Allen-Bradley

CompactLogix 5380 Controllers

Help future proof your system and enable The Connected Enterprise

CompactLogix™ 5380 controllers help enable faster system performance, capacity, productivity and security to meet the growing demands of smart machines and equipment for manufacturing.

All CompactLogix™ 5380 controllers use the same development environment, Studio 5000® software, combining elements of design into one standard framework that can optimize productivity and reduce time to commission. Studio 5000 also manages safety, so you don't have to be concerned about separation of standard and safety memory, or worry about partitioning logic to isolate safety – the software does it for you. Learn more about Studio 5000.

Features and Benefits

Enhanced performance and troubleshooting

- Provides up to 20% more capacity
- Dual gigabit (Gb) embedded Ethernet ports enable high-speed I/O and motion control
- Optimized to enable maximum system performance
- Display provides enhanced diagnostics and troubleshooting
- Dual configurable port supports Device Level Ring/Linear topologies or multiple IP addresses
- Provides additional Ethernet connectivity for versions >2MB starting with V31

Scalable Safety Solution

- Achieve SIL CL2/PLd performance
- Optimized to enable faster safety reaction time
- Support for new Compact 5000™ I/O Safety modules
- Integrated safety functions with drives and motion

Added security and capabilities

- Energy storage module removes the need for a battery
- Controller-based change detection and logging enable added security
- Digitally-signed controller firmware adds another layer of security
- Provides role-based access control to routines and Add-On Instructions
- Ability to enable and disable all embedded ports

LISTEN. THINK. SOLVE.®

CompactLogix 5380 Standard Controller

The CompactLogix 5380 controller's high performance capabilities enhance your control system in several ways.

Smart

- Display provides enhanced diagnostics and troubleshooting
- USB port supports local programming, troubleshooting and updates
- Leverage the same code from large to small systems with Studio 5000

Productive

- Dual Gb embedded Ethernet ports enable high performance I/O and motion control
- Integrated Motion on EtherNet/IP™ up to 32 axes
- Dual configurable port supports Device Level Ring/Linear topologies or multiple IP addresses
- Supports up to 31 local Compact 5000 I/O modules

Secure

- Digitally-signed controller firmware provides an added layer of security
- Controller-based change detection and logging enable added security
- Role-based access control to routines and Add-On Instructions
- Ability to enable and disable all embedded ports

Compact GuardLogix® 5380 Controller

Right-sizing your Safety Solutions to Optimize Cost and Performance

Manufacturers are continually looking for control solutions that adhere to the latest global safety standards while dealing with competitive pressures to reduce costs and improve productivity. As the latest addition to the CompactLogix 5380 family of controllers, the Compact GuardLogix 5380 delivers scalable options for high performance, integrated safety in standard and conformally coated formats.

Scalable

- Achieve SIL2 / PLd with 1oo1 architecture
- Standard memory options from 0.6 - 10 MB
- Safety memory options from 0.3 - 5 MB
- Communication options for up to 180 EtherNet/IP nodes
- Conformal coated options for harsh environments

Integrated

- Single controller for Standard and Safety Control
- Single software for Standard and Safety Control
- Single network for Standard and Safety Control
- Mix and match safety and standard I/O
- Networked Safety Functions with Drives and Motion

