Mitsubishi iQ Platform-compatible
FA Integrated Engineering Software
MELSOFT iQ Works

NEW
DVD version also available
Mitsubishi Electric’s “e-F@ctory” FA integrated solution is an evolutionary step in manufacturing which can provide dramatic cost-cutting results. Reduce your TCO and stay one step ahead of the competition by using advanced technology designed to optimize the entire factory, including the development, production and maintenance phases of operation. The key to this integrated concept is the “iQ Platform.” By combining the power of best-in-class components on the same platform, unparalleled levels of performance are possible. In addition, a vast array of communications options ensures connectivity between every element of the production process.

The iQ Platform maximizes the potential performance of each system component.

The iQ Platform is a Mitsubishi FA integration concept.

The iQ Platform writes a new chapter in the book of factory automation (FA).

Mitsubishi Electric is dedicated to helping you reduce your TCO.

iQ Works reduces the TCO with 5 key points.

iQ Platform dedicated to helping you reduce your TCO.
### 5 key points for TCO reduction with iQ Works

- **Designing Integrated systems becomes easier!**
  - The entire system can be designed with one product.
  - System Configuration Diagram: Visual display of system configuration and unit configuration enables easy recognition of components.
  - Function Blocks and Layers: This software has been developed with easy operation, recognizing of components.
  - Library Function Enhanced: Programs can be created easily by using a large range of sub-programs.
  - Improved visibility of dialog boxes: Clear visibility and confirmation conditions of switches and lamps, can be confirmed on HMI.
- **A brand-new user interface!**
  - More clear and easier to use!
  - Sharing User Interface: The tab display and docking windows make the screen use more convenient.
  - Help Function Enhanced: Setups can be performed without having to refer to a manual, since the system screen is presented in a user-friendly way.
  - User-friendly dialog box display: Dialog boxes, such as setting information display for positioning control, can be confirmed on HMI.
- **A higher level programming**
  - No longer need to repeat the same work!
  - Edit programs by flowcharts: It is possible to write machine operations in flowchart form while monitoring and debugging.
  - Function blocks and layers: Programs can be created easily, by using a large range of sub-programs.
  - Improved visibility of dialog boxes: Clear visibility and confirmation conditions of switches and lamps, can be confirmed on HMI.
- **Quick acquisition of information!**
  - The information you want to know can be quickly obtained!
  - System Monitor: The source of the error and its contents can be diagnosed quickly, during an error occurrence.
  - Help Function Enhanced: Setups can be performed without referring to a manual, since the system screen is presented in a user-friendly way.
  - User-friendly dialog box display: Dialog boxes, such as setting information display for positioning control, can be confirmed on HMI.
- **Individual products are now integrated!**
  - Economical set pricing!
  - Integration of Software: MELSOFT GX Works2, MELSOFT MT Works2 and MELSOFT GT Works3 were integrated.
  - Integration of Components: Software for programming, for simulator and for configurator was integrated.
  - Integration of Simulators: HMI simulators are combined, and operations can be confirmed easily.

### INDEX

<table>
<thead>
<tr>
<th>Item</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage projects in groups</td>
<td>7</td>
</tr>
<tr>
<td>Confirm unit configuration and setting easily</td>
<td>7</td>
</tr>
<tr>
<td>Easy-to-design system configuration</td>
<td>8</td>
</tr>
<tr>
<td>Shared labels</td>
<td>8</td>
</tr>
<tr>
<td>REDUCE SYSTEM CONFIGURATION TO THE MINIMUM</td>
<td>9</td>
</tr>
<tr>
<td>Display design directly into the ladder</td>
<td>12</td>
</tr>
<tr>
<td>Ladder to function blocks</td>
<td>12</td>
</tr>
<tr>
<td>Configure user interface and control panel</td>
<td>13</td>
</tr>
<tr>
<td>Simulation function available as default</td>
<td>13</td>
</tr>
<tr>
<td>Module and network status diagnosis</td>
<td>14</td>
</tr>
<tr>
<td>Secure access authority setting</td>
<td>14</td>
</tr>
<tr>
<td>Confirm configuration and setting easily</td>
<td>15</td>
</tr>
<tr>
<td>Edit programs by flowcharts</td>
<td>15</td>
</tr>
<tr>
<td>Easily configure a complex synchronized system</td>
<td>16</td>
</tr>
<tr>
<td>Setting information display for positioning control</td>
<td>16</td>
</tr>
<tr>
<td>Test drive equipment without a program</td>
<td>17</td>
</tr>
<tr>
<td>Perform debugging using a simulation</td>
<td>17</td>
</tr>
<tr>
<td>Display operation data with digital oscilloscope</td>
<td>18</td>
</tr>
<tr>
<td>Monitor Function Enhanced</td>
<td>18</td>
</tr>
<tr>
<td>Find what you need fast with work tree categories</td>
<td>19</td>
</tr>
<tr>
<td>Intelligible icons and toolbar</td>
<td>19</td>
</tr>
<tr>
<td>Create striking screen designs using simple operations</td>
<td>20</td>
</tr>
<tr>
<td>User-friendly dialog box display</td>
<td>20</td>
</tr>
<tr>
<td>One-click simulation</td>
<td>21</td>
</tr>
<tr>
<td>Easy data transfer by OS automatic selection</td>
<td>21</td>
</tr>
<tr>
<td>Customizable default settings</td>
<td>22</td>
</tr>
<tr>
<td>Selecting favorite parts from the toolbar</td>
<td>22</td>
</tr>
</tbody>
</table>
MELSOFT iQ Works represents a major innovation in systems engineering. MELSOFT iQ Works integrates the various programming and design software for Mitsubishi programmable controllers, motion controllers, and HMIs. The result is one seamless engineering environment.

