G0306B
USB 400x Video Inspection Probe
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Product Introduction

April 2016

Anritsu Corporation
## G0306B Product Introduction

### VIP Series Support Products

<table>
<thead>
<tr>
<th>Mainframe</th>
<th>G0306B (Fixed x400 type)</th>
<th>G0306A (Fixed x400 type) *Previous type</th>
</tr>
</thead>
<tbody>
<tr>
<td>MT1x00 Network Master Series</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MT1000A Network Master Pro.</td>
<td>Ver.5.00 or later</td>
<td>Ver.1.00 or later</td>
</tr>
<tr>
<td>MT1100A Network Master Flex</td>
<td>Ver.5.00 or later</td>
<td>Ver.1.00 or later</td>
</tr>
<tr>
<td>MT9090A Network Master</td>
<td></td>
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</tr>
<tr>
<td>MU909014x/15x (μOTDR)</td>
<td>Ver.2.27 or later (Coming soon)</td>
<td>Ver.2.13 or later</td>
</tr>
<tr>
<td>ACCESS Master Series</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MT9083x2 Series ACCESS Master</td>
<td>Ver.2.02 or later</td>
<td>Ver.1.09 or later</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MX900030A with Windows PC *</td>
<td>Ver.1.02 or later</td>
<td>Ver.1.00 or later</td>
</tr>
</tbody>
</table>

*: PC analysis software for G0306A/B (Support Windows XP, Windows 7(32bit, 64bit) and Windows 8(32bit, 64bit))
The MX900030A is available from the Anritsu public web site.
Scratches and stains to optic fiber ferrule endfaces are often said to have a negative impact on transmission quality. The G0306B can be connected to an MT1000A/MT1100A Network Master Series, MT9083x2 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.
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

Optic Fiber Clad

Dirty connector endface

Clean connector endface

Oil, Dust
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.

Optic Fiber Clad

Scratch Near Core

Verification through OTDR Output Port Connection
MT1000A/MT1100A Series

MT9083x2 Series ACCESS Master

MT9090A Series Network Master

μOTDR: MU909014/15

Include Pass/Fail analysis function
(Software version 1.00 or later)

Include Pass/Fail analysis function
(Software version 2.02 or later)

Include Pass/Fail analysis function
(Software version 2.27 or later)
G0306B Product Introduction

(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
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.
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
Basic Video Inspection Probe Operation

Fixed 400x focus

Scroll up or down to adjust the focus.

400x
1. The VIP USB terminal is connected to the MT1000A/MT1100A 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
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.
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.
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.
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.
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.
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.
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.
The VIP USB terminal is connected to the MT9090A's USB port.

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.
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 F2 to toggle between Details (Table) and Image View.
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.
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.
Examples of Measurement With the Windows PC

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

The VIP USB terminal is connected to the PC USB port.
Clicking “Capture” will cause analysis to be performed. Ferrule endface dirtiness and damage levels will be displayed.
Examples of Measurement With the Windows PC

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

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G0306B</td>
<td>400x Video Inspection Probe</td>
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</tbody>
</table>

- **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 |

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H0360A</td>
<td>2.5PC-M</td>
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<tr>
<td>H0361A</td>
<td>1.25PC-M</td>
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<tr>
<td>H0362A</td>
<td>2.5APC-M</td>
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<tr>
<td>H0363A</td>
<td>LC-PC-F</td>
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<td>H0364A</td>
<td>FC-PC-F</td>
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<td>H0365A</td>
<td>SC-PC-F</td>
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<tr>
<td>H0366A</td>
<td>SC-APC-F</td>
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<td>H0372A</td>
<td>E2000-PC-F</td>
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<td>H0373A</td>
<td>FC-APC-F</td>
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<td>MU-PC-F</td>
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<td>H0375A</td>
<td>ST-PC-F</td>
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<td>H0376A</td>
<td>1.25APC-M</td>
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<tr>
<td>H0380A</td>
<td>LC65-PC-F</td>
</tr>
</tbody>
</table>

**G0306B Supported…**

- MT1000A Network Master Pro., MT1100A Network Master Flex.
- MT9083x2 ACCESS Master
- MT9090A Network Master (MU909014/15: μOTDR)
- Windows XP, Windows7(32bit, 64bit) and Windows8(32bit, 64bit) PC for MX900030A