



for a greener tomorrow

RD77GF SIMPLE MOTION MODULE & MR-J4-GF-RJ SERVO WITH CC-LINK IE FIELD

Product Overview



The RD77GF Simple Motion Module for the iQ-R Series controller is capable of everything from simple point table operation to advanced Synchronous control, for complex applications in an easy to program solution. Combined with the CC-Link® IE Field compatible MR-J4-GF-RJ servo system, its superior speed and performance make it a great product to tackle a wide range of applications. This solution also provides excellent flexibility, reduced wiring, improved noise-immunity, and easy programming.

KEY BENEFITS:

- **Gigabit CC-Link IE Field Network** – Ethernet cable is simple and inexpensive. A single network simplifies machine design with high-speed communications, superior noise-immunity, reduced wiring, and excellent troubleshooting, diagnostics, and maintenance functions.
- **Superior motion performance** – Advanced Vibration Suppression Control II™, One-Touch Tuning™, 4 million pulse encoders, and 2.5 kHz speed frequency response reduces settling time and minimizes overshoot.
- **Two communications modes for maximum flexibility** – Motion mode allows multi-axis synchronous control with up to 32 axes per network. I/O mode allows single axis positioning with up to 120 servos per network. Mix and match motion and I/O mode axes in any combination as the application requires.
- **Advanced synchronous control** – Powerful motion functions including camming, gearing, and registration
- **Single software solution** – Configuration, programming, and diagnostics are fully integrated into GX Works 3
- **One-Touch Tuning™** – Fast, trouble free servo tuning that really works. Get optimum performance with no tuning experience necessary.
- **Advanced Vibration Suppression Control II™** – Suppress vibration both on the load and the machine base. Unique to the MR-J4 servo system, the ability to cancel both the load and machine base vibration means that rapid motion in one axis will not disturb product or affect the accuracy of another axis.
- **Safety over CC-Link IE Field** – Support safety function like STO, SS1, SS2, SOS, SLS, SBC, and SSM over network – less wiring, less maintenance.

Simple Motion Module and Servo System with CC-Link IE Field – Product Overview

OUTSTANDING PERFORMANCE

Improved machine efficiency – Mitsubishi Electric provides powerful first-class advanced One-Touch Tuning that sets gains and filters in real-time. Over the life cycle of the machine, continuous tuning optimizes gains to minimize settling time and eliminate positioning errors. As the machine ages, system longevity and machine efficiency are improved.

Reduce downtime – Vibration Tough Drive™ feature automatically reacts to changes in machine resonance frequency, reducing wear and tear on mechanical components. As mechanical components wear, the machine diagnosis function will detect changes in machine parts (ball screw, guide, bearing, belts) and changes in the vibration of the system.

22 bit high resolution encoder – 4,194,304 pulses per revolution provides high positioning accuracy and smooth velocity control. This technology also makes it possible to detect and correct even the slightest vibrations in the load and machine base.

Industry leading 2.5 kHz speed frequency response – High servo performance yields faster throughput speeds and decreased cycle times.

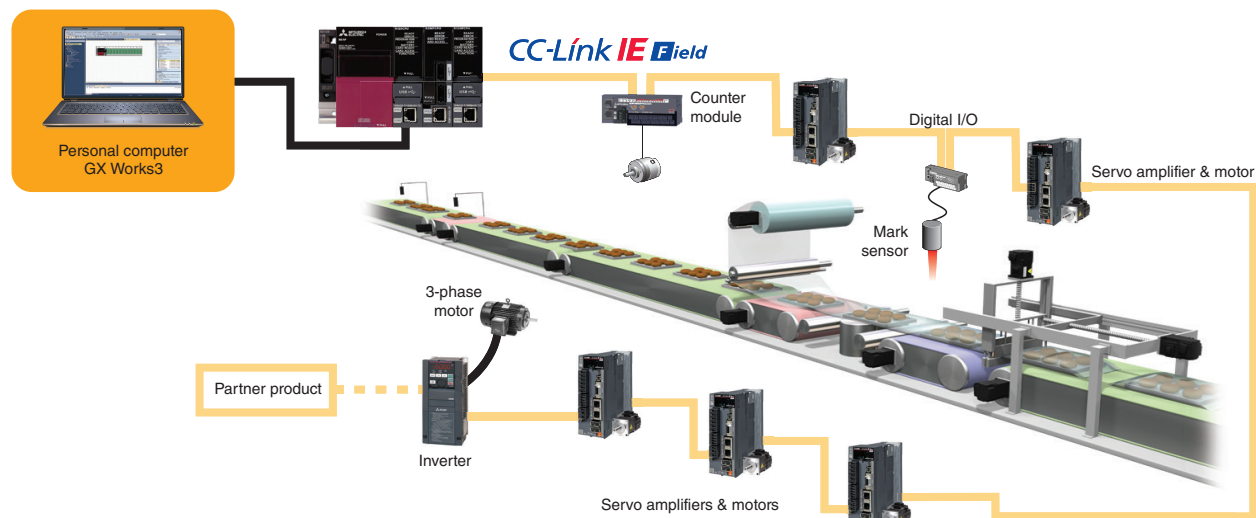
Gigabit CC-Link IE Field Network – Gigabit speeds provide 10x the speed of 100Mbps networks such as EtherCAT®, EtherNet/IP™, and PROFINET®.

INTUITIVE PROGRAMMING ENVIRONMENT

Graphical interface – Easily configure a system and set parameters in GX Works3 programming software.

Multiple programming languages – Multiple IEC 61131 programming languages are supported, and can even be used in the same project simultaneously. This flexibility allows the user to program in the most efficient manner for their application.

Motion setup tool – GX Works3 eliminates the need for additional software when using the Simple Motion Module.



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