MELSOFT iQ Works is the heart of iQ Works. It enables the effortless design of entire upper-level systems and seamlessly integrates the other MELSOFT programs included with iQ Works. Functions such as system configuration design, batch parameter setting, system labels, and batch read all help to reduce TCO.

MELSOFT Navigator represents the next generation in MELSOFT PLC maintenance and programming software. Its functionality has been inherited from both GX and IEC Developer, with improvements made throughout to increase productivity and drive down engineering costs.

MELSOFT GX Works2 is the next generation in MELSOFT PLC maintenance and programming software. Its functionality has been inherited from both GX and IEC Developer, with improvements made throughout to increase productivity and drive down engineering costs.

MELSOFT MT Works2 is a comprehensive motion controller maintenance and program design software. Its many useful functions, such as intuitive settings, graphical programming, and digital oscilloscope, simulator all help to reduce the TCO associated with motion systems.

MELSOFT GT Works3 is a complete HMI programming, screen creation, and maintenance software. In order to reduce the labor required to create detailed and impressive applications, the software's functionality has been built around the concepts of ease of use, simplification (without sacrificing functionality), and elegance (in design and screen graphics).
Multiple PLC, motion controller and GOT projects are displayed in the library tree. This enables an easier confirmation of the entire project, because projects can be managed in groups of process, such as factory, line or cell.

Functions such as program edit, parameter setting and batch reading can be executed intuitively using the graphic interface. In addition, the possibility of making setting errors is minimized because the entire system is immediately visible.

Define a label shared with a PLC, a motion controller, and an HMI with MELSOFT Navigator. Using this shared label, changes are automatically reflected to the motion controller project and the GOT project when some device assignment is changed in the PLC project. This enables a reduction of setting time and avoids setting mistakes.

The visual display of network configuration and unit configuration enables an easy recognition of components. On the unit configuration diagram, the power supply capacity and the number of I/O points can be checked.

It is easy to understand because I can set multiple system configurations comparing them visually!
MELSOFT Navigator

Integrated system management improves efficiency and thereby shortens development and maintenance time

Reflect the system configuration to the parameter setting

Set parameter settings for networks, I/O assignments, and others, based on the information of the system configuration diagram of MELSOFT Navigator, with one operation. In addition, in the multi-CPU, once parameters are set to a CPU module, the settings can be reflected to other CPU modules easily.

Motion system templates are available

Make use of templates to get started with multi-CPU systems including motion controllers. The hours for programming can be shortened, because templates are pre-configured with parameters and labels.

Display related programs directly

From a specific command in the PLC program, the motion programs related to the command can be directly displayed. This eliminates the need to open each project to search for referenced programs.

Batch read all project data

Use the batch read function to download the data of all PLC, motion controller, and GOT with one operation. Consequently, it is not necessary to start software for each device to download these data.

MELSOFT iQ Works

MELSOFT MT Works2

MELSOFT GX Works2

MELSOFT Navigator

MELSOFT GT Works3
Enhance project development efficiency via the user-friendly interface

Use the screen display area effectively

Minimize multiple displayed windows in the "Docking window" to tabs when they are not being edited. Likewise in the "Work window", multiple projects can be also changed to tabs. This enables to program efficiently, using the work area effectively.

Write equations directly into the ladder

Write descriptions of numerical processes and operational treatments directly into the ladder. This keeps ladders simple, and improves the readability of programs.

Display instruction or label options

Prevention of coding mistakes saves time with the ability to find an instruction or label even if the entire name is not known. Information about the selected item is automatically displayed insuring the correct choice is made. Instructions include detailed usage information.

Ladder function blocks

Create your own function blocks for easy re-use. They can be utilized easily by dragging and dropping function blocks from the function block selection window into the sequence programs. This improves the development efficiency.
Enhanced security and monitoring features aid start-up and maintenance operations

Configure and monitor intelligent function modules without manuals

When setting parameters for intelligent function modules, detailed descriptions are given on the screen, making it possible to set up and change the configuration of intelligent function modules without having to reference a manual. Use the intelligent function module batch memory monitor to create a custom list of items to observe and quickly identify problems.

