The debug time is drastically reduced by running the real ladder program on your PC!

Helpful simulation software for debug and trouble analysis

The Virtual-M3 is a simulation software which runs ladder sequences on a PC and debugs programs without any real machine. The I/O module simulation function, link function with HMI, step operation function, and link function with Live Logic Analyzer drastically reduce the debugging time.

Realistic Debug Environment includes Simulator of External Devices

Virtual CPU which is debugged and virtual I/O which simulates I/O modules and the external devices provide realistic debug environment. It allows you to debug the program on your PC without actual FA-M3 modules and external devices in the same environment as using actual equipment.
Automatically I/O Simulating Function

- Two windows (CPU and I/O) of Virtual-M3 can work together. **New!**
- Actions of I/O module can also be created by Ladder.
- Ladder program can be downloaded by WideField3.
- Actual machine operation can be realized by input from Virtual I/O.

Pinpoint debug by Step Operation

- Choose a concentrated point and debug it repeatedly.
  *Specify the starting position and debug conditions.
- Provide “Execute Instruction Step”, “Execute Circuit Step” and “Execute single-scan” functions.
  *Execute per instruction step, circuit step and single-scan.
- The [Restore to Previous State] action can undo up to 128 steps.
  *Can undo the previous status of the execution.

Operation check with time chart

- Live Logic Analyzer in WideField3 can be used for simulation.
- The equivalent functions as a CPU module are provided.
  *Can choose CPU modules beside F3SP7x.
- The signal behavior of one scan or a number of continue scans can be checked by the waves in LLA.
- The change within one scan can be checked by waves using the combination of step execution.
  *Live Logic Analyzer is the distinctive function in WideField3 and immediately displays the gathered data.

## Operation Environment

<table>
<thead>
<tr>
<th>Item</th>
<th>FA-M3 Simulation Software Virtual-M3(SF681-MDW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC</td>
<td>PC/AT compatible</td>
</tr>
<tr>
<td>OS</td>
<td>Microsoft Windows 7/8/8.1/10(x86/x64), English/Japanese OS version</td>
</tr>
<tr>
<td>Software Supply Method</td>
<td>Web download</td>
</tr>
<tr>
<td>CPU</td>
<td>Pentium 1 GHz or faster (or a compatible equivalent), adequate for the OS to run properly</td>
</tr>
<tr>
<td>Memory</td>
<td>1 GB or more, adequate for the OS to run properly</td>
</tr>
<tr>
<td>Hard Disk Capacity</td>
<td>400 MB or more available</td>
</tr>
<tr>
<td>Display</td>
<td>1024 x 768 dots or higher</td>
</tr>
</tbody>
</table>

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**Caution**
- For proper and safe use of this product, read the instruction manual thoroughly.
- If faults of this product are expected to result in accidents or losses, install additional external protection and/or safety circuits.
- If the product is to be used in applications which may directly affect or threaten human lives and safety, such as railway facilities, aviation and space navigation, medical equipment or transport equipment, please contact Yokogawa’s sales office.

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