## **EPSON**<sup>®</sup>

### Epson RC+<sup>®</sup> 8.0 Software



# A new standard in robot automation software.

**Easy to set up and learn** — Windows<sup>®</sup> based robotic automation development environment with an intuitive programming structure, powerful functions and seamless integrated options

**Low total cost of ownership** — programming and simulation software are included with robot purchase; open architecture programming environment can take on process control function in lieu of PLC

**Powerful 3D simulation software included** — run, optimize and verify concepts, cycle times and interference checks; use as a visualization tool to quickly and easily simulate how applications run cross-functionally

**Innovative solutions platform** — offers seamless expansion capability allowing third-party providers to develop, deploy and commercialize next-level integrated functionality beyond plug-and-play for hardware and software

**Point-and-click wizards for quick setup** — robot and applications setup includes robot manager, functional safety manager, calibration wizard, pallet wizard, tool wizard, program templates and much more

**Rapid development** — includes color-based editor with auto syntax assist and integrated debugger; extensive online help system with sample code to reduce programming time; languages supported include English, Spanish, French, Chinese, Japanese and German

**Flexible control structures** — Epson RC+ is ideal for creating industrial robotic solutions that are standalone using our GUI Builder option, PC-based with API options including LabVIEW, or PLC-controlled with remote fieldbus options including Add-On Instructions

**PC-based environment** — allows for online or offline development, with hundreds of motion, I/O, control structure and robotic application commands to optimize runtime, error handling/recovery and error messaging

**Integrated options** — including Vision Guidance, Parts Feeding, Force Guidance and Conveyor Tracking for reduced setup time

**Advanced troubleshooting** — integrated profiler, Resource Manager (including I/O Scope), troubleshooting log, real-time analog and digital readout of I/O, integrated debugger and I/O monitoring

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Specifications		
Robot Controllers		RC700-A, RC700-D, RC700-E, RC90B, RC800-A T-Series, VT-Series
Compatible Robots		G-Series, GX-Series, LS-B Series, RS-Series, T-Series, C-Series, VT-Series
Trial Software		Free download available at https://epson.com/Support/wa00904
User PC System Requirements	05	Windows 10 Pro 64-bit version Windows 11 Pro 64-bit version
	CPU	Core i5 or greater
	Memory	4GB or more
	Hard Disk Spare Capacity	5GB or more
	Graphic	DirectX10.1 or later OpenGL2.1 or later
Programming Language		SPEL+ programming language; powerful, easy-to-use Basic-like programming language Supports multitasking, robot motion control, I/O control and networking
Communication		USB 1.1/2.0 or Ethernet
Supported Network Communication		Modbus TCP/IP standard EtherNet/IP, DeviceNet®, CC-Link, PROFIBUS, PROFINET
Security		Manage groups and monitor usage; create groups to edit robot points, use jog & teach and use the command window
Troubleshooting Tools		Step into, step over, walk, resume, stop
I/O Systems		Includes digital I/O and Fieldbus I/O
Simulator		Included with robot purchase. Importing of 3D CAD models supported. Record and playback. Supports motion and cycle time calculations, visualization of camera and safety functions. Collision detect when the robot strikes a virtual object.
Safety Functions <sup>1</sup>		Safety robot manager to set up soft axis limiting, safety inputs and safety outputs

Options	
Vision Guide	Fully integrated for easy configuration and calibration, featuring a point-and-click interface that makes it simple, yet powerful for users of all levels. It also features wizards and auto calibration methods, plus a combination robot/vision simulator for rapid offline testing. Includes tools for inspection, gauging, barcode reading and much more.
IntelliFlex™Feeders	The IntelliFlex Feeding System offers easy setup and configuration. Its point-and-click interface helps reduce the typical development time required for flexible feeding applications. It offers intelligent auto-tuning for fast setup and flexible parts changeover. With four feeder sizes available, the system can accommodate part sizes ranging from 3 mm to 150 mm.
Force Guide	Epson Force Guide enables Epson robots to detect six axes of force. Driven by real-time servo system integration, Force Guide delivers fast, tactile feedback to guide robots for high-precision parts placement. Easy to set up, Force Guide features a point-and-click interface with pre-configured solutions and built-in teaching tools.
Teach Pendant	Powerful pendant for both teaching and robot operation.
GUI Builder License	Easily create a Graphical User Interface (GUI) for operators fully integrated within Epson RC+ to reduce overall development time. Create and debug GUI forms from your Epson RC+ project. Form and Control Events are executed as SPEL+ tasks.
PLC Function Blocks License	Ideal for both basic and complex programming tasks—initiates simple solutions or highly structured programs, all with ladder-logic programming. Single point of control—machine control via a PLC.
Conveyor Tracking	Supports vision- or sensor-based conveyor tracking. Multi-conveyor, multi-tool setups are supported. Automate manual kitting/packaging tasks and help maintain productivity with continuous conveyor operation.
PG Motion System	Epson RC+ software and pulse generator (PG) cards enable control of multiple third-party drives and motors. PG cards can be used to control X/Y tables, slides, rotary tables and a wide range of other production/inspection line peripherals.
External Control Point (ECP) License	For processes requiring the workpiece to be moved against a fixed tool, external control points can be used to ensure precise positioning. Up to 16 external control points can be set.
Epson RC+ API License	Program and execute robot applications in a familiar Microsoft <sup>®</sup> Windows OS environment using MS.Net. Robots can be controlled using Visual Basic, Visual C++, Visual C+, LabVIEW and other third-party programming languages. Robot status and variable values can be captured. Vision Guide integration for easy image display on user GUIs.
Fieldbus Master	Support for DeviceNet, PROFIBUS and Ethernet/IP networked peripherals (1,024-point I/0). Requires user PC for master board. Must be connected to robot controller during operation.
Fieldbus Slave	Support for DeviceNet, PROFIBUS, CC-Link, Ethernet/IP, EtherCAT and PROFINET networked peripherals (256-point I/0).
Advanced Safety Functions	Safety robot manager to set up joint angle monitoring, safety limited speed and safety limited position. Simulation viewer to help visualize safety planes, restricted areas and other features.
OPC UA for Robotics License	OPC UA for robotics is a standardized communication protocol that all technology providers can utilize to enable faster and easier integration. Robot and controller data, safety status, SPEL variables, I/O and force sensor data are supported.

Support

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Contact:

1 Available on models with integrated safety board.

See the latest innovations from Epson Business Solutions at www.epson.com/forbusiness

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