Example: Analog output module

The intelligent function module batch memory monitor lets you view digital values, signal, and status information directly from the software interface. Each item shows detailed information, so I can set the parameter with ease!

Something is not right with the module, but I don’t know what is going on inside...

I need to test this program, but I don’t have access to the PLC...

I only need a personal computer to test this program! It is very convenient!

Full simulation capabilities are immediately available with GX Works2. Accomplish debugging tasks more efficiently with the convenience to perform simulation anywhere, without the need for physical hardware.

Simulation function available as default

Secure access authority setting

Prevent unauthorized accesses to data by setting access levels for each user. Create a multi-level security scheme to support collaborative development while maintaining data protection.

System monitor shows the status with simple illustrations. Quickly diagnose network and PLC hardware problems anywhere in the system. This helps to specify error locations and to investigate its causes.

There’s not enough information on error locations/descriptions...

I can grasp the error locations and their descriptions easily, with one look at the system monitor!

I need to test this program, but I don’t have access to the PLC...

I only need a personal computer to test this program! It is very convenient!

There are not enough information on the error locations/descriptions...

Someone has changed data without permission.

Only authorized users can edit the data. This is great!

Only authorized users can edit the data.

User A

User B

User C

MELSOFT GX Works2

MELSOFT Navigator
Create advanced motion control systems
with ease

Confirm unit configuration and setting easily

The system setting screen relies largely on illustrations. Easy to set up servo amplifiers and modules for system configuration. The software provides details about the parameters so they can be configured without needing to refer to a manual.

Edit programs by flowcharts

It is possible to write machine operations for the control target in flow chart form while monitoring and debugging. Use the instruction wizard to quickly and easily write programs only by responding the questions appearing on the screen.

Setting information display for positioning control

Configure advanced motion control programs without the need for a manual. Simply pick the desired servo commands from the instruction list and the help (instruction help) is right there. Follow the help and set items like axis number, positioning address, and positioning speed to complete the configuration.

Easily configure a complex synchronized system

Drag and drop motor- and cam-shaped icons (mechanical modules) to place them in the same configuration as the control target system. Only parameter setting creates complex synchronous control system. Modify CAM patterns visually to further aid the design process.
Perform installations and maintenance more efficiently using enhanced debug and monitoring functionality

Test drive equipment without a program

Run basic instructions in test mode without programming. Test a new system with functions like return to home position, JOG, and others with just the click of a mouse.

Display operation data with Digital Oscilloscope

Digital oscilloscope plots feedback data synchronized with motion controller data on the same graph to quickly reveal any problems. Using this feature makes start-up and commissioning quick and easy. Also MT Works2 makes it easy to save the collected data in CSV format.

Perform debugging using a simulation

Program debug mode and the digital oscilloscope function allow for easy testing of motion SFC programs, servo programs, and mechanical system programs all without the need for real hardware. Easily recognize the simulator with debug in flowchart form and synchronized data in calculation cycle.

Monitor Function Enhanced

Improve installation and maintenance operation efficiency by using one of the many monitoring tools, monitor the motion controller's status, or batch monitor errors.
Enhanced user-friendliness makes it easier than ever to get started quickly

Find what you need fast with work tree categories

The work tree automatically organizes every piece of your project so it’s easy to find later. The files are split among three logical categories: “Project”, “System” and “Screen”. Then, you know where to look intuitively. Additionally you can now create new screens or comments directly from the work tree by double clicking “New.”

Create striking screen designs using simple operations

Users just need to choose object data they need, and drag and drop the data to where they want to place. The library tree has been reorganized and sorted to help users find the right element more quickly. For example, it is now possible to jump directly to items based on “appearance” or “function.” A feature to select items from a recent history list is also included.

Intelligible icons and toolbar

Many icons on toolbar are easily identified. Hovering over icons with the mouse now provides detailed tool-tips. The user toolbar now remembers the last function used to further increase screen design efficiency.

User-friendly dialog box display

Set-up and operation of the system has been simplified by including easy-to-identify tabs. Tabs which have already been configured are noted with asterisk to show designers that object settings have been modified. Arrange On/Off switches and images by variable number range and check them as you configure them.

Displays an explanation of the function when the mouse is placed over the icon

I can understand what these icons do by just pointing the item!

I cannot tell what these icons do by just looking at them...

I can understand the display by just looking at it! It is easy to make a setting!

I’m not sure what and where to set in this switch...

I want to set the barcode, but I am not sure where to start...

I can find the file I’m looking for quickly!

It is easy to find the library I need!

It is not easy to find what I need...

Click and place

Click and
place

Double-click to create new data
GT Works3 is easier to use, reducing the labor necessary for screen design

One-click simulation
Verify the correct operation of GOT projects on a PC, without the need for GOT or PLC hardware. Check that the system alarms operate, screen transitions are correct, and monitor devices all using the simulator. (Excluding GT10)

Easy data transfer by OS automatic selection
Because different GOT operating systems are required based on the screen data present, the screen design software will automatically choose and upload the correct OS when transferring projects to the GOT. Therefore users do not need to choose the OS manually.

