

Basic specifications

Item		Model	RCX240 / RCX240S	
Basic specifications	Number of controllable axes		4 axes maximum (Control simultaneously: 4 axes)	
	Controllable robots		Single-axis robot FLIP-X, Linear motor single-axis robot PHASER, Cartesian robot XY-X, SCARA robot YK-XG, Pick & place robot YP-X	
	Maximum power consumption		2500VA (RCX240) / 1500VA (RCX240S)	
	Capacity of the connected motor		1600W	
	Dimensions		W180 × H250 × D235mm	
	Weight		6.5kg	
	Input power supply	Control power supply	Single phase AC200 to 230V +/-10% maximum (50/60Hz)	
Motor power supply		Single phase AC200 to 230V +/-10% maximum (50/60Hz)		
Axis control	Drive method		AC full-digital software servo	
	Position detection method		Multi-turn resolver with data backup function, Magnetic linear scale	
	Operating method		PTP (Point to Point), Linear interpolation, Circular interpolation, ARCH	
	Coordinate system		Joint coordinates, Cartesian coordinates	
	Position indication units		Pulses, mm (millimeters), deg (degrees)	
	Speed setting		1% to 100% (In units of 1%. However speed is in units of 0.01% during single-axis operation by DRIVE statement.)	
	Acceleration setting		1. Automatic acceleration setting based on robot model type and end mass parameter 2. Setting based on acceleration and deceleration parameter (Setting by 1% unit)	
	Resolution		16384 P/rev, 1μm	
Origin search method		Incremental, Absolute, Semi-absolute		
Program	Program language		YAMAHA BASIC (Conforming to JIS B8439 SLIM Language)	
	Multitasks		8 tasks maximum	
	Sequence program		1 program	
	Point-data input method		Manual data input (coordinate value input), Direct teaching, Teaching playback	
Memory	Memory capacity		364KB (total capacity of program and points) (available program capacity during use of maximum number of points is 84KB)	
	Programs		100 program (Max.) 9,999: maximum lines per program 98KB: maximum capacity per program	
	Points		10,000 points: maximum numbers of points	
	Memory Backup battery		Lithium metallic battery (service life 4 years at 0°C to 40°C)	
	Internal flash memory		512KB (ALL data only)	
External input/output	STD.DIO	I/O input	General input 16 points, dedicated input 10 points (NPN / PNP specifications selectable)	
		I/O output	General output 8 points, dedicated output 11 points	
	SAFETY		Emergency stop input (Relay contact), Service mode input (NPN/PNP specification is set according to STD. DIO setting)	
	Brake output		Relay contact	
	Origin sensor input		Connectable to DC 24V normally-closed contact sensor	
	External communications		RS232C: 1CH D-SUB9 (female) RS422: 1CH (Dedicated RPB)	
	Options	Options	Slots	4
			Type	Optional input/output (NPN/PNP): General input 24 points / General output 16 points
				CC-Link: Dedicated input 16 points, Dedicated Output 16 points, General input 96 points, General output 96 points (4 nodes occupied)
				DeviceNet: Dedicated input 16 points, Dedicated Output 16 points, General input 96 points, General output 96 points
Profibus: Dedicated input 16 points, Dedicated Output 16 points, General input 96 points, General output 96 points				
Ethernet: IEEE802.3 10Mbps (10BASE-T)				
iVY: Camera input (2ch), camera trigger input, PC connection input				
Tracking: AB phase input, lighting trigger input, lighting power supply input/output				
Lighting control: lighting trigger input, lighting power supply input/output				
Programming box		RPB, RPB-E (with enable switch)		
Support software for PC		VIP ⁺ / VIP		
General specifications	Operating temperature		0°C to 40°C	
	Storage temperature		-10°C to 65°C	
	Operating humidity		35% to 85%RH (non-condensing)	
	Absolute backup battery		Lithium metallic battery 3.6V 5400mAH (2700mAH × 2)	
	Absolute data backup period		1 year (in state with no power applied)	
	Noise immunity		IEC61000-4-4 Level 3	
Protective structure		IP10		