Oriental Motor

FA Network Compatible Products

FA NETWORK

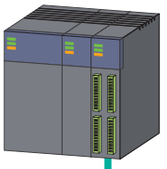
COMPATIBLE PRODUCTS

FA Network Compatible Products can Handle a Wide Variety of Equipment Design Requirements.

There are two main types of Oriental Motor FA Network-compatible products.
“FA Network direct connection type” and “Gateway connection type”.
Highly versatile Modbus (RTU) communication is also supported.

➜ P.6 Usage Examples for FA Network-Compatible Products

Product Line for FA Network-Compatible Products



Host Master Equipment
Various FA Network Communication Units

Various FA-Network Communication

EtherCAT
SSCNETIII/H
SERVO SYSTEM CONTROLLER NETWORK
MECHATROLINK

EtherCAT
PROFINET
CC-Link
EtherNet/IP

Multi-axis Driver (Maximum 4)

αSTEP
- **AZ** Series
- Actuators Equipped with **AZ** Series

Single-axis Driver

EtherCAT
αSTEP
- **AZ** Series
- Actuators Equipped with **AZ** Series

EtherNet/IP
αSTEP
- **AZ** Series
- Actuators Equipped with **AZ** Series

CC-Link
Brushless Motors
- **BLE** Series

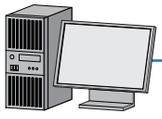
FA Network Direct Connection Type

Control from a variety of host devices is possible using Modbus (RTU)

PLC
Serial Communication Module

Touch Screen
(Panel Computer)

PC



Serial Communication Board

Modbus (RTU)
Modbus (RTU)
Modbus (RTU)

Modbus (RTU) Communication

EtherCAT CC-Link MECHATROLINK

Network Converters (Gateway)

FLEX Built-in Controller Driver (RS-485 Communication Compatible)
Pulse Input Driver with RS-485 Communication
Maximum Connection 16 Axes

αSTEP Stepper Motors
- AZ Series
- AR Series
- RKII Series

Electric Linear Slides
- EAS Series
- EZS Series

Electric Gripper
- EH Series

Compact Electric Cylinders
- DRS2 Series
- DR Series

Rack-and-Pinion System
- L Series

Hollow Rotary Actuators
- DGII Series

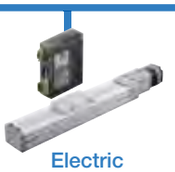
Brushless Motors
- BLE Series
- BLV Series

(Maximum 12 axes)

Gateway Connection Type

FLEX Built-in Controller Driver (RS-485 Communication Compatible) Maximum Connection 31 Axes
Pulse Input Driver with RS-485 Communication