Customizable default settings
Save time by choosing your own defaults for shapes and objects. Registering the most frequently used settings as defaults saves you the trouble of making the same changes repeatedly to each of those objects.

Selecting favorite parts from the toolbar
Create a collection of favorite parts to avoid configuring from default every time. Registering the favorite parts to “Favorite library” and the parts appear on “Favorite toolbar”. Objects in the “Favorites toolbar” can be picked and placed quickly.

Data transfer
Data transfer
Data transfer
Select data and OS automatically

The screen design software automatically chooses the OS I need. I do not have to choose it!

I do not know which OS to select...

Before customizing

I want to verify the data I created without the actual equipment...

Click and place

I can check the operation easily by just clicking the simulator!

I can register the style I often use as a default setting, and I do not need to make a same setting anymore!

Changing each of these objects to the style I want takes so much time...

I often need the same style parts...

* GX Works2 or GX Simulator is required

* GX Works2 or GX Simulator is required
Factory Automation has made an evolutionary leap thanks to Mitsubishi Electric's combination of several leading-edge technologies.

With a high-speed, high-capacity PLC and a high-speed, high-accuracy motion, these iQ Platform-compatible controllers unleash unprecedented performance using advanced multiple CPU high-speed communication.

The iQ Platform excels in bringing superior performance to multiple CPU systems. The key is the redesigned back-plane which allows for vastly increased CPU-to-CPU transfer speeds while maintaining full backward compatibility with Q Series hardware. The PLC CPUs have an increased memory sharing capacity and operation speeds in the nanosecond range which further helps to reduce takt time of production machines and manufacturing devices.

The motion controller CPUs realize high accuracy, synchronous, speed/position control by executing communications with servo amplifiers in as little as 0.44ms. Customize your motion solution by taking advantage of motion control functions such as multi-axis interpolation, speed control, electronic cam, tracking control, and more. In addition, the MELSOFT MT Works2 engineering environment has been optimized to substantially reduce program development and debugging times.

With the introduction of system labels, the labor required for system development has been greatly reduced. There is no longer a need to memorize devices as they can be easily searched. And now, configuring connected devices and drivers has never been easier. Using the batch parameter setting function in MELSOFT Navigator, it is easy to create parameters for all connected devices, drivers, and interfaces.
High-speed, high-accuracy machine control made possible with multiple CPUs

- Each programmable controller CPU in the multiple CPU configuration is capable of simultaneously processing multiple CPU high-speed communication (14k words/0.88ms), executing a sequence, process or motion program, and performing high-speed machine control. In motion applications, the motion control operations are synchronized using multiple CPU high-speed communications.

In-position response time

In a multiple CPU system (a PLC and a motion controller), with the in-position signal from the servo amplifier of the second axis (used by motion controller) as the trigger, the PLC sends a start command to the servo amplifier of the second axis. The time it takes for the servo amplifier of the second axis to output the speed command is called the in-position response time, and this time is a good indicator of CPU-to-CPU data transfer speed.

Efficient management by structuring programs into individual routines

- Programs are divided into 124 (max.) sub-programs according to categories such as product and process. This facilitates structuring programs into individual routines. Such structured programs can be highly specialized to enhance visibility for detailed program management. In addition, standard ROM (4MB max. capacity) enables the storage of device labels and comments for function block and sequence programs to be stored in the PLC CPU.

Large-capacity memory for large-volume data

- The capacity of standard RAM, which can be used as file register, has been increased to store larger amounts of production and quality data. Additionally, large-capacity SRAM cards are now supported. An 8MB SRAM card can be used as file register for 4086k words (max.) to handle large volumes of data. In addition, standard ROM (4MB max. capacity) can be used as file register for 4086k words (max.) to handle large volumes of data.
New algorithms result in high-speed and high-accuracy solutions

Optimal system construction

- Up to 4 CPU modules can be freely selected in the multiple CPU system (one PLC CPU required).
- An optimum decentralized control system can be constructed using multiple CPUs. Control is optimized by dispersing processing across the multiple CPUs with the PLC handling general machine control and the motion controller handling servo control tasks. System expandability is accomplished with ease due to the availability of over 100 different types of MELSEC Q Series modules.
- Up to 96 axis per system can be controlled using multiple motion CPUs (three Q173DCPU modules).
- SSCNETIII based MR-J3 servo amplifiers deliver a high-speed, high-accuracy solution.

Motion processing acceleration

- Approximately double the basic motion performance
- Basic motion performance (With 0.44ms operation cycle time) (In case of SV13)
  - Q173DCPU: 6 axes
  - Q173HCPU: 3 axes
- 1/4 the Motion SFC processing time
- Motion SFC processing time
  - Process time for D800L + D802L + D804L
  - Q173DCPU: 2.34 ms
  - Q173HCPU: 11.75 ms
- Processing time Reduced to approx. 1/4

PLC program interrupt for multiple CPU synchronization

- Using the new PLC interrupt function synchronized with the motion operation cycle (0.88ms), it is possible to achieve real-time processing of ladder programs.
- Motion-dedicated PLC instructions have become easier to use.

