

# ROBO Cylinder 6



Actuator with Built-in Controller RCP6S (On left)  
Quadruple Radial Cylinder Application (On right)

POINT 1

## Equipped with the High Resolution Battery-less Absolute Encoder as Standard

No maintenance is required since there is no battery. Since home-return operation is not required at start up or after an emergency stop or malfunction, this reduces your operational time, resulting in reduced production costs.



### Battery-less Absolute Encoder

No Battery, No Maintenance, No Homing,  
and No Price Increase.  
No Going Back to Incremental.

POINT 2

## ±20µm of Positioning Repeatability for the Current ROBO Cylinder Has Improved Improved Positioning Repeatability for Standard Specification: ±10µm

Standard Specification	±10µm
High-precision Specification	±5µm (Available only for RCP6-SA / WSA types)

POINT 3

## RCP6S Actuator with Built-in Controller

What is the RCP6S actuator with a built-in controller?

RCP6S is an RCP6 actuator with a built-in controller. No external controller is needed, making the control panel more compact.

16 axes of RCP6S at max. are available to connect from one unit of gateway unit.

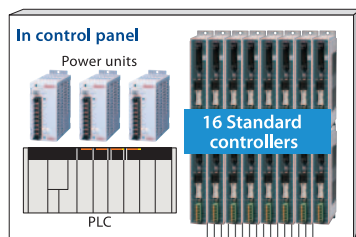
A maximum of 16 axes of RCP6S (relayed through a hub unit) can be connected to one gateway unit.

In addition, the gateway unit can supply the motor power and control power needed for all connected axes, therefore only requiring one cable (power and communication line) for the RCP6S.

The RCP6S actuator with built-in controller has the following advantages:

- Control panel can be smaller
- Wiring can be easier.
- Reduced maintenance parts since a common cable is used.

### Control Panel for Standard Controllers

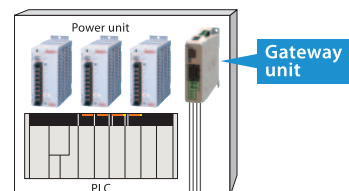


16 cables

Example for production equipment

When 16 axes connected

### Control Panel for RCP6S Controller Built-in Actuator

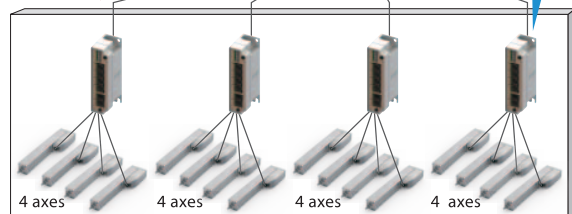


Size of the controller panel reduced to one third

Number of cables between equipment and control panel reduced from 16 to 4

4 cables

Hub unit



POINT 4

## ROBO Cylinder Series

### Product Types

- Rod Type
- Radial Cylinder Type
- Wide Type
- Table Type
- Slider Type

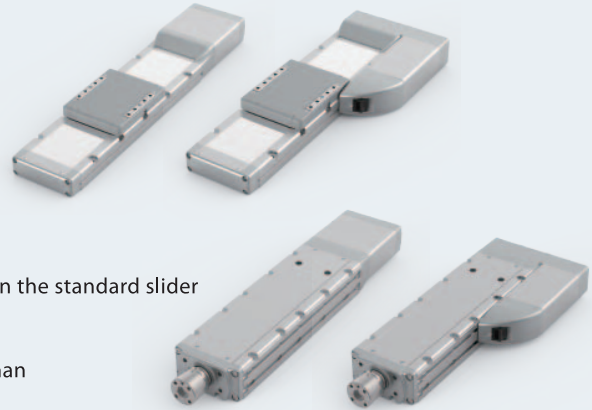
### Features of the Wide Type

#### (1) Wide Slider Type

Allowable dynamic moment is **14** times higher than the standard slider

#### (2) Wide Radial Cylinder

Allowable torque on the rod tip is **3** times higher than the standard radial cylinder



POINT 5

## Selection of PowerCON® Compatible Controllers Is Available

The RCP6 is compatible with PowerCON, the controller equipped with a high-output driver. Thanks to the PowerCON, the stepper motor has achieved higher output. This has reduced the production cycle time, leading to improved productivity of the equipment. You can choose from two controllers compatible with PowerCON: the "separate type" and "built-in type".

# IAI

Quality and Innovation

### JAPAN Headquarters

577-1 Obane, Shimizu-ku, Shizuoka-shi, Shizuoka, 424-0103, JAPAN  
www.iai-robot.co.jp

### IAI America, Inc.

#### USA Headquarters

2690 W. 237th Street, Torrance, CA 90505, USA  
(800) 736-1712

#### Chicago Office

110 East State Parkway, Schaumburg, IL 60173, USA  
(800) 944-0333

#### Atlanta Office

1220 Kennestone Circle, Suite 108, Marietta, GA 30066, USA  
(888) 354-9470

www.intelligentactuator.com

### IAI Industrieroboter GmbH

Ober der Röth 4, D-65824 Schwalbach am Taunus, Germany  
www.iai-gmbh.de

### IAI (Shanghai) Co., Ltd.

#### China Headquarters

Shanghai Jiahua Business Center A8-303, 808,  
Hongqiao Rd, Shanghai 200030, China  
www.iai-robot.com

### IAI Robot (Thailand) Co., Ltd.

825 PhairojKijja Tower 12th Floor, Bangna-Trad Rd.,  
Bangna, Bangkok 10260, Thailand

### IA Korea Corp.

4F Seyoung Bldg. 1228-1, Gaepo-Dong, Gangnam-Gu  
Seoul 135-964 Korea  
www.iakorea.co.kr

[www.IntelligentActuator.com](http://www.IntelligentActuator.com)