

SLC 500 System Overview

The Allen-Bradley SLC 500 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. The RSLogix 500 ladder logic programming package provides flexible editors, point-and-click I/O configuration, and a powerful database editor, as well as diagnostic and troubleshooting tools to help you save project development time and maximize productivity.



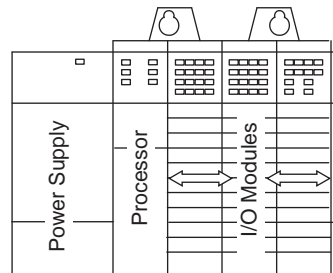
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Typical Systems

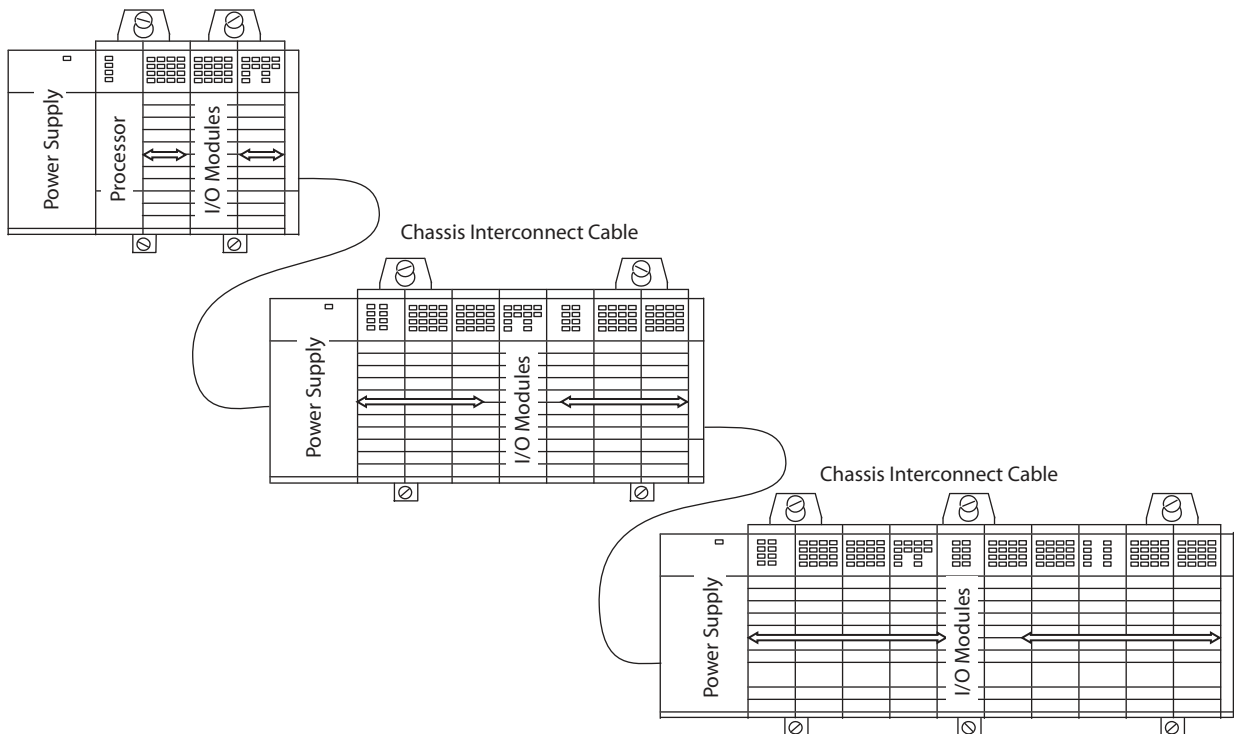
With up to 64 K of configurable data/program memory available and over 60 types of I/O modules, as well as a choice of networking options, the SLC system provides a powerful solution for stand-alone or distributed industrial control.

Local Systems

At minimum, a modular hardware SLC 500 control system consists of a processor module and I/O modules in a single 1746 chassis with a power supply.



You can configure a system with one, two, or three local chassis, for a maximum total of 30 local I/O or communication modules. You connect multiple local chassis together with chassis interconnect cables to extend the backplane signal lines from one chassis to another.



