



for a greener tomorrow

# MR-J4-TM MULTI-NETWORK SERVO WITH PROFINET

## Product Overview



The MR-J4-TM multi-network servo drive with PROFINET® and compatible motors is not your average servo solution. The MR-J4-TM leverages the high fidelity response of the flagship MR-J4 product line with ease of use, and solution integration of PROFINET. The MR-J4-TM is packed with advanced features to reduce maintenance requirements, improve machine speed and performance, and increase product quality.

### KEY BENEFITS:

- **PROFINET IO REAL TIME (RT)** – PROFINET IO Real Time (RT) Communications with PROFIdrive v4.1 profile and CiA 402 drive profile provides excellent compatibility with common controllers and easy system integration.
- **One-Touch Auto-Tuning™** – Fast, trouble free servo tuning that really works. Get optimum performance with no tuning experience necessary.
- **High speed update rates** – Communication cycles as fast as 250  $\mu$ s
- **Short settling times** – Industry-leading performance with 2.5 kHz speed frequency response
- **High resolution encoders** – High speed and accuracy with absolute 4,194,304 pulse/rev encoders
- **Advanced Vibration Suppression Control II™** – Suppress vibration both on the load and the machine base
- **Clean installation** – No additional motion controllers or protocol converters are required
- **Machine diagnosis function** – Avoid unnecessary downtime due to mechanical component wear and tear



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## OUTSTANDING PERFORMANCE

**Reduce downtime** – Vibration Tough Drive™ feature automatically readjusts when a change in machine resonance frequency is detected, reducing wear and tear on mechanical components and maintaining optimal performance. 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. The MR Configurator2 software analyzes the data to aid in scheduling preventative maintenance.

**Improve machine efficiency** – The MR-J4 servo drives feature advanced One-Touch Auto-Tuning that sets gains and filters in real-time. Over the life cycle of the machine, continuous tuning optimizes gains to minimize setting time and eliminate overshoot.

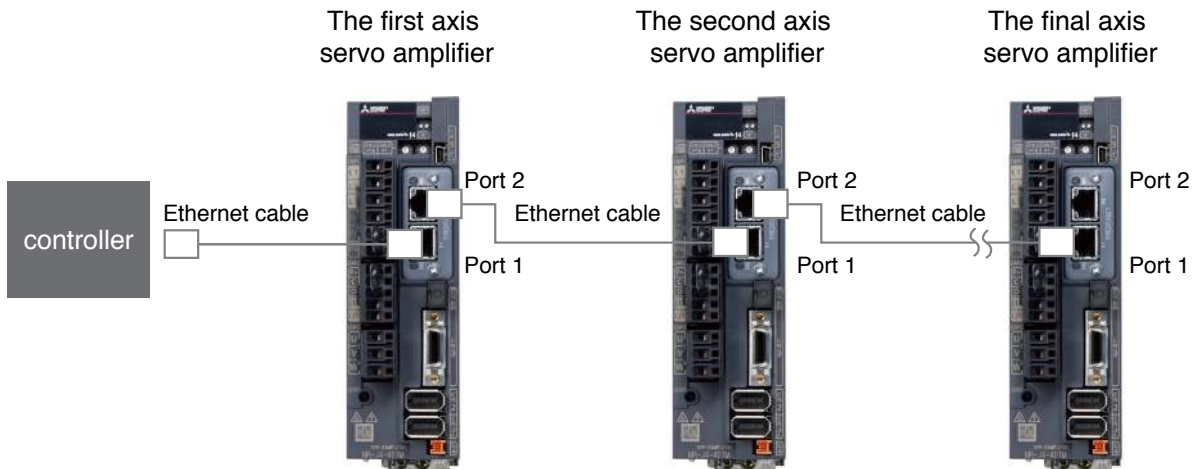
## IMPROVES SYSTEM PERFORMANCE AND EFFICIENCY

The MR-J4-TM brings the benefits of its high performance, ease of use, and quality you expect from Mitsubishi Electric. It improves system integration and flexibility with the open industrial real-time Profinet network.

## SUPPORTED MODES AND FUNCTIONS INCLUDE:

- PP – Profile Position mode
- PV – Profile Velocity mode
- TQ – Profile Torque mode
- HM – Homing mode

## PROFINET communications to MR-J4-TM Servo



PROFINET® is a registered trademark of PROFINET International (PI).

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L-VH-02051  
F72-155-SLSMKTG-004-\*