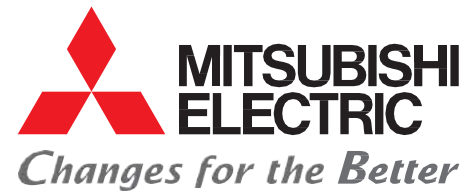




for a greener tomorrow



# General-Purpose AC Servo MELSERVO-JE Series Ethernet Compatible Servo Amplifier MR-JE-C 0.1 kW to 3 kW

August 2017

**New Product Release**  
SV1703-2E-A

CC-Link **IE** Field Basic

**SLMP**  
Seamless Message Protocol

MODBUS®/TCP



**eFactory**

## CC-Link IE Field Network Basic Compatible Servo Amplifier MR-JE-C

- CC-Link IE Field Network Basic realizes easier network integration, as its cyclic communications stack is softwarebased, without requiring a dedicated ASIC. Moreover, the MR-JE-C servo amplifiers make it easy to implement "e-F@ctory," Mitsubishi Electric's integrated solution to optimize factories.
- MR-JE-C has the basic performance and advanced ease-of-use of the MR-JE series. MR-JE-C is compatible with both pulse train command and analog voltage command, and supports absolute position detection system.
- MR-JE-C supports MODBUS®/TCP network\* which enables the master device to drive machines Ver.UP
- A capacity of 2 kW and 3 kW is newly added. MR-JE-C covers the capacity range of 0.1 kW to 3 kW in the 200V class. NEW

\* MODBUS®/TCP network is supported by MR-JE-C servo amplifier with software version A3 or later.

## CC-Link IE Field Network Basic

### Ethernet-based open network

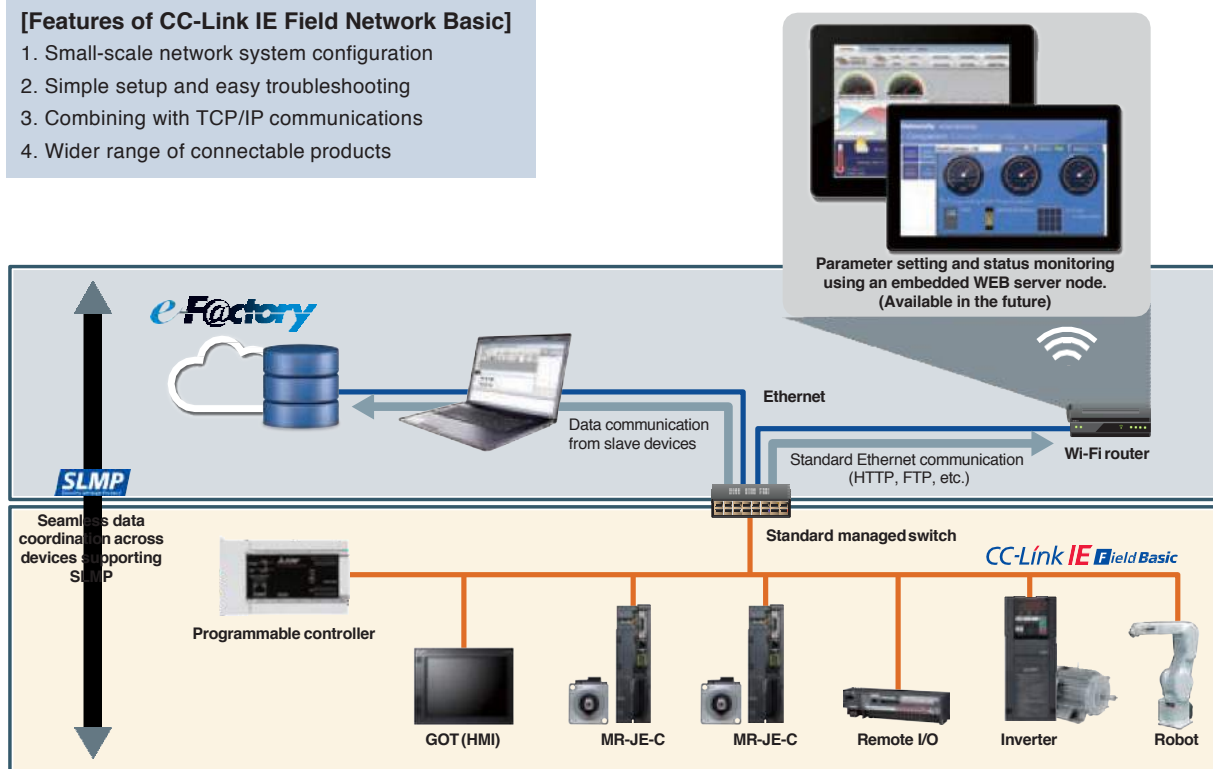
### e-F@ctory with MR-JE-C

CC-Link IE Field Basic

CC-Link IE Field Network Basic realizes easier network integration, as its cyclic communications stack is software-based, without requiring a dedicated ASIC. The network operates on the standard Ethernet protocol stack, which can be used together with TCP/IP communications (such as HTTP, FTP). This feature allows CC-Link IE Field Network Basic compatible products and Ethernet compatible products to be connected on the same Ethernet communications line, enabling a highly-flexible and low-cost system.