αSTEP Stepper Motors



Electric Linear Slides

Electric Cylinders

Compact Electric Cylinders

Rack-and-Pinion System

Hollow Rotary Actuators

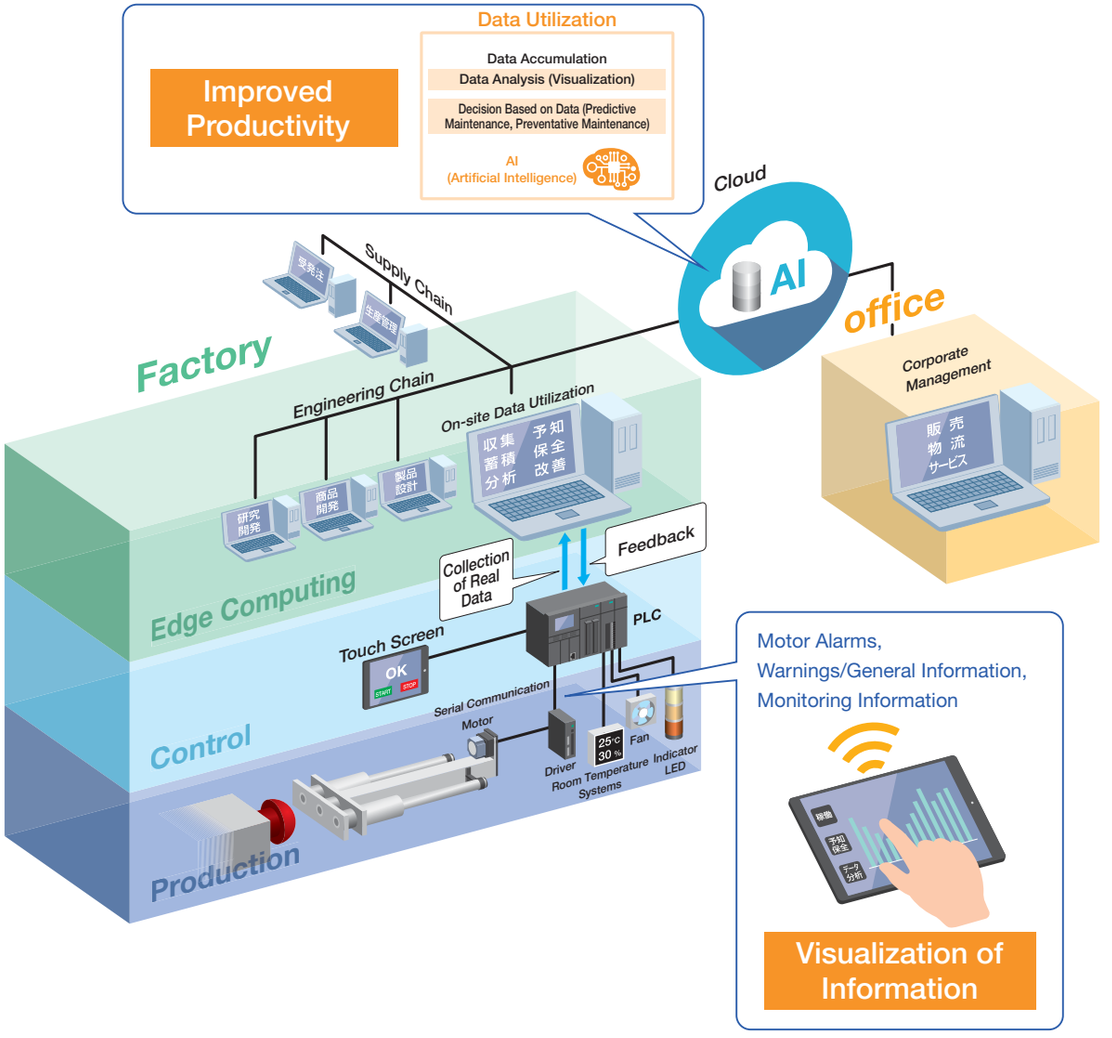
Brushless Motors

Modbus (RTU) Communication Type

Contributes to Analysis of Conditions

Increased productivity is sought in manufacturing plants. At the same time, it is imperative to continue utilizing the knowledge of human experience through the use of Artificial Intelligence (AI). In order to use AI, it is important to collect, digitize and analyze the day to day “changes in conditions". Oriental Motor has created a wide lineup of products capable of outputting the various changes in conditions of motors.

System Overview



Demonstrations of Predictive Maintenance and IoT can be Viewed on Our Website.

www.orientalmotor.com/videos/index.html

List of Alarms, Warnings/General Information and Monitors for Each Series

The monitoring functions, which contribute to analysis, are introduced below. For details, check the operating manual for each product.

●Stepper Motors

Series Name / Type		**CVD** Series RS-485 Communication	**RKII** Series Built-in Positioning Function	**αSTEP AR** Series Built-in Controller	**αSTEP AZ** Series Built-in Controller Pulse Input with RS-485 Communication EtherNet/IP Compatible EtherCAT Drive Profile Compatible
Monitoring	Positioning	○*1	○*2	○	○
	Speed	○*1	○*1	○	○
	Torque/Load	–	–	–	○
	Integrating Load	–	–	–	○
	Motor Temperature	–	–	–	○
	Driver Temperature	○	–	–	○
	Distance Traveled Integrating Distance Traveled	○	–	–	○
Warning/ General Information	Overflow	–	○*3	○	○
	Overspeed	–	–	○	○
	Overload	–	–	○	○
	Integrating Load	–	–	–	○
	Motor Overheat	–	–	–	○
	Driver Overheat	○	○	○	○
	Distance Traveled Integrating Distance Traveled	○	–	–	○
Alarm	Overflow	–	○*3	○	○
	Overspeed	–	–	○	○
	Overload	–	–	○	○
	Motor Overheat	–	–	–	○
	Driver Overheat	○	○	○	○

*1 Only the command values can be monitored.
*2 For products with an encoder, the command value and the encoder counter value can be monitored.
*3 Only for products with an encoder

●Brushless Motors

Series Name / Type		**BLE** Series RS-485 Communication	**BLV** Series	**BLH** Series RS-485 Communication Type Digital Setting
Monitoring	Torque/Load	○*1	○*1	○*1
	Speed	○*2	○*2	○*2
	Position Regulation	–	–	–
	Driver Temperature	–	–	○*3
Warning/ General Information	Motor Lock/Overload	○	○	○
	Overspeed	○	–	○
	Overflow	–	–	–
	Driver Overheat	○	○	○
	Distance Traveled Integrating Distance Traveled	–	–	○
Alarm	Motor Lock/Overload	○	○	○
	Overspeed	○	○	○
	Overflow	–	–	–
	Motor Overheat	–	–	–
	Driver Overheat	○	○	○