Motion-dedicated PLC instruction

- Issue multiple instructions at the same time
  - Example: Execution of three motion-dedicated SVST instructions at the same time
- Indirectly set data and execute instructions at the same time
  - Example: Indirect data setting of speed and position plus execution of the motion-dedicated SVST instructions all at the same time

Large reduction in programming read/write time

- Substantial shortening of communication time when reading and writing to the motion controller (Q173DCPU/Q172DCPU use).

Motion CPU communication time

- Servo program read time
  - Q173DCPU: Reduced to approx. 1/2
  - Q173HCPU: Reduced to approx. 1/4

Shared memory capacity

- Q06UDHCPU+Q173DCPU: 14k words
- Q06HCPU+Q173HCPU: 4k words

Increased controllability

- Up to 4 CPU modules can be freely selected in the multiple CPU system (one PLC CPU required).
- An optimum decentralized control system can be constructed using multiple CPUs. Control is optimized by dispersing processing across the multiple CPUs with the PLC handling general machine control and the motion controller handling servo control tasks. System expandability is accomplished with ease due to the availability of over 100 different types of MELSEC Q Series modules.
- Up to 96 axis per system can be controlled using multiple motion CPUs (three Q173DCPU modules).
- SSCNETIII based MR-J3 servo amplifiers deliver a high-speed, high-accuracy solution.

Motion controller

- Twice the motion operational performance (0.44ms/6axis) as previously possible has resulted in increased production rates.
- Extremely accurate synchronous control and speed/position control realized thanks to the increased speed of the axial control cycle.
- A motion control-specific processor (high-performance 64bitRISC) and a proprietary acceleration algorithm ASIC improve hardware efficiency.
- Using the MELSEC Q Series universal model CPU, sequence processing is also accelerated. (Using the Q06UDHCPU, the PLC basic instruction time is 9.5ns.)
- Equipped with various motion control functions such as multi-axis interpolation, speed control, electronic cam and tracking control.
- Reduce variations in response time by using motion SFC programming.

Up to 96 axis per system can be controlled using multiple motion CPUs (three Q173DCPU modules).

SSCNETIII based MR-J3 servo amplifiers deliver a high-speed, high-accuracy solution.
Improve production site efficiency with the integration of HMI and iQ Platform-compatible products

Ladder monitor function

This function monitors Mitsubishi Q/S/QnA/FX Series PLC sequence programs using a circuit diagram (ladder format).

Troubleshoot with the one-touch ladder jump function (QnA Monitor)

- By setting a program name and coil number of the PLC to a touch switch, the desired ladder circuit block can be displayed directly.
- Select “SP Function” → “Ladder Monitor” from the touch switch property dialog box.
- Set PLC station No., CPU No., destination device name. (Example) [Program name: AUTO-L1, Network No.: 2, Station No.: 3, M100]
- When a problem occurs, or when the PLC CPU program is updated, the sequence program data can be transferred, analyzed, and corrected without requiring an experienced engineer, increasing time and cost efficiency.

Device values and timer (T)/counter (C) set values can be changed.

Example of defect search (when error indicator light [Y10] is on)

1. Backup
2. Analysis and connection
3. Restore

Writing to the PLC

- After you edit the program, you can “stop” it remotely from GOT to write it, and then “run” it remotely.

Monitor, search and test the ladder program

- You can display the current value, search and execute device test on the ladder program. Testing the edited program can be executed immediately.

Wide range of access

- In addition to the PLC connected to the GOT, you can access other stations (PLCs) in the network including multiple CPUs. You can edit multiple programs in every CPU.

Improving maintenance work efficiency with a wide monitoring range of useful functions

- In addition to the PLC connected to the GOT, other stations including multi CPUs can be monitored. Multiple programs and local devices in every CPU can be monitored.
- Save sequence program comments to the CF card in the GOT (QnA ladder monitor).
- Device values and timer (T)/counter (C) set values can be changed.
- Execute a coil search or contact point search simply by touching the (QnA) ladder monitor screen. <Touch search>
- When an alarm occurs, perform a back-tracking ladder search to find the contact that triggered the alarm. <Defect search>
- You can also find and replace a device. Not only it is easy to find each place to edit, but it is also easy to correct multiple places in a batch.

Make a data back up in case of PLC or CPU failure or a dead battery, and quickly replace the faulty device and restore the system using the backup.

Device values and timer (T)/counter (C) set values can be changed.

Example of defect search (when error indicator light [Y10] is on)

1. Backup
2. Analysis and connection
3. Restore

Writing to the PLC

- After you edit the program, you can “stop” it remotely from GOT to write it, and then “run” it remotely.