#### [Features of CC-Link IE Field Network Basic]

1. Small-scale network system configuration
2. Simple setup and easy troubleshooting
3. Combining with TCP/IP communications
4. Wider range of connectable products



### Seamless data coordination

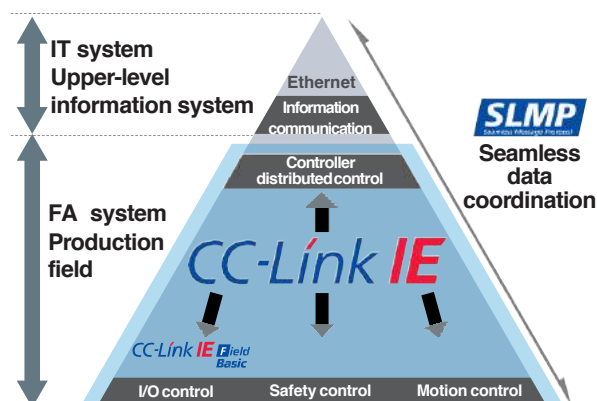
### Transparent Communications with Seamless Data Coordination

SLMP

Transparent communications are achieved by utilizing SLMP\* that enables seamless connectivity within all levels of manufacturing.

For example, power consumption and a result of machine diagnosis can be checked in the upper-level information system.

\* Seamless Message Protocol





## Features of MR-JE-C

### Profile mode

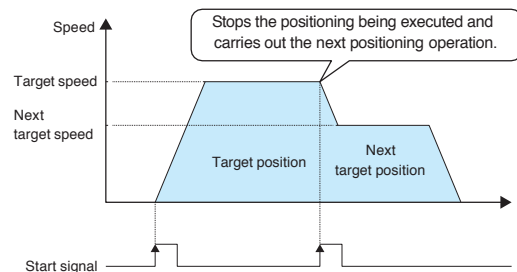
#### CiA 402 Drive Profile Operation

MR-JE-C servo amplifier supports CiA 402 drive profile.

- Profile position mode: pp
- Profile velocity mode: pv
- Profile torque mode: tq
- Homing mode: hm

The servo amplifier generates a command to a target position based on the target position and speed set in the master station, and starts positioning operation with a start signal.

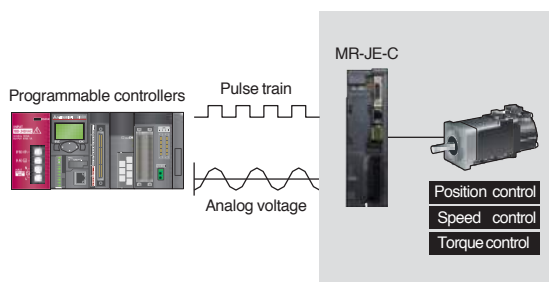
#### [Continuous operation example of profile position mode]



### Pulse train command/analog voltage command

#### Positioning Module

MR-JE-C supports Positioning modules (both differential and open-collector types) and enables position control by pulse train command and speed/torque control by analog voltage command.



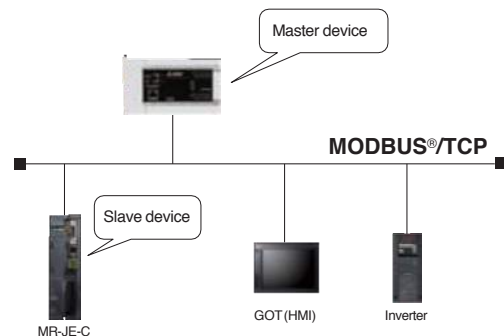
### MODBUS®/TCP

#### MODBUS®/TCP Network

Ver.UP

In addition to CC-Link IE Field Network Basic and SLMP, MODBUS®/TCP network is supported by MR-JE-C, and enables the master device to drive machines.

\* MODBUS®/TCP network is supported by MR-JE-C with software version A3 or later.