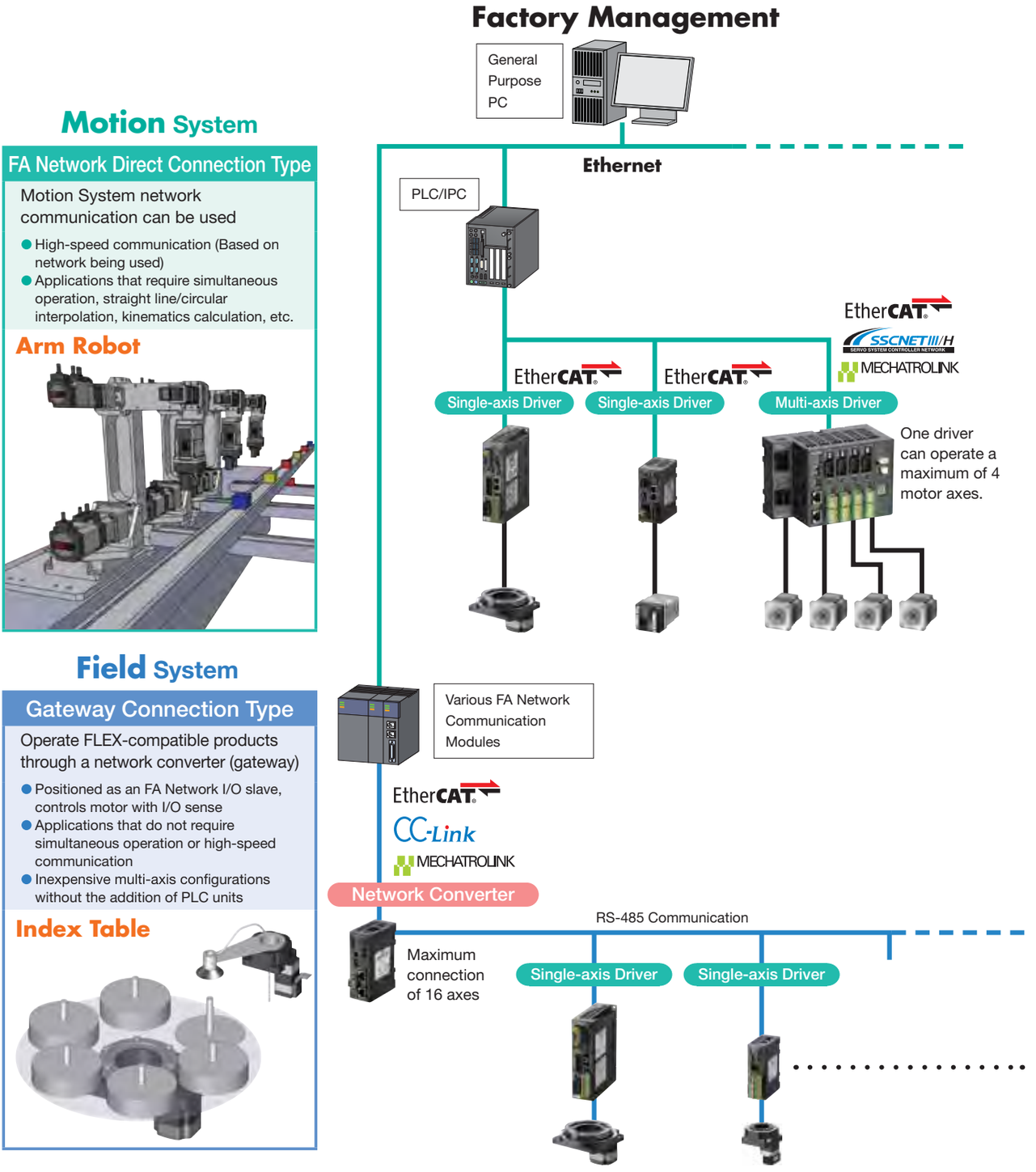
*1 Can be monitored using Support Software **MEXE02** or RS-485 communication.
*2 Can be monitored using SPEED OUT output or Support Software **MEXE02**.
*3 Requires Support Software **MEXE02**.

Usage Examples for FA Network-Compatible Products

Application cases for the FA Network Direct Connection Type and the Gateway Connection Type will be introduced below.

Capabilities of Network Products

- Setting of operating data from the network and overwriting of data at any time
- Implementation of the monitoring necessary for analysis



● What is a **Motion** System? Applications that require linear/circular interpolation, kinematics calculations or complicated calculation processing
High-speed communication is necessary for simultaneous/synchronized operation of multiple motors.

● What is a **Field** System? Applications that do not require simultaneous/synchronized operation and can be positioned as an I/O slave within an FA Network
High-speed communication is not necessary.

Field System

FA Network Direct Connection Type

Can use Motion System network communication and it can be controlled from PC

- Positioned as an FA Network I/O slave, controls motor with I/O sense
- Applications that do not require simultaneous operation and high-speed communication
- Inexpensive multi-axis configurations without the addition of PLC units

