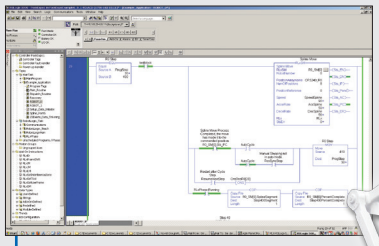
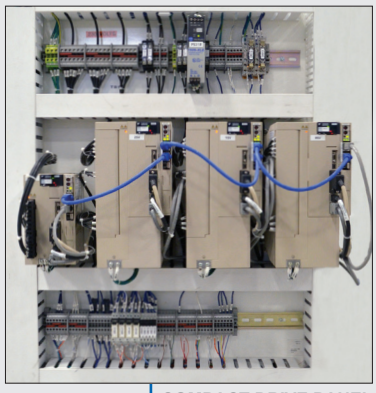
SOLUTIONS IN MOTION®

YASKAWA

Rockwell Automation Encompass™ Product Partner Americas

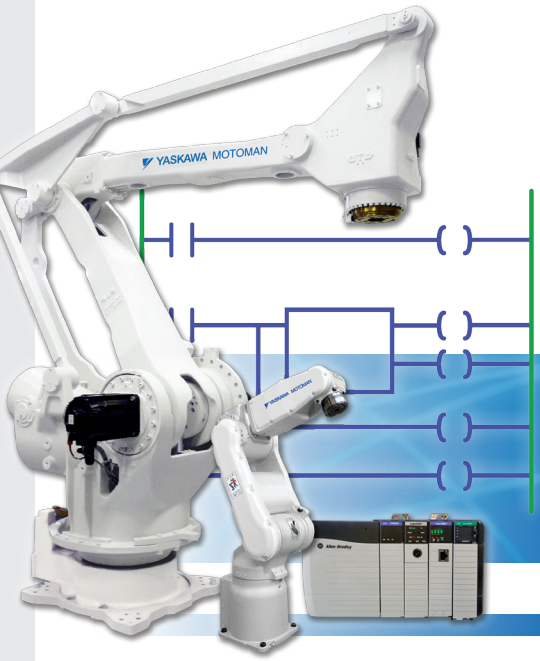


PROGRAM ROBOTS FROM RSLOGIX



COMPACT DRIVE PANEL

OPTIONAL PROGRAMMING PENDANT



MLX100

ROBOT GATEWAY

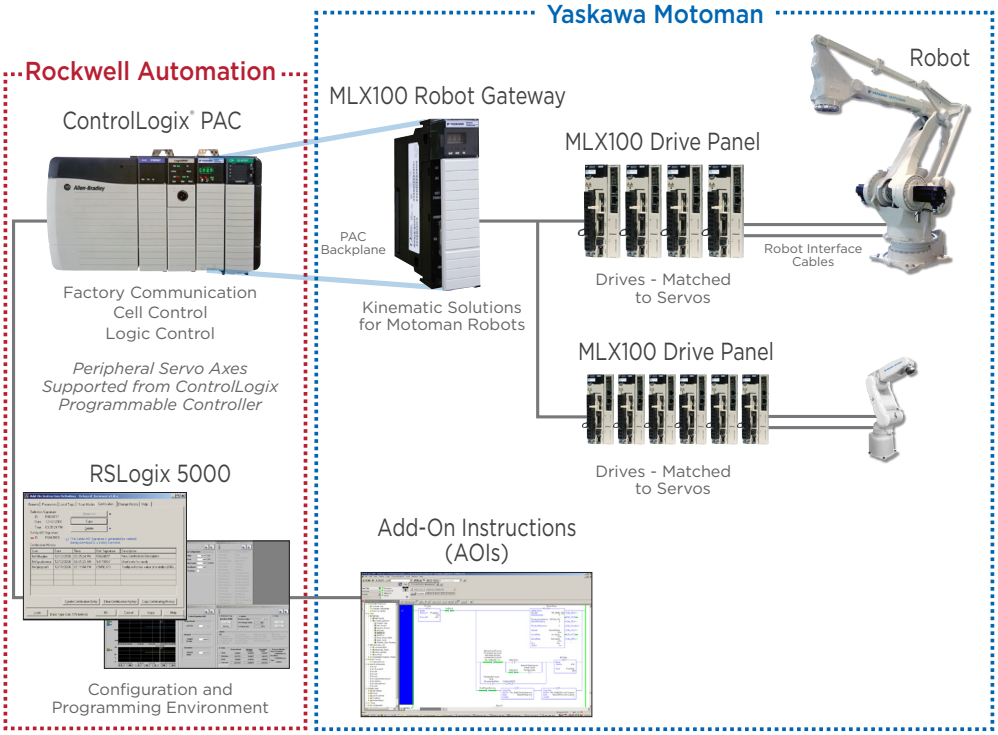
The MLX100 Robot Gateway provides a unified controls platform to program and control Motoman® robots and peripheral equipment in the widely accepted Rockwell ControlLogix® environment.

