ControlLogix 5580 Controller
Future proofing your system and enabling The Connected Enterprise

The ControlLogix® 5580 controller helps enable faster system performance, capacity, productivity and security to help meet the growing demands of smart machines and equipment for manufacturing.

The ControlLogix 5580 controller with Studio 5000® software connects people and processes to enable the Connected Enterprise.

Features and Benefits

Enhanced performance and troubleshooting
• Provides up to 45% more capacity
• 1 gigabit (Gb) embedded Ethernet port enables high-speed I/O and motion control
• Controller functions optimized for maximum system performance
• Display provides enhanced diagnostics and troubleshooting

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
The ControlLogix 5580 controller's high performance capabilities enhance your automation control system in several ways.

**ControlLogix 5580 Controller**

- Secure Digital (SD) card provides optional nonvolatile memory to permanently store user program and tag data on the controller.
- Energy storage module removes the need for a battery.
- Studio 5000 design and configuration environment provides ease of system design and commissioning.
- Mode change switch adds a physical layer for security.
- Digitally-signed and encrypted firmware helps protect against malicious intent.
- FactoryTalk® Security provides centralized authentication and access control by verifying the identity of each user-access attempt to the system.
- Display provides enhanced diagnostics and troubleshooting.
- Integrated Motion over EtherNet/IP for up to 256 axes.
- 1 Gb embedded Ethernet port enables high performance, communications, I/O and motion control.
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.

- **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 safe and secure operating environment, reduced exposure due to poor product quality and internal and external threats.
Catalog Number | Memory Size | Number of EtherNet/IP Nodes
--- | --- | ---
1756-L83E | 10 MB | 100
1756-L85E | 40 MB | 300

Environmental Specifications and Certifications

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temperature¹</td>
<td>Operating: 0-60°C (33-140°F)  Storage: -40-85°C (-40-185°F)</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>5-95% non-condensing</td>
</tr>
<tr>
<td>Vibration</td>
<td>2 g at 10-500 Hz</td>
</tr>
<tr>
<td>Shock</td>
<td>Operating: 30 g  Nonoperating: 30 g</td>
</tr>
</tbody>
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Certifications

UL, ULH, cUL, cULH, CE, ATEX, EAC, FMH, KOREA, MARINE, RCM

For more details and a full list of product certifications, visit www.ab.com

See the ControlLogix 5580 Controllers Technical Data and additional information at the Rockwell Automation website.