Conveyor

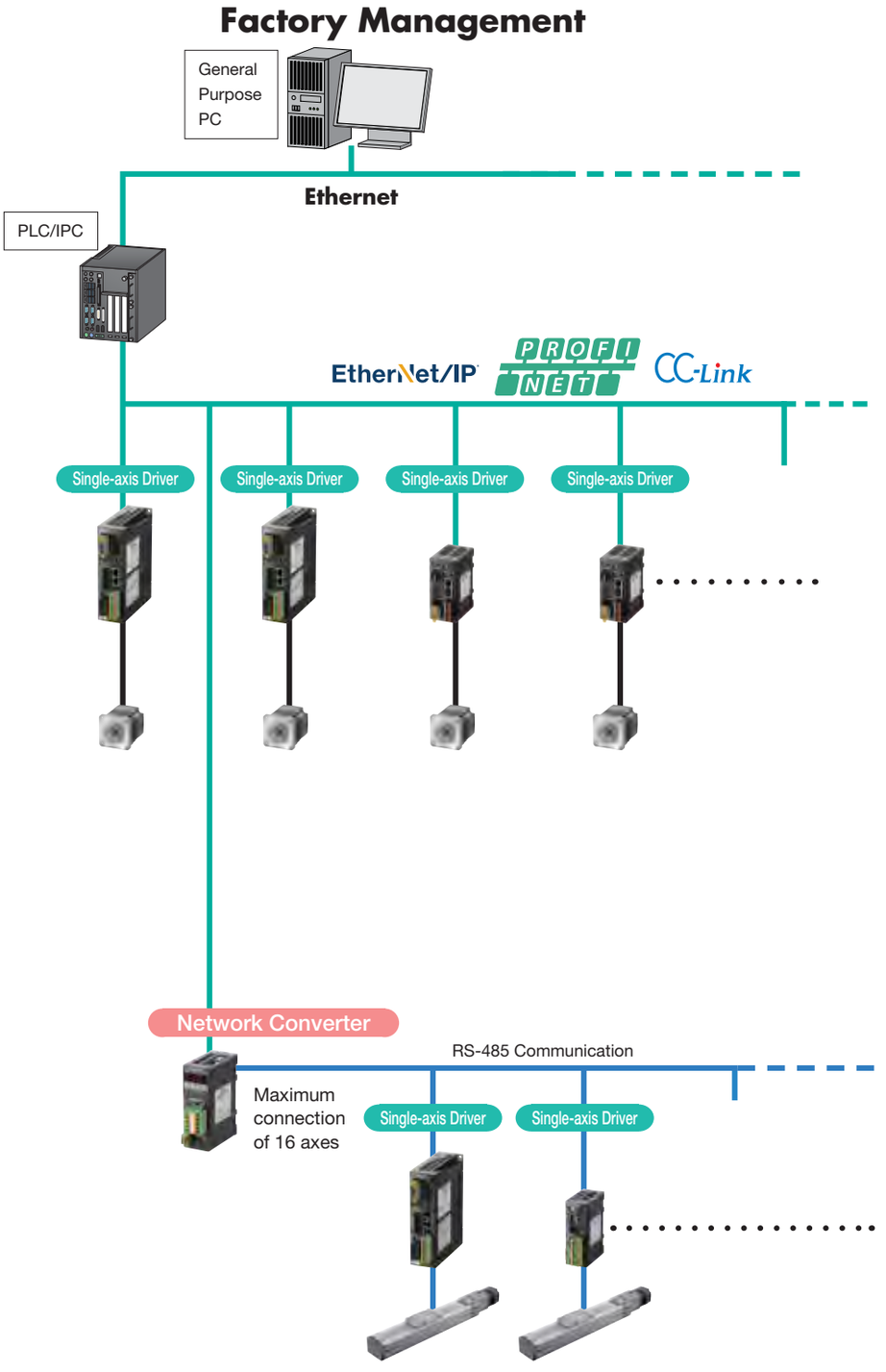
Field System

Gateway Connection Type

Operate FLEX-compatible products through a network converter (gateway)

- Positioned as an FA Network I/O slave, controls motor with I/O sense
- Applications that do not require simultaneous operation and high-speed communication
- Inexpensive multi-axis configurations without the addition of PLC units

X-Y



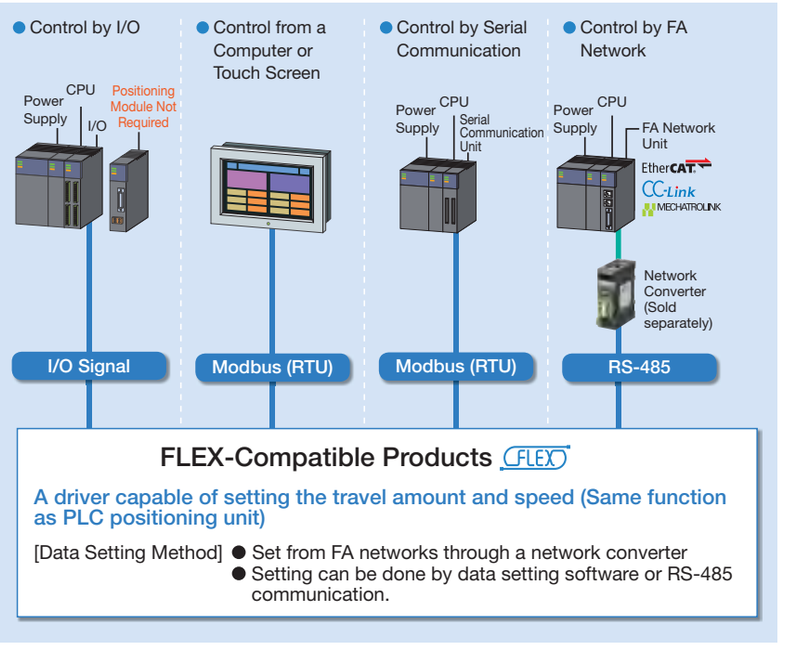
What is FLEX?

What is FLEX?

