

AUTOMATING THE WORLD FOR A SUSTAINABLE FUTURE

Comprehensive Solutions Lineup



- Built to work together
- Achieve new levels of productivity, precision, and quality
- Rapid integration, flexibility, efficiency, and robust production analytics

SERVO



MELSERVO-J5 Servo Amplifiers employ cutting edge technology to provide high function, high performance solutions, CC-Link IE TSN, and EtherCAT®.

- Tuning has never been easier with Quick Tune which starts tuning at Servo ON
- Meet any axis requirements, from single axis to a 256 multi-axis system, for various industry applications
- Available in 200 VAC and 400VAC up to 7kW

MR-JET Servo Amplifiers provide a user-friendly, high-quality, low-cost servo solution. CC-Link IE TSN, and EtherCAT.

- Full suite of tuning features (One-Touch, Quick Tune, Manual Tuning)
- MR-J4 level of performance
- Available in 200 VAC up to 3kW

Rotary Servo Motors feature high-performance motors in 100/200/400 VAC up to 220kW or 48/24 VDC up to 30W. Seven unique motor families are available with varied inertia and capacity ranges.

Linear Servo Motors are available with three different core types, linear motor module, and one core-less option for maximum flexibility.

Direct Drive Servo Motors fit perfectly into applications requiring low speed and high torque.

ROBOTS AND COBOTS



Industrial Robots which are capable of simple pick and place applications to complex assembly tasks, offer class-leading speed and precision. Available intelligent options enable 3D vision, force sensing, seamless PLC integration, and predictive maintenance.

- Vertically articulated, SCARA, and inverted SCARA
- Extensive selection of arm sizes, configurations, and protection ratings, backed by next-generation features and options
- 3-year warranty which is extended to 5 years with a Robot Diamond Assurance preventive maintenance plan

MELFA ASSISTA collaborative robots can share a workspace with humans and are simpler, easier, and more flexible than industrial robots.

- Easy control with operating buttons and an LED light to view the status of the robot all on the robot arm
- Create programs visually using intuitive operations with RT-VisualBox
- Grippers, fingers, vision, and other peripherals devices available with pre-configured interface for easy setup and operation

VARIABLE FREQUENCY DRIVES



FR-A800 Series delivers multi-use performance, accuracy and system flexibility in an ultra-reliable hardware design.

- High-speed processing and response for complex and demanding applications
- Up to 200% overload protection
- Control for both standard induction motors and IPM motors
- FR-A800-E Ethernet standard and FR-A800-P parallel versions are available

FR-F800 Series is a pump and fan control VFD that combines performance, accuracy and reliability with embedded Ethernet based communications to enhance overall system flexibility.

- Standard Ethernet communications including BacNet™/IP, Modbus® TCP/IP and CC-Link IE Field Basic
- Remote operation for commissioning, monitoring, or troubleshooting
- Drive-to-drive communications utilizing the internal PLC

FR-E800 Series designed to save energy, minimize costs, and bring together advances in quality, performance, and predictive maintenance capabilities in one multi-purpose micro-drive.

- Internal PLC saves panel space and allows for drive-to-drive communications
- Autotune to both IM (induction) and PM (permanent magnet) motors

FR-D700 Series class-leading range of micro drives are suitable for a wide variety of general purpose motor speed control applications.

- Highly compact design for a reduced installation footprint
- Safety drive capability eliminates the need for an extra contactor for operator safety

CONTROLLERS



iQ-R Series full featured control platform with fast processing speeds, network, and module synchronization, and multi-discipline control.

- 0.98 ns execution speed
- Multi-discipline control with up to 4 CPUs in a single rack

iQ-F Series cost effective compact control platform provides ease of use, functionality, and high performance in a small panel footprint.

- 34 ns execution speed
- Superior drive and motion control in a simple low cost design

MOTION



iQ-R Motion Module multi-core processors enable high-speed advanced motion control up to 256 servo axes on the iQ-R platform with CC-Link® IE TSN. Designed to execute advanced synchronous control functions and high speed registration, independent of PLC scan time, for maximum performance.

- 4, 8, 16, 32, 64, 128, and 256 control axes per module
- Utilize PLCopen® Motion Control Function Block library and simplify programming in a single environment with GXWorks3
- Execute complex operations with distributed load control
- Advanced motion control such as position control, speed control, torque control, synchronous control, and cam control

iQ-F Motion Module offers state-of-the-art motion performance on the iQ-F Series compact control platform. Combined with CC-Link IE TSN, the iQ-F motion module provides top-of-the-line features and performance for cost-sensitive solutions.

- 4 or 8 axes of synchronized motion
- Programing identical to iQ-F simple motion module
- Performs advanced motion control, such as positioning, synchronous, cam, and speed-torque control

SAFETY



Comprehensive Safety Solutions provide total safety by incorporating control devices, drive devices, and components required for safety systems.