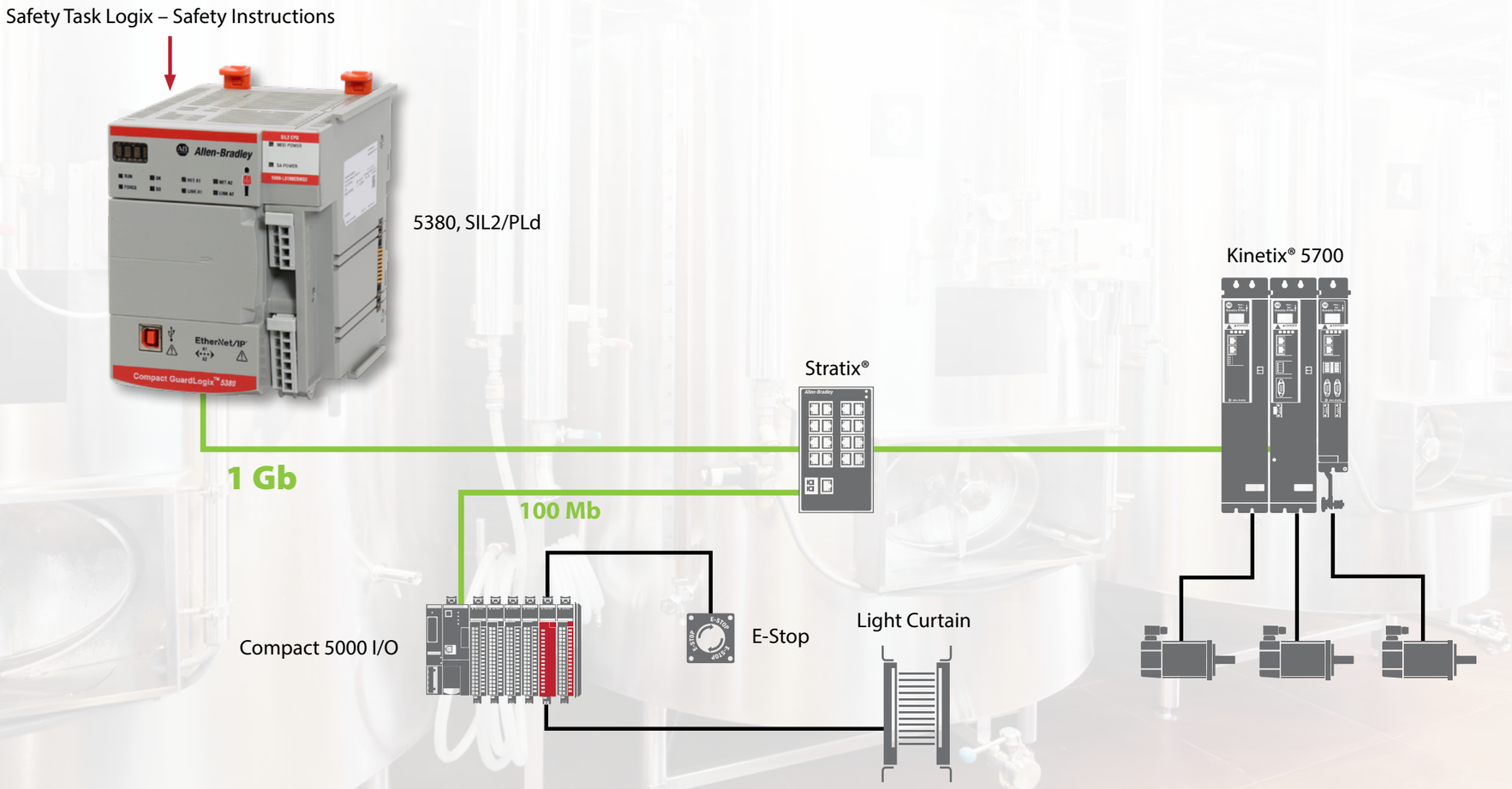
High Performance

- Optimized for faster safety reaction time to reduce safe distance and risk of injury

Integrated Motion and Safety over EtherNet/IP™

Simplifying Multi-Disciplined Design and Control with a Single Network

Allen-Bradley



Enabling the Connected Enterprise

Bringing people, processes and technology together.

It's about reshaping the future through leverage and convergence.
The Connected Enterprise leverages technology to better gather, analyze data and transform it into actionable, real-time information. Convergence of information technology (IT) and operations technology (OT) into a single, unified architecture capitalizes on operational, business and transactional data for improved enterprise, operations and supply chain performance.

- Improve Productivity with better asset utilization and system performance
- Promote Globalization with easy access to actionable, plant-wide information
- Support Sustainability with extended product lifecycles and better asset utilization
- Cultivate Innovation with increased system flexibility and technical risk mitigation

Faster time to market

Design productivity, faster commissioning times with intelligent devices, quicker startup of Greenfields, proven technology around risk mitigation for operations and IT, and the agility to respond to customer trends more quickly.

Lower total cost of ownership

Better life-cycle management, enabling more effective operations, improved energy management, and easier technology migration.

Improved asset utilization and optimization

Improved reliability and quality, and predictive maintenance driven by operational intelligence tools.

Enterprise risk management

Protection of intellectual property and brand image with a secure operating environment and reduced exposure due to poor product quality and internal and external threats.

The result of converging and leveraging The Connected Enterprise, IoT and the Integrated Architecture® technologies

Seamless collaboration and integration enable you to use the power of real-time data to make better and more profitable business decisions. Enhanced performance, optimized operations and increased profitability throughout your entire enterprise provides you with the ability to meet the growing automation demands of customers around the world.