FLEX is the collective name for products that support I/O control, Modbus (RTU) control, and FA network control via network converters. These products enable simple connection and simple control, and shorten the total lead time for system construction. The FLEX logo in the series name indicates the applicable products.

Advantages

Because operation data is set and stored in the driver (positioning function is built-in), a PLC positioning module is not required, and system configuration is simple for multi-axis control.



A Tool to Make All Data Setting Easy

● Support Software MEXE02 (Free Download)

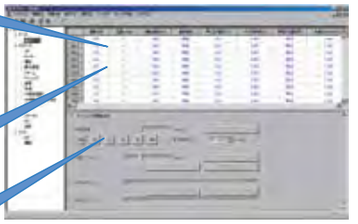
Easy to use, even for people with no electrical design experience

Fundamental settings, such as editing operation data and parameter settings, can be performed easily from a computer.
Sequence control is possible, which allows for easy system configuration without a host sequence.

This is a function that allows the traveling amount, speed, etc. to be displayed and input in the designated units

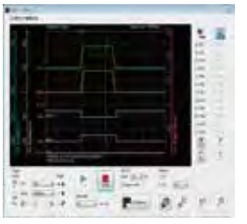
Simplified program with simple sequence function

Settings can be copied and backed up



Easy to understand and easy to use
Intuitive usability

Teaching can be performed from a PC



Built-in waveform monitor that can check signal input status

● Control Module OPX-2A (Sold Separately)

Startup data setting and operation checks can be performed, even without a computer. Suitable for on-site I/O check operation monitoring and setting changes.

● Touch Screen (Commercially Available)

Operating data can be directly overwritten from the touch screen normally used for monitoring. This is useful for monitoring operation status and when settings must be changed due to set-up changes.

System Configuration Examples

I/O Control

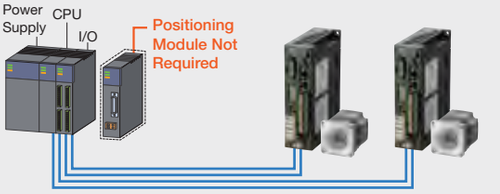
Operation data (travel amount, speed, etc.) is set in the driver in advance. When a signal is input from the directly connected PLC, operation is performed using the setting data. A positioning module and pulse generator are not necessary, thus saving space and simplifying the system.

This kind of configuration is possible ▶

Switch Box

Use of switches instead of PLC. Execute operation data directly from I/O.

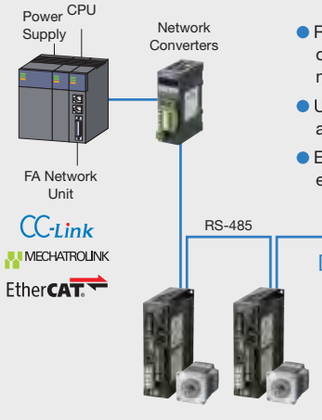
Easy Control | Low-Cost Design | Space Saving



FA Network Control Via Network Converter

All FA network types are supported when a network converter is used. The setting of operating data and operation commands input is performed from the network. Multiple motors can be connected to and controlled by a single converter without the need to increase the number of host masters, contributing to a reduction in total costs.

Easy Control | Simple Wiring | Multi-Axis Control at Low Cost



- Reduces the increase of master devices when multiple units are in use
- Unified control of motors and actuators
- Easy control with I/O sense, even over a network

[Linking of Multiple Drivers]
Maximum 16 axes

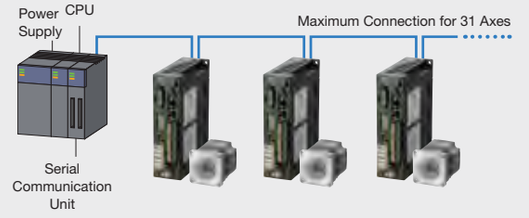
Connection guides have been prepared when communicating using the PLCs and FA network from the following manufacturers. (Download)

- OMRON Corporation
- Yaskawa Electric Corporation
- Mitsubishi Electric Corporation
- Keyence Corporation
- Hitachi Industrial Equipment Systems Co.,Ltd.
- Fuji Electric Co., Ltd.

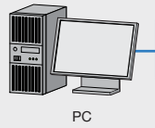
Modbus (RTU) Control

RS-485 communication can be used to set operating data and parameters, as well as input operation commands. The protocol is Modbus (RTU) compatible, and can be easily controlled from a PLC or other device.

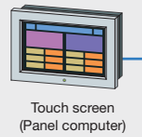
Easy Control | Simple Wiring | Supports Serial Modules of Various Manufacturers



▼ This configuration is also possible



Mount an RS-485 communication board in a computer to carry out setting and operation, instead of using a PLC.



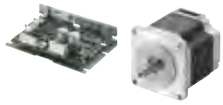
Direct connection to a touch screen instead of using a PLC. Setting operation data and parameters, checking alarm history and trial runs are possible, making a PLC unnecessary.