TOP REASONS TO BUY

- Promotes faster application development with unified controls architecture for robot and other equipment in same RSLogix™ 5000 programming environment
- Ease of use and maintenance friendly systems with widely accepted familiar ControlLogix platform
- Available for a wide range of Motoman robots for assembly, picking, packing and palletizing applications
- Promotes ownership of the system with easily available Yaskawa and Allen Bradley parts, tight integration of components and elimination of redundant interfaces

- The MLX100 Robot Gateway tightly integrates proven industrial Motoman robots with the widely accepted Rockwell ControlLogix programmable controllers.
- Complete robot kinematics solution for coordinated motion of 4-, 5-, 6- and 7-axis robots targeted for assembly, kitting, packing and palletizing applications ranging from 5 kg to 300 kg payload.
- Single MLX100 Robot Gateway module can control and program up to two robots in the same workcell making complex application development easy.
- The robot gateway module, packed with robot kinematics and control, plugs into the ControlLogix Programmable Automation Controller (PAC) chassis and communicates directly with the PLC over the backplane for faster data exchange and robot control.
- Available with MH5S, MH5LS, SIA20D, MPK50, MPL80, MPL160 and MPL300 robot models (other models as requested).
- Unified architecture promotes ease of use through single programming interface for robot and peripheral equipment control which leads to better resource utilization.
- Panel mounted robot drives can be easily assembled into the main control cabinet promoting efficient use of floorspace, elimination of redundant hardware and interfaces, and ease of maintenance.
- Drives panel enables users to specify enclosure material and IP rating for the application.
- Ease of troubleshooting and maintenance with familiar Rockwell platform.
- Conveyor tracking option simplifies applications that require tracking and coordination with moving parts or product.
- Simulation (MLX-Sim) and development software package (MLX-D) available.

MLX100 ROBOT GATEWAY



MLX-controlled robots include the MLX100 Robot Gateway, drive panel, robot interface cables and manipulator

- MLX100 robot gateway module contains articulated arm kinematics and operation controls for supported robots
- HMI for robot control screens are designed in Factory Talk View for display on PanelView or PC
- ANSI/RIA 15.06-1999 Safety standard compliant design features dual channel e-stop with user connections, soft limit configuration, cubical interference zones, and brake release
- Minimum Requirements
  - ControlLogix Processor – 1756-L71
  - RSLogix 5000 v20
  - FactoryTalk® View Machine Edition 6.1 or higher
  - Panel voltage – 230 VAC 3 phase

MLX100 ROBOT GATEWAY SPECIFICATIONS

ROBOT GATEWAY	**Drives Panel Dimensions**	737 (w) x 820 (h) x 290 (d) (29" x 32.3" x 11.4")* Enclosure customer supplied**
	Approximate Mass	47 kg (103.6 lbs.)
	Ambient Temperature	Operating 0° to 45° C (32° to 113° F)
	Relative Humidity	85% Non-condensing
	Primary Power Requirements	230 VAC 3 PH 50/60 Hz
	Digital I/O	Customer provided
	Position Feedback	Absolute encoder
	Program Memory	Based on processor card provided by customer
	Interface	Many network cards available; see Rockwell Automation website
	Multiple Robot Control	Two robots per gateway
SAFETY	**Safety Hardware**	Dual-Channel Emergency Stop Interface
	Collision Detection	External sensor required
	Machine Lock	Not available
OPTIONAL PENDANT	**Pendant Dimensions**	259 (w) x 232 (h) x 55 (d) (10.2" x 9.1" x 2.2")
	Pendant Display	7.5 TFT color touch screen
	Pendant Language	English
	Pendant Weight	1.2 kg (2.6 lbs.)
	Coordinate System	Joint, Cartesian, tool, user
	Protection Rating	IP65
	Memory	12.5 MB

* Maximum size shown. See robot data sheets for specific robot information.
** Regenerative resistor is a separate assembly that is designed for mounting to the enclosure.

PROGRAMMING	**Programming Language**	Ladder logic entered using RSLogix 5000
	Robot Motion Control	Linear, joint and incremental motion. Move blending also available.
	Speed Adjustment	Joint: 0 - 100% of maximum selected using an AOI Linear: mm/sec - selected using an AOI
	I/O Instructions	Complete ControlLogix Command Set

MAINTENANCE	**Maintenance Functions**	Internal maintenance clocks
	Self-Diagnostics	Classifies errors and major/minor alarms and displays data
	User Alarm Display	Displays alarm messages for peripheral devices
	Alarm Display	Alarm messages and alarm history
	I/O Diagnosis	Permits simulated enabled/disabled input/output
	TCP Calibration	Provides screens for data input

OPTIONS	MLX-D Development Kit
	MLX-Sim Simulation
	MLX100 HMI Customization Software
	Accessory, Conveyor Tracking, MLX100
	MLX Simulation Kit (includes MLX-D, MLX-Sim and Gateway Module)
	MLX100 Teach Pendant Kit

ROBOTS AVAILABLE	MODEL	AXES	PAYLOAD	REACH
	MH5S	6	5 kg	706 mm
	MH5LS	6	5 kg	895 mm
	SIA20D	7	20 kg	910 mm
	MPK50	4	50 kg	1,917 mm
	MPL80	5	80 kg	2,061 mm
	MPL160	4	160 kg	3,159 mm
	MPL300	4	300 kg	3,159 mm

MLX-controlled robots are tested for floor mounting. Contact Yaskawa Motoman regarding different mounting requirements.

www.motoman.com

YASKAWA

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