Monitor, search and test the ladder program

- You can display the current value, search and execute device test on the ladder program. Testing the edited program can be executed immediately.

Wide range of access

- In addition to the PLC connected to the GOT, you can access other stations (PLCs) in the network including multiple CPUs. You can edit multiple programs in every CPU.
### MELSOFT iQ Works system requirements

**Software model list**

- MELSOFT iQ Works
- MELSOFT Navigator
- MELSOFT MT Works2
- MELSOFT GT Works3

**Hardware model list**

- MELSOFT Navigator compatible module list
- MELSOFT iQ Works compatible module list
- MELSOFT GT Works3 compatible module list
- MELSOFT MT Works2 compatible module list

**Module types**

- Main base unit
- Motion
- PLC

**Available space**

- Display: XGA (1024 x 768) or higher
- Memory: 1GB or more
- Available space: 2 GB or more data space

**MELSOFT iQ Works system requirements**

| OS (x86 32 bit OS) | Windows XP Professional, Service Pack 4  
| Windows XP Professional, Service Pack 2  
| Windows 2000 Professional, Service Pack 4  
| Windows 2000 Professional, Service Pack 2  
| Windows 98 SE | Windows Vista Business, Service Pack 1 |

| Display | XGA (1024 x 768) or higher |

| Memory | 1GB or more |

| Available space | For installation: 2 GB or more data space |

**MELSOFT iQ Works compatible version**

- MELSOFT iQ Works version 1.20 or later
- MELSOFT MT Works2 version 1.09K or later
- MELSOFT GT Works3 version 1.30G or later

**iQ Platform-compatible controller model list**

- PID control
- Position control
- Motion control
- Temperature control

**Category**

<table>
<thead>
<tr>
<th>Category</th>
<th>Model name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motion</td>
<td>Q30UDCPU</td>
</tr>
<tr>
<td>PID</td>
<td>Q40UDCPU</td>
</tr>
<tr>
<td>Position</td>
<td>Q50UDCPU</td>
</tr>
<tr>
<td>Temperature</td>
<td>Q10UDCPU</td>
</tr>
</tbody>
</table>

**Software model list**

- MELSOFT iQ Works
- MELSOFT Navigator
- MELSOFT MT Works2
- MELSOFT GT Works3

**Hardware model list**

- MELSOFT Navigator compatible module list
- MELSOFT iQ Works compatible module list
- MELSOFT GT Works3 compatible module list
- MELSOFT MT Works2 compatible module list

**Module types**

- Main base unit
- Motion
- PLC

**Available space**

- Display: XGA (1024 x 768) or higher
- Memory: 1GB or more
- Available space: 2 GB or more data space

**MELSOFT iQ Works system requirements**

| OS (x86 32 bit OS) | Windows XP Professional, Service Pack 4  
| Windows XP Professional, Service Pack 2  
| Windows 2000 Professional, Service Pack 4  
| Windows 2000 Professional, Service Pack 2  
| Windows 98 SE | Windows Vista Business, Service Pack 1 |

| Display | XGA (1024 x 768) or higher |

| Memory | 1GB or more |

| Available space | For installation: 2 GB or more data space |

**MELSOFT iQ Works compatible version**

- MELSOFT iQ Works version 1.20 or later
- MELSOFT MT Works2 version 1.09K or later
- MELSOFT GT Works3 version 1.30G or later

**iQ Platform-compatible controller model list**

<table>
<thead>
<tr>
<th>Model name</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q30UDCPU</td>
<td>Motion</td>
</tr>
<tr>
<td>Q40UDCPU</td>
<td>PID</td>
</tr>
<tr>
<td>Q50UDCPU</td>
<td>Position</td>
</tr>
<tr>
<td>Q10UDCPU</td>
<td>Temperature</td>
</tr>
</tbody>
</table>

**Software model list**

- MELSOFT iQ Works
- MELSOFT Navigator
- MELSOFT MT Works2
- MELSOFT GT Works3

**Hardware model list**

- MELSOFT Navigator compatible module list
- MELSOFT iQ Works compatible module list
- MELSOFT GT Works3 compatible module list
- MELSOFT MT Works2 compatible module list

**Module types**

- Main base unit
- Motion
- PLC

**Available space**

- Display: XGA (1024 x 768) or higher
- Memory: 1GB or more
- Available space: 2 GB or more data space

**MELSOFT iQ Works system requirements**

| OS (x86 32 bit OS) | Windows XP Professional, Service Pack 4  
| Windows XP Professional, Service Pack 2  
| Windows 2000 Professional, Service Pack 4  
| Windows 2000 Professional, Service Pack 2  
| Windows 98 SE | Windows Vista Business, Service Pack 1 |

| Display | XGA (1024 x 768) or higher |

| Memory | 1GB or more |

| Available space | For installation: 2 GB or more data space |

**MELSOFT iQ Works compatible version**

- MELSOFT iQ Works version 1.20 or later
- MELSOFT MT Works2 version 1.09K or later
- MELSOFT GT Works3 version 1.30G or later