Usable screen samples and operating manuals have been prepared when the touch screens from the following manufacturers are connected. (Download)

- Schneider Electric Co., Ltd.
- Mitsubishi Electric Corporation
- Keyence Corporation
- Hakko Electronics Co., Ltd

FA Network Direct Connection-Compatible Products

Products that can be connected directly to an FA Network master device

Series Name	Features	Motor Types	FA Network
αSTEP **AZ** Series • Actuators Equipped with **AZ** Series Network-compatible multi-axis drivers DC Input 	● Automatic control that combines the tuning-free, high responsiveness of open loop control with the position correction and constant status monitoring function of closed loop control ● High performance ● Reduces return-to-home time and allows for motion control without the use of external sensors (Built-in battery-free absolute sensor)	[Motor Size] □20 (0.79)/□28 (1.10)/□30 (1.18)/ □40 (1.57)/□42 (1.65)/□60 (2.36)/ □85 (3.35)/□90 (3.54) [Geared Motor Types] **TS**/**PS**/**HPG**/Harmonic Geared Right-Angle **FC** Geared [Actuator Types] ● Electric Linear Slides **EAS** Series ● Electric Linear Slides **EZS** Series ● Electric Cylinders **EAC** Series ● Compact Electric Cylinders **DRS2** Series ● Compact Electric Cylinders **DR** Series ● Hollow Rotary Actuators **DGII** Series ● Rack-and-Pinion System **L** Series ● Electric Gripper **EH** Series	SSCNETIII/H SERVO SYSTEM CONTROLLER NETWORK MECHATROLINK (MECHATROLINK-III) EtherCAT.
αSTEP **AZ** Series • Actuators Equipped with **AZ** Series EtherNet/IP-compatible EtherCAT drive profile-compatible AC Input DC Input 			EtherCAT. EtherNet/IP PROFINET
Brushless Motors **BLE** Series CC-Link-Compatible AC Input 	● Speed control and torque control are possible ● Speed control range: 80 to 4000 r/min Speed regulation with respect to the load: ±0.2% ● Wide product lineup for output power, gearheads and options	[Motor Output Power] 30 W (1/25 HP)/60 W (1/12 HP)/ 120 W (1/6 HP) [Combination Type] ● Parallel Shaft Gearhead ● Hollow Shaft Flat Gearhead	CC-Link (Ver.1.1)
Brushless Motors **BLH** Series RS-485 Communication Type DC Input 		[Motor Output Power] 15 W (1/50 HP)/30 W (1/25 HP)/ 50 W (1/15 HP) [Combination Type] ● Parallel Shaft Gearhead ● Hollow Shaft Flat Gearhead	**Modbus** (RTU)
Stepper Motors **PKP** Series / Driver for stepper motors **CVD** Series RS-485 Communication Type DC Input 	● A combination of the compact **CVD** Series stepper motor driver capable of high current operation with the compact, high torque **PKP** Series stepper motor ● High efficiency motor, decreased heat generation ● Full-time micro step operation with digital control	[Motor Size] 2-Phase: □20 (0.79)/□28 (01.10)/ □35 (1.30)/□42 (1.65)/ □50 (1.97)/□51 (2.00)/ □56.4 (2.22)/□60 (2.36)/ □61 (2.40) 5-Phase: □20 (0.79) (**PK** Series)/ □28 (1.10)/□42 (1.65)/ □60 (2.36) [Geared Motor Types] 2-Phase: **SH**/**CS** Geared, With Harmonic Gear 5-Phase: **TS** Geared Type	**Modbus** (RTU)

Network Converter

Connects FLEX-Compatible Products to FA Networks

Network converters convert the various FA Network communication protocols to Oriental Motor's original RS-485 communication protocol.
Using a network converter makes it possible to control Oriental Motor FLEX-compatible products (RS-485 communication-compatible) using all types of FA Network communication.

● Multi-Axis Connection is Possible

Product Name	Communication Protocol	Maximum Number of Connectable Units	Setting Method for Converter			
 **NETC02-CC**	CC-Link Ver. 2 Compatible	16	Body Control Panel	Support Software **MEXE02** (Free download) 	USB Cable Standard: USB2.0 (Full Speed) Type: A to mini B	–
 **NETC01-CC**	CC-Link Ver. 1.1 Compatible	12	CC-Link Communication		Support Software Communication Cable **CC05IF-USB** (Sold separately) 	Control Module* **OPX-2A** (Sold separately) 
 **NETC01-M2**	MECHATROLINK (MECHATROLINK-Ⅱ)	16	–			
 **NETC01-M3**	MECHATROLINK (MECHATROLINK-Ⅲ)		–			
 **NETC01-ECT**	EtherCAT		EtherCAT Communication			

*The control module can also be used as a scan-time monitor during communication.