- Integrated safety controller compliant with international safety standards ISO 13849-1 PL e and IEC 61508 SIL 3
- Servo safety solutions support STO, SS1, SS2, SOS, SBC, SLS, and SSM, compliant with Cat 4 PL e, SIL 3
- VFD safety solutions support PLd and SIL2 as standard, SIL3 supported on FR-A800 and FR-F800 Series

DIGITAL SOLUTIONS

GENESIS64 SCADA is a PC-based supervisory control and data acquisition software suite that improves the visibility of manufacturing operations. Graphical user interfaces, alarm and event management, and data logging and trending are core features supported by the GENESIS64 suite.

MELSOFT MaiLab is a data science/analytics tool that uses Maisart AI technology to enable non-specialists to easily analyze and diagnose factory data allowing for improved productivity, quality, and overall cost reduction.

Gemini is a 3D simulator software to virtually model machines and manufacturing processes. The software includes a library of ready-made 3D models, and custom 3D models that can be used to create a Digital Twin of your application.

Dispel provides unparalleled cybersecurity and is the leading solution for secure remote access and protecting critical infrastructure.

VISUALIZATION



GOT2000 Series HMI features a range of models to fit a variety of performance and screen size requirements.

- Top performance models offer gesture screen operation and options for multimedia, network, and I/O connectivity.
- Wide screen and open-frame options available
- Remote access available on many models

GOT Simple HMI provides an operator interface for systems that require cost-effective performance. The GS Series' built-in functionality provides a platform that enhances other Mitsubishi Electric components in the system with monitor tools, backup/restore of programs, and data transfer functions.

MELIPC Industrial PCs offer new value in edge computing, high-level IT system linkage, and device control in real time. These powerful, IoT-enabling computers bring your factory value to the next level and are available in several different models.

- WinCPU iQ-R rack based solution
- MI3000 panel IPC with touchscreen display

LOW VOLTAGE SWITCHGEAR & ENERGY MONITORING



Circuit Protection and Electrical Switching delivers superior performance in every application with a comprehensive range of electrical protection, isolation, and control products.

Energy Monitoring for achieving reduced energy operating costs and meeting corporate sustainability objectives.

- Multiple energy meter form factors, options, and networks to suit your application
- Software to collect, record, and offer insights into energy usage
- Specialized hardware to monitor/regulate common energy consumers on plant floor





SERVICES

Robot Diamond Assurance is a comprehensive 5-year extended warranty and preventive maintenance plan designed to maximize productivity and return-on-investment for robots and systems.

Repair for cleaning, diagnosing, and repairing your Robot, CNC, Servo, VFD, PLC, and HMI products. We back our repairs with a 1-year warranty.

Extended Warranties are available in 1 to 4-year increments for VFD, Servo, PLC, and HMI products sold. Products covered are eligible for immediate replacement should a failure occur during the warranty period.

Start-Up Services are performed by Mitsubishi Electric factory-trained Service Engineers to assure your investment is commissioned properly. Confirmation of correct installation, connections, parameters, and functionality on VFD, PLC, HMI, and Servo products.



ENGINEERED SOLUTIONS

Configured Robot Cells ARIA and LoadMate Plus™ satisfy a wide variety of applications, are available in a multitude of configurations, and are ideal solutions for machine tending, pick-and-place, light assembly, packaging, material handling and numerous other applications where robotic automation makes sense.

Configured Drives designed using Mitsubishi Electric components to create standard and custom drive panel systems for HVAC, pump & fan, heavy-duty, or general applications.

Custom Panels are complete panel systems designed and built to exact specifications for OEMs and systems integrators seeking a single-source solution. Utilizing Mitsubishi Electric's extensive engineering capability and product offering reduces supply chain complexity and assembly time by delivering a complete panel system that is tested and ready for installation.

Customized Products for custom labeling, packaged electromechanical solutions, and parameterization & programming services for OEMs requiring these value-added services.

Software Solutions to remotely monitor and manage your Mitsubishi Electric controlled CNC machine through our CNC Manager, IMA Adapter, and IMA Mobile software for maximized productivity. Mitsubishi Electric also designs and creates software solutions for OEMs and systems integrators requiring tailored software per a given application requirement.

Americas Offices

US

Mitsubishi Electric Automation, Inc.
500 Corporate Woods Parkway
Vernon Hills, Illinois 60061
847-478-2100

Canada

Mitsubishi Electric Automation, Inc.
4299 14th Avenue
Markham, Ontario L3R 0J2
905-754-3805

Mexico

Blvd. Miguel de Cervantes Saavedra 301
Col. Ampliación Granada, Miguel Hidalgo
CDMX, 11520, México



e-Factory



Mitsubishi Electric's e-F@ctory concept utilizes both FA and IT technologies, through collaboration with e-F@ctory Alliance Partners, to reduce the total cost of development, production, and maintenance, with the aim of achieving manufacturing that is a "step ahead of the times".

us.mitsubishielectric.com/fa/en

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