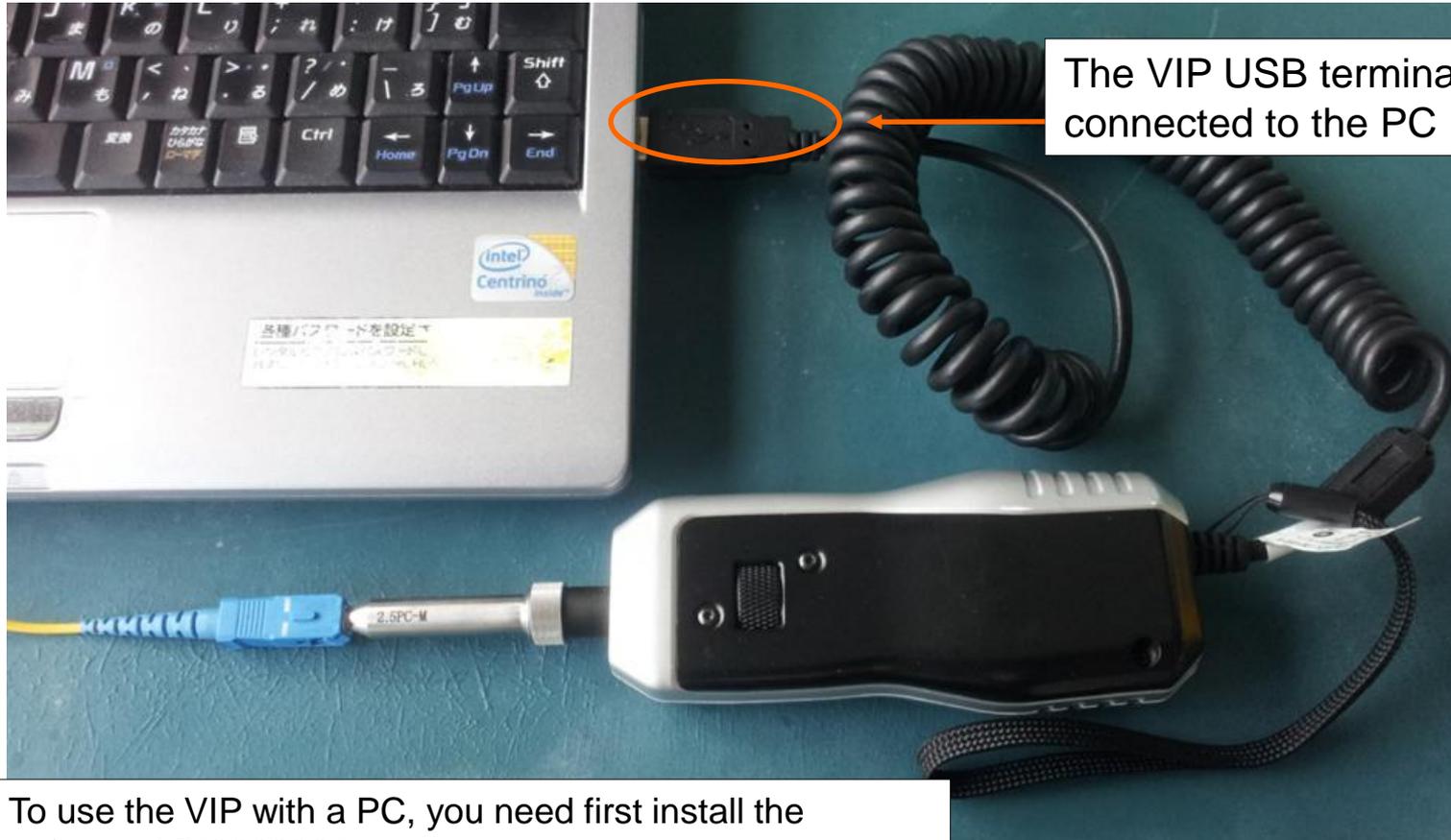


Capture Time 2013-02-05 13:24:24

Sample PDF Report

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Examples of Measurement With the Windows PC