**iQ Platform-compatible controller model list**

<table>
<thead>
<tr>
<th>Model name</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q30UDCPU</td>
<td>Motion</td>
</tr>
<tr>
<td>Q40UDCPU</td>
<td>PID</td>
</tr>
<tr>
<td>Q50UDCPU</td>
<td>Position</td>
</tr>
<tr>
<td>Q10UDCPU</td>
<td>Temperature</td>
</tr>
</tbody>
</table>
For Your Safety

Precautions for Choosing the Products

To use the products given in this catalog properly, always read the related manuals before starting to use them. The products within this catalog have been manufactured as general-purpose parts for general industries and have not been designed or manufactured to be incorporated into any devices or systems used in purposes related to human life. Before using any product for special purposes such as nuclear power, electric power, aerospace, medicine or passenger movement vehicles, consult with Mitsubishi.

The products within this catalog have been manufactured under strict quality control. However, when installing the product where major accidents or losses could occur if the product fails, install appropriate backup or failsafe functions in the system. Mitsubishi will not be held liable for damage caused by factors found not to be the cause of Mitsubishi; machine damage or lost profits caused by faults in the Mitsubishi products; damage, secondary damage, accident compensation caused by special factors unpredictable by Mitsubishi; damages to products other than Mitsubishi products; and to other duties.

Mitsubishi will not be held liable for damage caused by factors found not to be the cause of Mitsubishi; machine damage or lost profits caused by faults in the Mitsubishi products; damage, secondary damage, accident compensation caused by special factors unpredictable by Mitsubishi; damages to products other than Mitsubishi products; and to other duties.

---

<table>
<thead>
<tr>
<th>Category</th>
<th>Model name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulse I/O, positioning</td>
<td>QD35ID1, QD35ID2, GT16**, GT15**</td>
</tr>
<tr>
<td>Information module</td>
<td>GT15**, GT15***, GT11**, GT11***</td>
</tr>
<tr>
<td>Network module</td>
<td>GT10**</td>
</tr>
<tr>
<td>ID interface module</td>
<td>QD62, QD62-E, QD70P8, QD75D1, QD75D2, QD75D4, QD70D4, QD70D8</td>
</tr>
<tr>
<td>Black cover module</td>
<td>QD60, QD62-H01, QD62-H02</td>
</tr>
</tbody>
</table>

This is the MELSOFT Navigator compatible module list. This list does not cover the compatible modules of MELSOFT GX Works2, MELSOFT MT Works2, and MELSOFT GT Works3.

To use the products given in this catalog properly, always read the related manuals before starting to use them.
This catalog is an introduction to only part of what Mitsubishi Electric has to offer. Mitsubishi Electric offers individualized solutions for the challenges in your factory.