CompactLogix 5380 Standard Controller

Catalog Number	Application Memory	I/O Expansion	Ethernet Nodes	Motion Axes
5069-L306ER	0.6 MB	8	16	0
5069-L310ER	1 MB	8	24	0
5069-L320ER	2 MB	16	40	0
5069-L330ER	3 MB	31	50	0
5069-L340ER	4 MB	31	55	0
5069-L310ER-NSE	1 MB	8	24	0
5069-L306ERM	0.6 MB	8	16	2
5069-L310ERM	1 MB	8	24	4
5069-L320ERM	2 MB	16	40	8
5069-L330ERM	3 MB	31	60	16
5069-L340ERM	4 MB	31	90	20
5069-L350ERM	5 MB	31	120	24
5069-L380ERM	8 MB	31	150	28
5069-L3100ERM	10 MB	31	180	32

Environmental Specifications and Certifications

Temperature	Operating: 0 °C < Ta < +60 °C (+32 °F <Ta < +140 °F) Storage: -40…85 °C (-40…185 °F)
Relative Humidity	5-95% non-condensing
Vibration	5 g at 10…500 Hz
Shock	Operating: 30 g Nonoperating: 50 g
Certifications	cULus, CE, C-Tick, ATEX, IECEx, KC, UL, EtherNet/IP For more details and a full list of product certifications, visit www.ab.com

See the CompactLogix 5380 Controllers Technical Data for additional information.

Compact GuardLogix 5380 Controller

Catalog Number	Memory Size (MB)		Integrated Motion	Conformal Coated	Total # of Controller EtherNet/IP nodes
	Standard	Safety			
5069-L306ERMS2	0.6 MB	0.3MB	yes	--	16
5069-L306ERS2	0.6 MB	0.3MB	--	--	16
5069-L310ERMS2	1 MB	0.5MB	yes	--	24
5069-L310ERS2	1 MB	0.5MB	--	--	24
5069-L320ERMS2(K)	2 MB	1MB	yes	yes	40
5069-L320ERS2(K)	2 MB	1MB	--	yes	40
5069-L330ERMS2(K)	3 MB	1.5MB	yes	yes	60
5069-L330ERS2(K)	3 MB	1.5MB	--	yes	60
5069-L340ERMS2	4 MB	2MB	yes	--	90
5069-L340ERS2	4 MB	2MB	--	--	90
5069-L350ERMS2(K)	5 MB	2.5MB	yes	yes	120
5069-L350ERS2(K)	5 MB	2.5MB	--	yes	120
5069-L380ERMS2	8 MB	4MB	yes	--	150
5069-L380ERS2	8 MB	4MB	--	--	150
5069-L3100ERMS2	10 MB	5MB	yes	--	180
5069-L3100ERS2	10 MB	5MB	--	--	180

* Safety Controllers adhere to functional safety standards IEC 61508, ISO 13849, and IEC 62061

Environmental Specifications and Certifications

Temperature	Operating: 0 °C < Ta < +60 °C (+32 °F <Ta < +140 °F) Storage: -40…85 °C (-40…185 °F)
Relative Humidity	5-95% non-condensing
Vibration	5 g at 10…500 Hz
Shock	Operating: 30 g Nonoperating: 50 g
Certifications	cULus, CE, C-Tick, ATEX, IECEx, KC, UL, EtherNet/IP For more details and a full list of product certifications, visit www.ab.com

See the CompactLogix 5380 Controllers Technical Data for additional information.

www.rockwellautomation.com

Power, Control and Information Solutions Headquarters

Americas: Rockwell Automation, 1201 South Second Street, Milwaukee, WI 53204-2496 USA, Tel: (1) 414.382.2000, Fax: (1) 414.382.4444
Europe/Middle East/Africa: Rockwell Automation NV, Pegasus Park, De Kleetlaan 12a, 1831 Diegem, Belgium, Tel: (32) 2 663 0600, Fax: (32) 2 663 0640
Asia Pacific: Rockwell Automation, Level 14, Core F, Cyberport 3, 100 Cyberport Road, Hong Kong, Tel: (852) 2887 4788, Fax: (852) 2508 1846

Publication 5069-PP003D-EN-P – April 2018
Supersedes Publication 5069-PP003C-EN-P – December 2016