

# ControlLogix Programmable Automation Controllers



1756-L71, L72, L73, L74, L75

The latest addition to the ControlLogix® family of controllers is designed for improved performance. The new controllers provide the memory, speed and processing capabilities to meet the demands of basic plant floor applications through high performance process and motion applications.

As part of the Rockwell Automation Integrated Architecture™ system, these new controllers use the same programming software, network protocol and information capabilities as ControlLogix L6 series controllers, providing a common control engine with a common development environment for all control disciplines.

## Conformal Coating

Select products are available with Conformal Coating to help protect components and extend product life in the following:

- ANSI/ISA-71.04.2013; Pollution class G3 Harsh Group A environments (tested equivalent to 10 years)
- High-humidity and caustic areas
- Salt-contaminated and saline-fog environments
- Aggressive chemical and vapor atmospheres
- Environmentally sensitive and abrasive areas
- Off-shore marine environments

*Products that are not available as standard coated may be ordered as custom coated products.*



## Improved Performance

Depending on your application, you evaluate performance using different criteria. ControlLogix 1756-L7 series controllers offer specific improvements for specific applications.

**For process applications,** the ControlLogix controllers significantly improve the amount of information that can be exchanged between the control and supervisory layers, and offer a significant improvement in the performance of redundant control applications. The 1756-L7 series controllers also offer increased capacity, allowing more control strategies to be executed in each task.

**For motion applications,** the 1756-L7 series controllers provide high-speed motion command and axis trajectory planner execution making it the right solution for complex, high performance motion applications. The controllers have been optimized for control of high performance motion drives on EtherNet/IP or SERCOS™ interface and are capable of supporting as many as 100 axes.

**For discrete applications,** the new ControlLogix controllers significantly improve controller scan times using a new faster dual core custom CPU. They offer improved communication rates for new Rockwell Automation® Ethernet communication modules and provide faster cross-loading for redundancy systems.

LISTEN.  
THINK.  
SOLVE.®

## Memory Options

The ControlLogix controllers use enhanced SDRAM memory technology and are available in the following fixed memory sizes: 2 MB (1756-L71), 4 MB (1756-L72), 8 MB (1756-L73), 16 MB (1756-L74) and 32 MB (1756-L75).

The optional and removable Secure Digital non-volatile memory provides faster reads and writes and better data integrity than the previous CompactFlash technology and is now rated for use in SIL 2 applications. A 1 GB Secure Digital (SD) card is included with each 1756-L7 series controller.

## Power and Diagnostic Capabilities

With the launch of these new controllers, we also introduced the Energy Storage Module (ESM), which ships with each controller. The ESM eliminates the need for lithium batteries as well as the maintenance and environmental issues associated with the transport and disposal of lithium batteries.

The new controllers also feature an on-board display providing enhanced controller diagnostics and run-time information.

## Pollution Class Standards

### Standard Products

Standard Allen-Bradley products meet or exceed the requirements of:


- ANSI/ISA 71.04.2013 G2 Environment

### Conformally Coated Products

Conformally coated Allen-Bradley products meet or exceed the requirements of:

- ANSI/ISA 71.04.2013 G3 Environment (10-year exposure)
- IEC 61086-3-1 Class 2
- IPC-CC-830
- MIL-I-46058C
- EN600068-2-52 salt mist test, severity level

## Environmental Specifications and Certifications

Temperature	<b>Operating:</b> 0–60 °C ( 33–140 °F) <b>Storage:</b> -40–85 °C ( -40–185 °F)
Relative Humidity	5–95% non-condensing
Vibration	2 g at 10–500 Hz
Shock	<b>Operating:</b> 30 g <b>Non-operating:</b> 50 g
Certifications	UL, ULH, c-UL-us, cULH, CE, ATEX, AUSTRALIA, KOREA, MARITIME, RUSSIAN <i>For more details and a full list of product certifications, visit <a href="http://www.ab.com">www.ab.com</a>.</i> 

## Additional Information

The most current list of Conformally Coated products can be found [here](#), or by contacting your local Rockwell Automation distributor or sales office.

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[www.rockwellautomation.com](http://www.rockwellautomation.com)

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