## Multi-axis System with MR-JE-C

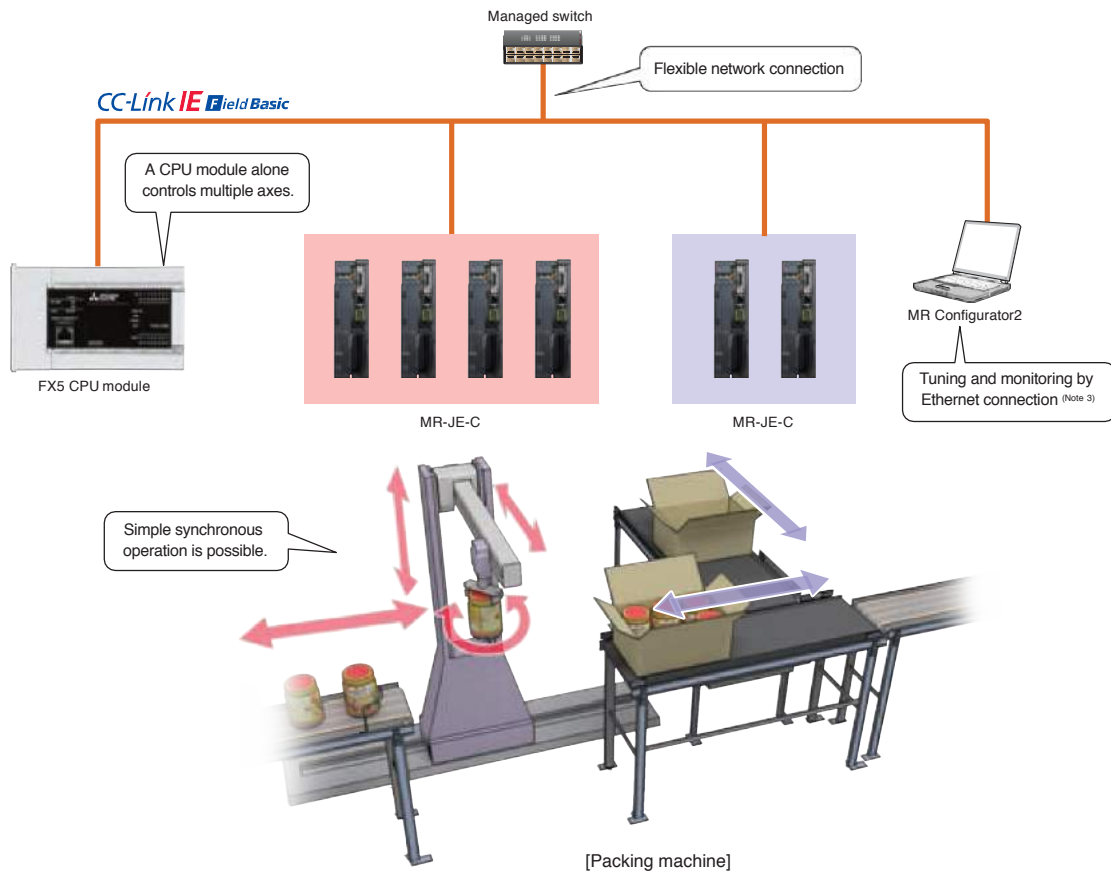
### Multi-axis system

### Configuring Multi-axis System Easily

CC-Link IE **Field Basic**

A system configured with CC-Link IE Field Network Basic has following features:

- Flexible network connection is configured easily using a managed switch.  
(Network topology: Star topology, Maximum station-to-station distance: 100 m <sup>(Note 1)</sup>)
- An FX5 CPU module alone controls multiple axes. <sup>(Note 2)</sup>
- Simple synchronous operations including horizontal, vertical, and rotational movements are possible with a start signal to **a** axes via cyclic transmission.
- Tuning, monitoring, diagnosing, reading/writing parameters, and test operations are enabled with a personal computer (MR Configurator2) connected via Ethernet. <sup>(Note 3)</sup> **Ver.UP**



### [Application examples]

Packing machines, packaging machines, material handling systems, and parts assembly machines

- Notes:
1. For the maximum station-to-station distance, contact manufacturers of the managed switch to be used.
  2. For the maximum number of axes to be connected, refer to the relevant instruction manuals of the master station to be used.
  3. Ethernet communication is supported by MR-JE-C servo amplifier with software version A3 or later and MR Configurator2 with software version 1.68W or later.

## Compliance with Global Standard and Regulations

Use the MR-JE-C servo amplifiers globally. The servo amplifiers and the servo motors comply with global standards as standard.



### Servo amplifier

European EC directive	Low voltage directive	EN 61800-5-1
	EMC directive	EN 61800-3 Category C3
	RoHS directive	EN 50581
UL standard		UL 508C
CSA standard		CSA C22.2 No.14
Measures for Administration of the Pollution Control of Electronic Information Products (Chinese RoHS)		Compliant (Names and the content of hazardous substances are described in Instruction Manuals.)
China Compulsory Certification (CCC)		N/A
Korea Radio Wave Law (KC)		Compliant
Certification system of the Eurasian Economic Union (EAC)		Compliant



### Rotary servo motor

European EC directive	Low voltage directive	EN 60034-1
	EMC directive	EN 61800-3 Category C3
	RoHS directive	EN 50581
UL standard		UL 1004-1 / UL 1004-6
CSA standard		CSA C22.2 No.100
Measures for Administration of the Pollution Control of Electronic Information Products (Chinese RoHS)		Compliant (Names and the content of hazardous substances are described in Instruction Manuals.)
China Compulsory Certification (CCC)		N/A
Korea Radio Wave Law (KC)		N/A
Certification system of the Eurasian Economic Union (EAC)		Compliant

## Related Catalogs



Servo Amplifiers & Motors  
MELSERVO-JE Catalog  
L(NA)03086ENG



CC-Link IE  
Field Network Basic  
Compatible Products  
N001ENG-A