



# Solution MOTOMAN-AR S

# YRC1000 Robot Controller

Four Features







## Make equipment compact

# Smallest size in the world reduces installation space

This 125 L compact size controller does not require a transformer and has built-in external axis amplifiers for three axes.\*



Realized this size by building in three external axes\* and eliminating the need for a transformer.



### Improve work efficiency

## 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).



# Standardization of equipment

### Global standardization (Universal size)

- · Common size for use in Japan and overseas.
- · Applied standards: European harmonized standards and **UL** standards
- · Overseas models do not require a transformer to adapt to the required power supply voltage.



### Improve work efficiency

### 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.

### ■ YRC1000 Robot Controller Specifications

Items	Specifications
Configuration	Dust proof IP54 structure (area of backside duct fan: IP2X)
Dimensions	598 (W)×427 (D)×490 (H) mm. 125 L
Approx. Mass	70 kg max. (External axis amplifiers for up to three axes can be built in.)*
Cooling System	Indirect cooling
Ambient Temperature	During operation: 0°C to +45°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	Japan: three-phase 200 VAC to 240 VAC (+10% to −15%), 50/60 Hz (±2%)
	Asia and Europe: three-phase 380 VAC to 440 VAC (+10% to -15%), 50/60 Hz (±2%) (neutral grounding)
	North America: three-phase 380 VAC to 480 VAC (+10% to -15%), 50/60 Hz (±2%) (neutral grounding)
Grounding	Grounding resistance: 100 $\Omega$ or less for 200-V class, 10 $\Omega$ or less for 400-V class
Digital I/Os	Specialized signals: 19 inputs and 6 outputs
	General signals: 40 inputs and 40 outputs (32 transistor outputs, 8 relay outputs)
Positioning System	Serial communications (absolute encoder)
Programming Capacity	JOB: 200,000 steps, 10,000 instructions
	CIO ladder: 20,000 steps max.
Expansion Slots	PCI express: 2 slots
LAN (Connection to Host)	2 (10BASE-T/100BASE-TX)
Interface	RS-232C: 1ch
Control Method	Software servo control
Drive Units	SERVOPACK for AC servomotors

## ■ Programming Pendant Specifications

Items	Specifications
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 (USB 2.0, 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.: 36 m (with optional extension cable)

<sup>\*:</sup> External axis amplifiers for two axes can be built in for AR1440E.