**MELSOFT iQ Works**

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Sales office</th>
<th>Tel/Fax</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.A</td>
<td>Mitsubishi Electric Automation Inc.</td>
<td>Tel: +1-847-478-2100</td>
</tr>
<tr>
<td></td>
<td>500 Corporate Woods Parkway Vernon Hills, IL 60061, USA</td>
<td>Fax: +1-847-478-0327</td>
</tr>
<tr>
<td>Brazil</td>
<td>MELCO-TEC Rep. Co. e Asessorias Tecnica Ltda.</td>
<td>Tel: +55-11-3146-2200</td>
</tr>
<tr>
<td></td>
<td>Av Paulista, 1439-C. 72 Cerqueira Cesar CEP 01311-200, Sao Paulo, SP, CEP:01311-200, Brazil</td>
<td>Fax: +55-11-3146-2217</td>
</tr>
<tr>
<td>Germany</td>
<td>Mitsubishi Electric Europe B.V. German Branch</td>
<td>Tel: +49-2102-486-0</td>
</tr>
<tr>
<td></td>
<td>Gothaer Strasse 8 D-40880 Ratingen, GERMANY</td>
<td>Fax: +49-2102-486-1120</td>
</tr>
<tr>
<td>U.K</td>
<td>Mitsubishi Electric Europe B.V. UK Branch</td>
<td>Tel: +44-1707-276100</td>
</tr>
<tr>
<td></td>
<td>Travellers Lane, Hatfield, Hertfordshire, AL10 8XB, UK</td>
<td>Fax: +44-1707-278992</td>
</tr>
<tr>
<td>Italy</td>
<td>Mitsubishi Electric Europe B.V. Italy Branch</td>
<td>Tel: +39-039-60531</td>
</tr>
<tr>
<td></td>
<td>VIALE COLLEONI 7-20041 Agrate Brianza(Milano), Italy</td>
<td>Fax: +39-039-6053312</td>
</tr>
<tr>
<td>Spain</td>
<td>Mitsubishi Electric Europe B.V. Spanish Branch</td>
<td>Tel: +34-93-565-3131</td>
</tr>
<tr>
<td></td>
<td>Carretera de Rubi 76-80 E-08190 Sant Cugat del Valles (Barcelona), Spain</td>
<td>Fax: +34-93-589-1579</td>
</tr>
<tr>
<td>France</td>
<td>Mitsubishi Electric Europe B.V. French Branch</td>
<td>Tel: +33-1-5568-5568</td>
</tr>
<tr>
<td></td>
<td>25, Boulevard des Bouvets, F-92741 Nanterre Cedex, France</td>
<td>Fax: +33-1-5568-5757</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>Mitsubishi Electric Europe B.V. Czech Branch</td>
<td>Tel: +420-251-551-470</td>
</tr>
<tr>
<td></td>
<td>Avenir Business Park, Radlická 714/113a CZ-158 00 Praha 5</td>
<td>Fax: +420-251-551-471</td>
</tr>
<tr>
<td>Poland</td>
<td>Mitsubishi Electric Europe B.V. Polish Branch</td>
<td>Tel: +48-12-630-47-00</td>
</tr>
<tr>
<td></td>
<td>ul. Krakowska 50 32-063 Balice, Poland</td>
<td>Fax: +48-12-630-47-01</td>
</tr>
<tr>
<td>Russia</td>
<td>Mitsubishi Electric Europe B.V. Moscow Office</td>
<td>Tel: +7-812-633-3497</td>
</tr>
<tr>
<td></td>
<td>52/3, Kosmodamianskaya nab., 115054, Moscow, Russia</td>
<td>Fax: +7-812-633-3499</td>
</tr>
<tr>
<td>South Africa</td>
<td>Circuit Breaker Industries Ltd.</td>
<td>Tel: +27-11-928-2000</td>
</tr>
<tr>
<td></td>
<td>Private Bag 2016, ZA-1600 Isando, South Africa</td>
<td>Fax: +27-11-392-2354</td>
</tr>
<tr>
<td>China</td>
<td>Mitsubishi Electric Automation(Shanghai) Ltd.</td>
<td>Tel: +86-21-2322-3030</td>
</tr>
<tr>
<td></td>
<td>17/F, Chong Hing Finance Center, No.288 West Nanjing Road, Shanghai 200003, CHINA</td>
<td>Fax: +86-21-2322-3000</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Setsuyo Enterprise Co., Ltd.</td>
<td>Tel: +886-2-2299-2499</td>
</tr>
<tr>
<td></td>
<td>6F., No.105 Wu-Kung 3rd Rd, Wu-Ku Hsiang, Taipei Hsine, Taiwan</td>
<td>Fax: +886-2-2299-2509</td>
</tr>
<tr>
<td>Korea</td>
<td>Mitsubishi Electric Automation Korea Co., Ltd.</td>
<td>Tel: +82-2-3660-9552</td>
</tr>
<tr>
<td></td>
<td>1480-6, Gayang-dong, Gangseo-gu Seoul 157-200, Korea</td>
<td>Fax: +82-2-3664-8372</td>
</tr>
<tr>
<td>Singapore</td>
<td>Mitsubishi Electric Asia Pte. Ltd.</td>
<td>Tel: +65-6470-2480</td>
</tr>
<tr>
<td></td>
<td>307 Alexandra Road #05-01/02, Mitsubishi Electric Building Singapore 159943</td>
<td>Fax: +65-6476-7439</td>
</tr>
<tr>
<td>Thailand</td>
<td>Mitsubishi Electric Automation (Thailand) Co., Ltd.</td>
<td>Tel: +66-2-517-1326</td>
</tr>
<tr>
<td></td>
<td>Bang-Chan Industrial Estate No.111 Soi Serithai 54, T.Kannaya, A.Kannaya, Bangkok 10230, Thailand</td>
<td>Fax: +66-2-517-1328</td>
</tr>
<tr>
<td>Indonesia</td>
<td>P.T. Autotekindo Sumber Makmur</td>
<td>Tel: +62-21-663-0833</td>
</tr>
<tr>
<td></td>
<td>Muara Karang Selatan Block A/Utara No.1 Kav. No.11 Kawasan Industri/Pengadangan Jakarta-Utara P.O Box 5045</td>
<td>Fax: +62-21-663-0832</td>
</tr>
<tr>
<td>India</td>
<td>Messung Systems Pvt. Ltd.</td>
<td>Tel: +91-20-2712-3130</td>
</tr>
<tr>
<td></td>
<td>Electronic Sadan NO:III Unit No.15, M.I.D.C Bhosari, Pune-411026, India</td>
<td>Fax: +91-20-2712-8108</td>
</tr>
<tr>
<td>Australia</td>
<td>Mitsubishi Electric Australia Pty Ltd.</td>
<td>Tel: +61-2-9684-7777</td>
</tr>
<tr>
<td></td>
<td>348 Victoria Road, Rydalmer, N.S.W 2116, Australia</td>
<td>Fax: +61-2-9684-7245</td>
</tr>
</tbody>
</table>