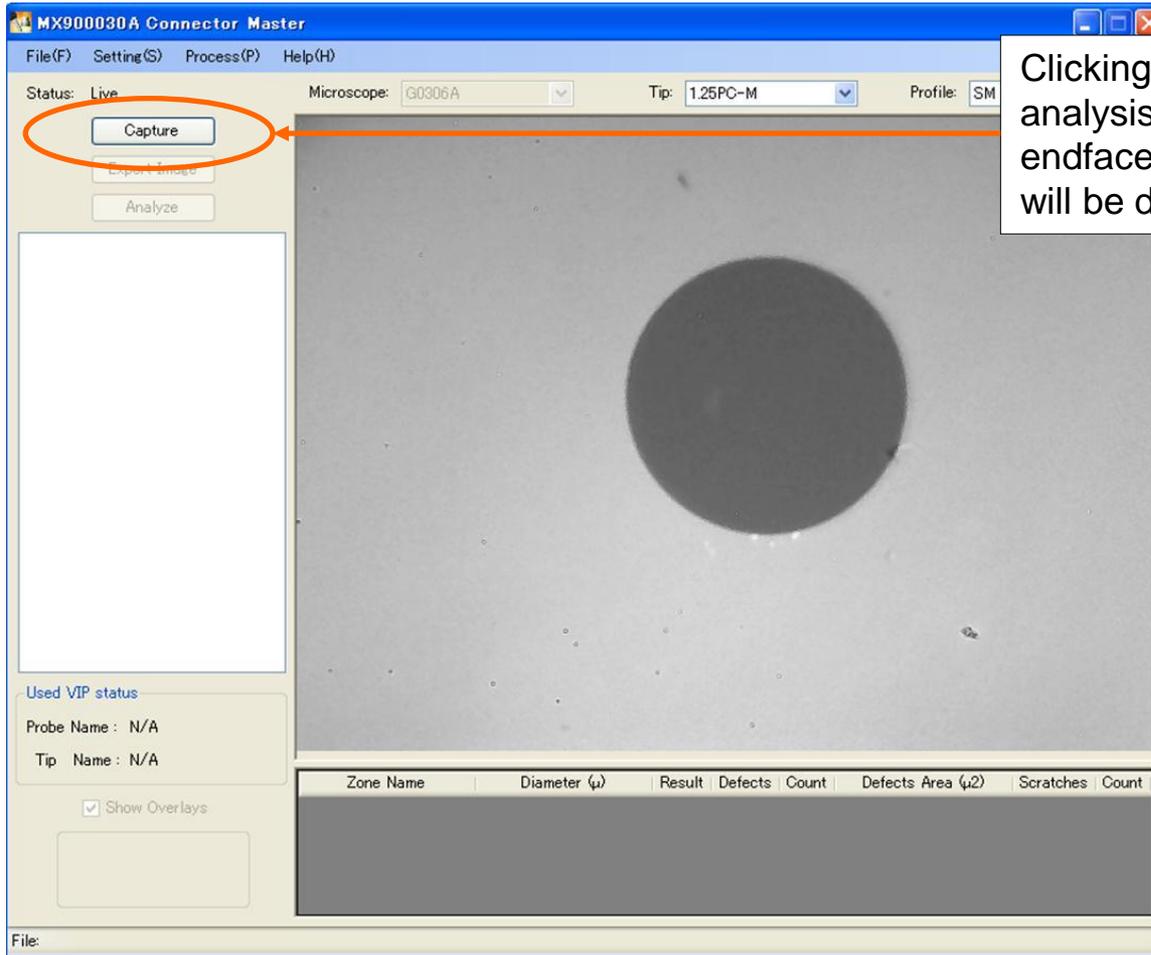


The VIP USB terminal is connected to the PC USB port.

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

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Examples of Measurement With the Windows PC



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

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Examples of Measurement With the Windows PC

MX900030A Connector Master

Status: Captured

Microscope: G0306A Tip: 1.25PC-M Profile: SM PC>45

Buttons: Live, Export Image, Analyze

Used VIP status

Probe Name: G0306A
Tip Name: 1.25PC-M

Show Overlays

Zone Name	Diameter (μ)	Result	Defects	Count	Defects Area (μ ²)	Scratches	Count
Core	25	PASS	PASS	0	0.00	PASS	0
Cladding	120	PASS	PASS	1	1.67	PASS	0
Adhesive	130	PASS	PASS	0	0.00	PASS	0
Contact	250	FAIL	FAIL	35	637.98	PASS	0

FAIL

When analysis completes, the following information appears:

- Core
- Cladding
- Adhesive
- Contact

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

MX900030A Connector Master

Status: Captured

Microscope: G0306A Tip: 1.25PC-M Profile: SM PC>45

Buttons: Live, Export Image, Analyze

Used VIP status

Probe Name: G0306A
Tip Name: 1.25PC-M

Show Overlays

Zone Name	Diameter (μ)	Result	Defects	Count	Defects Area (μ ²)	Scratches	Count
Core	25	PASS	PASS	0	0.00	PASS	0
Cladding	120	PASS	PASS	1	4.35	PASS	0
Adhesive	130	PASS	PASS	0	0.00	PASS	0
Contact	250	PASS	PASS	1	4.02	PASS	0

PASS

G0306A Product Introduction

Ordering Information

Model No.			
G0306A	400x Video Inspection Probe		
- Standard accessories -	Operation manual (Printed) Soft Bug Seven Connector Tips - 1.25mm PC Male, - 2.5mm PC Male, - 2.5mm APC Male - 1.25mm PC Female(LC), - 2.5mm PC Female(FC) - 2.5mm PC Female(SC), - 2.5mm APC Female(SC)		
Application Parts			
Model No.		Model No.	
H0360A	2.5PC-M	H0366A	SC-APC-F
H0361A	1.25PC-M	H0372A	E2000-PC-F
H0362A	2.5APC-M	H0373A	FC-APC-F
H0363A	LC-PC-F	H0374A	MU-PC-F
H0364A	FC-PC-F	H0375A	ST-PC-F
H0365A	SC-PC-F	H0376A	1.25APC-M

G0306A Supported...

- MT9083x2 ACCESS Master
- MT9090A Network Master (MU909014/15: μ OTDR)
- Windows XP, Windows7(32bit, 64bit) and Windows8(32bit, 64bit) PC for MX900030A

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