Gateway Connection Type FLEX-Compatible Products

αSTEP AZ Series with Built-In Battery-Free Absolute-Sensor

Series Name	Features	Motor Types	FA Network
αSTEP **AZ** Series AC Input DC Input 	● Automatic control that combines the tuning-free, high responsiveness of open loop control with the position correction and constant status monitoring function of closed loop control ● Reduces return-to-home time and allows for motion control without the use of external sensors ● Number of positioning points: 256 points	● AC Input [Motor Size] □40 (1.57)/□42 (1.65)/□60 (2.36)/ □85 (3.35)/□90 (3.54) [Geared Motor Type] **TS**/**PS**/**HPG**/Harmonic Geared Type Right-Angled **FC** Geared ● DC Input [Motor Size] □20 (0.79)/□28 (1.10)/□30 (1.18)/ □40 (1.57)/□42 (1.65)/□60 (2.36) [Geared Motor Type] **TS**/**PS**/**HPG**/Harmonic Geared Type Right-Angle **FC** Geared	Connection to FA Network via Network Converter or **Modbus** (RTU)
Electric Linear Slides **EZS** Series AC Input DC Input 	Linear slide that combines the **AZ** Series with a ball screw and guide from THK. ● Simple dust proofing function, clean room compatible ● Slim dimensions ● Stroke: 50 to 850 mm ● Max. Speed: 800 mm/s ● Maximum Transportable Mass - Horizontal: 60 kg (132.3 lb) ● Maximum Transportable Mass - Vertical: 30 kg (66.1 lb) ● Thrust: 400 N	● Straight Type **EZS3**, **EZS4**, **EZS6** ● Reversed Type **EZS3**, **EZS4**, **EZS6** ● Cleanroom compatible **EZS3**, **EZS4**, **EZS6**	
Electric Cylinders **EAC** Series AC Input DC Input 	Electric cylinder that combines the **AZ** Series with a ball screw and guide from THK. ● Stroke: 50 to 300 mm ● Max. speed: 600 mm/s ● Maximum Transportable Mass - Horizontal: 60 kg (132.3 lb) ● Maximum Transportable Mass - Vertical: 30 kg (66.1 lb) ● Thrust: 400 N	● Straight Type **EAC2**, **EAC4**, **EAC6** *__EAC2__ is DC input only ● Reversed Type **EAC4**, **EAC6**	
Compact Electric Cylinders **DR** Series DC Input 	Integration of an **AZ** Series motor with a ball screw saves space and reduces wiring. Optimized for providing linear motion micro-movements and high positioning accuracy applications. Push-motion operation is also possible. * ● Minimum Traveling Amount: 0.001 mm ● Repetitive Positioning Accuracy: ±0.003 mm ● Maximum Transportable Mass - Horizontal: 4 kg (8.8 lb) ● Maximum Transportable Mass - Vertical: 4 kg (8.8 lb) ● Max. Speed: 100 mm/s *□28 mm lead 2.5 mm only	● Wide Table Type □28 mm ● Table Type □20/□28 mm ● Type with a Guide □28 mm ● Rod Type □20/□28 mm	
Compact Electric Cylinders **DRS2** Series DC Input 	Integration of an **AZ** Series motor with a ball screw saves space and reduces wiring. Optimized for providing linear motion micro-movements and high positioning accuracy applications. Push-motion operation is also possible. ● Minimum Traveling Amount: 0.001 mm ● Repetitive Positioning Accuracy: Ground ball screw: ±0.003 mm Rolled ball screw: ±0.01 mm ● Maximum Transportable Mass (Horizontal/Vertical) 50 kg (110.2 lb) ● Max. Speed: 200 mm/s	● Type with a Guide □42 mm ● Type without a Guide □42/□60 mm	

Series Name	Features	Motor Types	FA Network
Electric Gripper **EH** Series DC Input 	This is an electric gripper that combines the **AZ** Series with a rack-and-pinion mechanism. A delicate “grasp” is possible at low-speed operation by adjusting the running current. ● Max. Holding Force: 25 N ● Repetitive Positioning Accuracy (One side): ±0.02 mm ● Backlash (one side): 0.1 mm ● Stroke: 25 mm ● Minimum Traveling Amount: 0.02 mm ● Max. Speed: 156 mm/s	**EH4**	Connection to FA Network via Network Converter or **Modbus** (RTU)
Rack-and-Pinion System **L** Series AC Input 	These are linear & rotary actuators that combine a rack-and-pinion mechanism with a linear motor. ● High Transportable Mass/Long Stroke ● Stroke: 100 to 1000 mm ● Max. Speed: 500 mm/s ● Maximum Transportable Mass: 100 kg (220.5 lb)	● Horizontal (B Type) ● Vertical (F Type)	
Hollow Rotary Actuators **DGII** Series AC Input DC Input 	The **AZ** Series has been integrated with a large aperture hollow rotary table. ● Useful for Index Operations ● Attach Work Piece Directly to Table, Use Hollow Area for Piping ● Reduced Return-to-Home Time	● Cross-Roller Bearing □85/□130/□200 mm ✻200 mm is AC input only ● Deep-Groove Ball Bearing □60 mm ✻DC power supply input only	

