

Compact
Size



High
Performance



Safety
Function

Controller for small robots YRC1000micro

25L smaller than
the former model(40L)

15 L

Height: **125** mm



Depth: **280** mm

Width: **425** mm

Introducing YASKAWA's new compact size controller with functions & performance optimized for transfer and assembly applications. Its compact size enables installation into a 19-inch rack, and its models*1 are compatible with single-phase power supply.

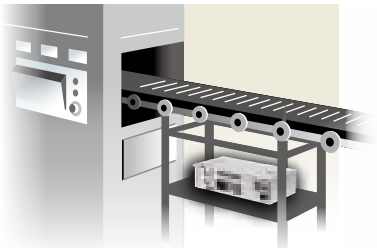
This controller helps to minimize installation space, optimize performance, and improve our customers' productivity.

*1: Please check the product specification sheet for compatible models.

1 Compact and Lightweight Controller

- Compact size of 15 L
- Weighs only 10.5 kg (9.5 kg less than the former model)*2

Can be installed inside a 19-inch rack, inside equipment or conveyors.

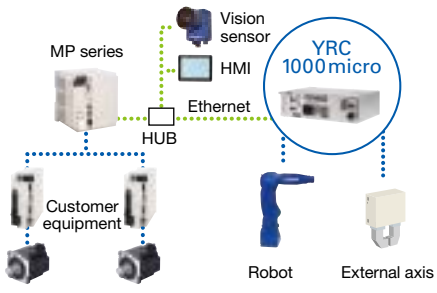


*2: For Japan, Asia, and North America model specifications

2 Easy Connections to Peripheral Devices

- Can be easily connected with Yaskawa's external devices, such as machine controllers (MP series), PLCs, sensors, and HMIs.


Facilitates the construction of flexible systems



3 New Motion Control (High Precision and High Speed)

- Cycle time improved by max. 10% (compared with the former model) due to optimized acceleration/deceleration control (depends on conditions).
- Significantly reduces error in path accuracy caused by differences in motion speed (improved by 80% compared with the former model).

Improves customer productivity



■ Red: Playback track
■ Green: Speed override track (50%)
■ Blue: Test operation track


4 Enhanced Safety Function

- Compatible with Functional Safety which monitors motion range and speed limitations.

Helps to minimize installation space required for equipment/facilities and reduces costs.

5 Selection of programming pendant or software pendant (both are optional)

- Lighter programming pendant with better operability
 - Weighs only 730 g, the lightest programming pendant in its class, with improved cable installation.
 - Can confirm robot positions and postures on the 3D robot model display.
 - Touch screen allows intuitive operation to easily move the cursor and scroll.
- Can replace programming pendant with PC tool
 - PC software enables to monitor state or control axes via PC
 - Same usability as a programming pendant
 - Can switch between multiple controllers



YRC1000micro

■ Specifications

Item	Japan, Asia, and North America Model Specifications	Europe Model Specifications
Configuration	Open structure IP20	
Dimensions	425 (W)×280 (D)×125 (H) mm, 15 L	425 (W)×280 (D)×180 (H) mm, 22 L
Approx. Mass	10.5 kg (External axis amplifiers for up to two axes can be built in.)	16.0 kg (External axis amplifiers for up to two axes can be built in.)
Cooling System	Direct cooling	
Ambient Temperature	During operation : 0°C to +40°C During storage : -10°C to +60°C	
Relative Humidity	90% max. (non-condensing)	
Altitude	2000 m (with temperature derating) Derating condition of over 1000 m: max. ambient temperature decreases 1% per 100 m.	
Power Supply	Single-phase 200/230 VAC (+10% to -15%), 50/60 Hz (±2%) *1 Three-phase 200/220 VAC (+10% to -15%), 50/60 Hz (±2%)	
Grounding	Grounding resistance : 100 Ω or less	
Digital I/Os	Specialized signals: 7 inputs and 1 output General signals: 8 inputs and 8 outputs (8 transistor outputs)	
Positioning System	Serial communications (absolute encoder)	
Programming Capacity	JOB: 200,000 steps, 10,000 instructions CIO ladder: 1,500 steps max.	
Expansion Slots	PCI express: 2 slots	

*1: Please check the product specification sheet for compatible models of the single-phase power supply.

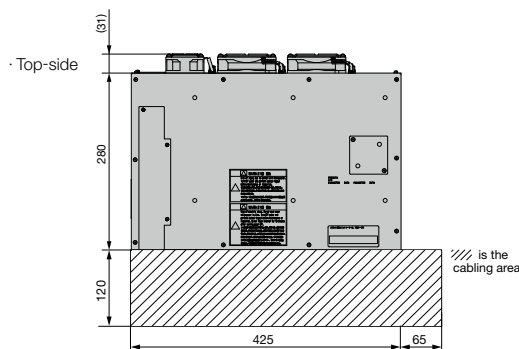
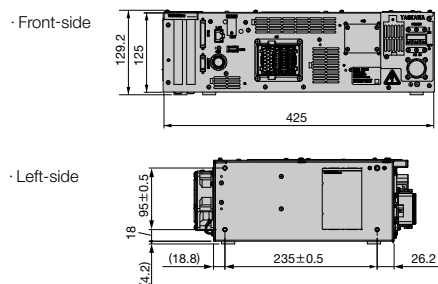
Item	
LAN (Connection to Host)	1 (10BASE-T/100BASE-TX)
Interface	Not possible
Control Method	Software servo control
Drive Units	SERVOPACK for AC servomotors

