SLC 500 System

The SLC 500 system is a small chassis-based family of programmable controllers, discrete, analog, and specialty I/O, and peripheral devices. The SLC 500 family delivers power and flexibility with a wide range of communication configurations, features, and memory options.

SLC 500 programmable controllers provide value with extensive capabilities to address a broad range of applications including material handling, HVAC control, high-speed assembly operations, small process control, simple motion control, and SCADA. With SLC 500 Modular Hardware Style controllers, you select the processor, power supply, and I/O modules to fit your application. Modular style chassis are available in 4, 7, 10, and 13-slot versions.

Digital I/O modules, analog I/O modules, and specialty temperature, counting, and process control modules are available to help you create a custom solution for your application.

CompactLogix 5370 Controllers

CompactLogix 5370 controllers provide scalable controller solutions to address a wide variety of applications. All CompactLogix 5370 controllers provide the following functionality:

- Two EtherNet/IP™ ports
- One USB port
- Support for local expansion modules
- Control of local and distributed I/O modules
- Use of 1784-SD1 or 1784-SD2 Secure Digital (SD) card for nonvolatile memory
- A battery is no longer necessary because of the internal energy-storage solution

Some CompactLogix 5370 controllers provide the following functionality:

- Built-in power supply
- Some combination of embedded digital, analog, and high-speed counter modules
- Support for Integrated Motion over an EtherNet/IP network
- Access to DeviceNet® networks.

CompactLogix 5380 Controllers

CompactLogix 5380 controllers can operate in various applications that range from standalone systems or in more complex systems with devices that are connected to the controller via an EtherNet/IP network. All CompactLogix 5380 controllers provide the following functionality:

- Two EtherNet/IP ports
- One USB port
- Support for local expansion modules
- Control of local and distributed I/O modules
- Support Device Level Ring (DLR), Star, and Linear EtherNet/IP network topologies.
- Support up to 180 EtherNet/IP nodes, depending on catalog number.
- Support Linear/DLR and Dual-IP EtherNet/IP modes.

- Support Generic ASCII, Modbus RTU/ASCII, and legacy DF1 and DH-485 protocols.

Some CompactLogix 5380 controllers provide the following functionality:

- Support for Integrated Motion up to 32 axes over an EtherNet/IP network

Compact I/O Modules

The Compact I/O modules can be used in the following applications:

- With a CompactLogix controller
- In an assembly with a 1769-ADN DeviceNet adapter
- In an assembly with a 1769-AENTR Ethernet adapter.

Each I/O module includes a built-in removable terminal block with fingersafe cover for connections to I/O sensors and actuators. The terminal block is behind a door at the front of the module. I/O wiring can be routed from beneath the module to the I/O terminals.

- Once the modules are locked together, the system becomes a rugged assembly.
- Upper and lower tongue-and-groove slots guide the module during installation and secure the module within the system.
- Removable terminal blocks help ease the wiring task.
- Self-lifting, field-wire pressure plates cut installation time.
- The patented bus connector with the lock function enables consistent system communication.
- A color bar is provided on the front of the module.
- Digital and field circuits are optically isolated.

Compact 5000 I/O Modules

The Compact 5000 I/O architecture provides a wide range of input and output modules to span many applications, from high-speed digital to process control. The architecture uses Producer/Consumer technology that allows input information and output status to be shared among multiple Logix 5000 controllers.

Compact 5000 I/O systems are used as local I/O modules in CompactLogix 5380 controller systems or as remote I/O modules with CompactLogix 5380 controllers and some other Logix 5000 controllers. The modules are configured with the Studio 5000 Logix Designer application.

The serial module provides two independent channels that function as network interface using RS232C, RS422, or RS485 to serial devices communicating on Generic ASCII, Modbus RTU/ASCII, DF1, or DH-485 protocol.

The I/O module requires a removable terminal block (RTB) to connect field-side wiring. RTBs are not included with the I/O modules. You must order RTBs separately.