Gateway Connection Type FLEX-Compatible Products

αSTEP AR Series

Series Name	Features	Motor Types	FA Network
αSTEP **AR** Series AC Input DC Input 	● Automatic control that combines the tuning-free, high responsiveness of open loop control with the position correction and constant status monitoring function of closed loop control ● High Efficiency Motor ● IP65-rated Motor ● SEMI47-Compatible ● Number of Positioning points: 64 points	● **AC Input** [Motor Size] □42 (1.65)/□60 (2.36)/□85 (3.35)/□90 (3.54) [Geared Motor Type] **TH**/**PS**/**PN**/Harmonic Geared Type Right-Angle Shaft **FC** Geared ● **DC Input** [Motor Size] □20 (0.79)/□28 (1.10)/□30 (1.18)/□42 (1.65)/□60 (2.36)/□85 (3.35)/□90 (3.54) [Geared Motor Type] **TH**/**PS**/**PN**/Harmonic Geared	Connection to FA Network via Network Converter or **Modbus** (RTU)
Electric Linear Slides **EAS** Series AC Input DC Input 	This is a standard type linear slide that combines the **AR** Series with a ball-screw and guide from THK. ● Stroke: 50 to 850 mm ● Max. Speed: 800 mm/s ● Maximum Transportable Mass - Horizontal: 60 kg (132.3 lb) ● Maximum Transportable Mass - Vertical: 30 kg (66.1 lb) ● Thrust: 400 N	● Straight Type **EAS2**, **EAS4**, **EAS6** ✻**EAS2** is DC input only ● Reversed Type **EAS4**, **EAS6**	
Electric Cylinders **EAC** Series AC Input DC Input 	This is an electric cylinder that combines the **AR** Series with a ball-screw and guide from THK. ● Stroke: 50 to 300 mm ● Max. Speed: 600 mm/s ● Maximum Transportable Mass - Horizontal: 60 kg (132.3 lb) ● Maximum Transportable Mass - Vertical: 30 kg (66.1 lb) ● Thrust: 400 N	● Straight Type **EAC2**, **EAC4**, **EAC6** ✻**EAC2** is DC input only ● Reversed Type **EAC4**, **EAC6**	
Hollow Rotary Actuators **DGII** Series AC Input DC Input 	The **AR** Series has been integrated with a large aperture hollow rotary table. ● Useful for Index Operations ● Attach Work Piece Directly to Table, Use Hollow Area for Piping	● Cross-Roller Bearing □85/□130/□200 mm ✻AC Input only ● Deep-Groove Ball Bearing □60 mm ✻DC input only	

Stepper Motor Open Loop Control

Series Name	Features	Motor Types	FA Network
Stepper Motors **RKII** Series AC Input 	This is a newly-designed 5-phase motor that utilizes a full-time microstepping driver with full digital control. ● High Efficiency Motor ● Low Vibration and Reduced Noise ● Compact AC Input Driver ● Misstep Detection via Encoder ● Number of Positioning Points: 64 points	[Motor Size] □42 (1.65)/□60 (2.36)/□85 (3.35)/□90 (3.54) [Geared Motor Type] **TS**/**PS**/Harmonic Geared Right-Angle Shaft **FC** Geared	Connection to FA Network via Network Converter or **Modbus** (RTU)

Brushless Motors

Series Name	Features	Motor Types	FA Network
Brushless Motors **BLE** Series RS-485 Communication Type AC Input 	● Speed Control, Torque Limiting ● Speed Control Range: 80 to 4000 r/min Speed Regulation with Respect to the Load: ±0.2% ● Wide Lineup of Output Power, Gearhead and Options	[Motor Output Power] 30 W (1/25 HP)/60 W (1/12 HP)/120 W (1/6 HP) [Combination Type] Parallel Shaft Gearhead Hollow Shaft Flat Gearhead	Connection to FA Network via Network Converter or **Modbus** (RTU)
Brushless Motors **BLV** Series DC Input 		[Motor Output Power] 100 W (1/18 HP)/200 W (1/4 HP)/400 W (1/2 HP) [Combination Type] Parallel Shaft Gearhead Hollow Shaft Flat Gearhead Round Shaft	

EtherCAT

EtherCAT is an Ethernet (IEEE802.3)-compliant, open, high-speed, industrial network system.

●EtherCAT® is a registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany.

EtherNet/IP

EtherNet/IP is the open field network promoted by ODVA (Open DeviceNet Vendor Association, Inc.)

●EtherNet/IP is a trademark of ODVA.

CC-Link

CC-Link (Control&Communication Link) is the open field network promoted by CC-Link Partner Association.

●CC-Link is a registered trademark of CC-Link Partner Association.

Modbus (RTU)

Modbus is the open field network with Modbus Protocol installed. Modbus is used widely in the fields of factory and process automation because its protocol specification is open to the public and it is very simple.

●Modbus is a registered trademark of Schneider Automation Inc.

MECHATROLINK

MECHATROLINK-Ⅱ and MECHATROLINK-Ⅲ are motion networks promoted by MECHATROLINK Members Association.

●MECHATROLINK is a registered trademark of MECHATROLINK Members Association.

SSCNETⅢ/H
SERVO SYSTEM CONTROLLER NETWORK

SSCNETⅢ/H is the motion network promoted by Mitsubishi Electric Corporation.

●SSCNETⅢ/H is a registered trademark of Mitsubishi Electric Corporation.

PROFINET

PROFINET is an Industrial Ethernet solution. It is a communication protocol to exchange data between controllers and devices.

●PROFINET is a trademark or registered trademark of PROFIBUS Nutzerorganisation e.V. (PNO).

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