Programming Pendant (optional)*2	
Dimensions	152 (W) × 49.5 (D) × 300 (H) mm
Approx. Mass	0.730 kg
Material	Reinforced plastics
Operation Device	Select keys, axis keys, numerical/application keys, mode selector switch with keys (mode: teach, play, and remote), emergency stop button, enable switch, compact flash card interface device (compact flash is optional.), USB port (USB2.0, 1 port)
Display	5.7-inch TFT color LCD, touch panel VGA 640 × 480 pixels (alphanumeric characters, Chinese characters, Japanese letters, and others)
IEC Protection Class	IP54
Cable Length	Standard: 8 m Max.: 20 m (with optional extension cable)

*2: A programming pendant or a dummy connector is required with the YRC1000micro. (Sold separately)

Dummy connector: The dummy connector must be inserted when the programming pendant is not connected or when the software pendant is used. The programming pendant for DX100, FS100, and DX200 controllers cannot be connected to the YRC1000micro controller because of differences in their specifications.

■ Dimensions Units: mm



YASKAWA ELECTRIC CORPORATION

2-1 Kurosakishiroishi, Yahatanishi-ku, Kitakyushu, 806-0004, Japan
Phone: +81-93-645-7703 Fax: +81-93-645-7802

YASKAWA AMERICA, INC. (MOTOMAN ROBOTICS DIVISION)

100 Automation Way, Miamisburg, OH 45342, U.S.A.
Phone: +1-937-847-6200 Fax: +1-937-847-6277

YASKAWA EUROPE GmbH (ROBOTICS DIVISION)

Yaskawastrasse 1, 85391, Allershausen, Germany
Phone: +49-8166-90-100 Fax: +49-8166-90-103

YASKAWA NORDIC AB

Verkstadsgatan 2, Box 504, SE-385 25 Torsås, Sweden
Phone: +46-480-417-800 Fax: +46-486-414-10

YASKAWA ELECTRIC (CHINA) CO., LTD.

22F, One Corporate Avenue, No.222 Hubin Road, Huangpu District, Shanghai 200021, China
Phone: +86-21-5385-2200 Fax: +86-21-5385-3299

YASKAWA SHOUGANG ROBOT CO., LTD.

No.7 Yongchang North Road, Beijing E&T Development Area, Beijing 100076, China
Phone: +86-10-6788-2858 Fax: +86-10-6788-2878

YASKAWA ELECTRIC KOREA CORPORATION

35F, Three IFC, 10 Gukjegeumyung-ro, Yeongdeungpo-gu, Seoul, 07326, Korea
Phone: +82-2-784-7844 Fax: +82-2-784-8495

YASKAWA ELECTRIC TAIWAN CORPORATION

12F, No.207, Sec. 3, Beishin Rd., Shindian District, New Taipei City 23143, Taiwan
Phone: +886-2-8913-1333 Fax: +886-2-8913-1513

YASKAWA ASIA PACIFIC PTE. LTD.

30A Kallang Place, #06-01, 339213, Singapore
Phone: +65-6282-3003 Fax: +65-6289-3003

YASKAWA ELECTRIC (THAILAND) CO., LTD.

59, 1st-5th Floor, Flourish Building, Soi Ratchadapisek 18, Ratchadapisek Road, Huaykwang, Bangkok 10310, Thailand
Phone: +66-2-017-0099 Fax: +66-2-017-0199

PT. YASKAWA ELECTRIC INDONESIA

Secure Building-Gedung B Lantai Dasar & Lantai 1 Jl. Raya Protokol Halim Perdanakusuma, Jakarta 13610, Indonesia
Phone: +62-21-2982-6470 Fax: +62-21-2982-6471

YASKAWA INDIA PRIVATE LIMITED (ROBOTICS DIVISION)

#426, Udyog Vihar Phase-IV, Gurgaon, Haryana 122016, India
Phone: +91-124-475-8500 Fax: +91-124-475-8542

YASKAWA

YASKAWA ELECTRIC CORPORATION

In the event that the end user of this product is to be the military and said product is to be employed in any weapons systems or the manufacture thereof, the export will fall under the relevant regulations as stipulated in the Foreign Exchange and Foreign Trade Regulations. Therefore, be sure to follow all procedures and submit all relevant documentation according to any and all rules, regulations and laws that may apply. Specifications are subject to change without notice for ongoing product modifications and improvements.

© 2017 YASKAWA ELECTRIC CORPORATION

LITERATURE NO. CHEP C941115 00B <1>-0

Published in Japan December 2018
18-10-44