Distributed Systems

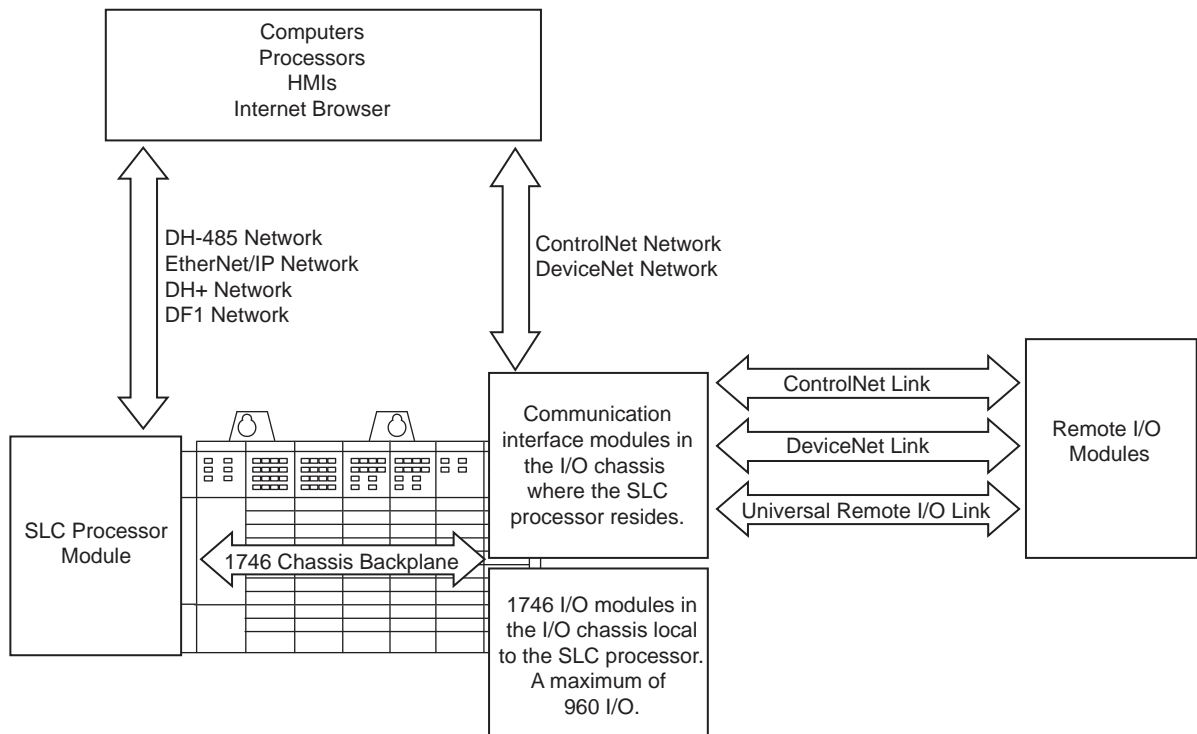
More complex systems can use:

- distributed I/O.

- multiple controllers joined across networks.
- I/O in multiple platforms that are distributed in many locations and connected over multiple I/O links.

Choose the processor module with the on-board communication ports you need. You optionally add modules to provide additional communication ports for the processor. For I/O in locations remote from the processor, you can choose between a ControlNet, DeviceNet, or Universal I/O link. A communication interface module is required in both the local and remote chassis.

Depending upon the communication ports available on your particular SLC control system, you can select operator interfaces that are compatible.



Laying Out the System

Lay out the system by determining the amount of I/O necessary, the network configurations, and the placement of components in each location. Decide at this time whether each chassis will have its own controller or a networked solution.

SLC 500 processors are available with a large range of memory sizes (1 K...64 K) and can control up to 4096 input and 4096 output signals. All modular processors except the SLC 5/01 processor are capable of controlling remotely located I/O. By adding an I/O scanner module, you can use these processors to control/monitor these remotely located I/O across ControlNet, DeviceNet, and Universal Remote I/O links.

SLC 500 processors are single-slot modules that you place into the left-most slot of a 1746 I/O chassis. For I/O in a location remote from the processor, the I/O adapter is a single-slot module that you place in the left-most slot of the I/O chassis. SLC 500 modular systems provide separate power supplies which must be mounted directly on the left end of the 1746 I/O chassis.

The 1746 I/O chassis are designed for back-panel mounting and available in sizes of 4, 7, 10, or 13 module slots. The 1746 I/O modules are available in densities up to a maximum of 32 channels per module.

Communications

Evaluate what communications need to occur. Knowing your communications requirements will help you determine which processor and which communications devices your application might require.

An SLC processor communicates across the 1746 backplane to 1746 I/O modules in the same chassis in which the processor resides. Various models of SLC processors have various on-board ports for communication with other processors or computers. Also, separate modules are available to provide additional communication ports for communication with other processors, computers, and remotely located I/O.

Each processor has one or two built-in ports for either EtherNet/IP, DH+, DH-485, or RS-232 (DF1, ASCII, or DH-485 protocol) communication.

In addition to the on-board ports available with SLC processors, you have the option of providing another communication port for an SLC processor by adding a communication module.

Adapter modules for 1746 I/O are available for ControlNet and Universal Remote I/O links. An I/O adapter module in a chassis with I/O modules interfaces the I/O modules with the I/O link for communication with a scanner port for a processor at another location.

SLC 500 Common Specifications

The following specifications apply to all SLC 500 modular components unless noted.

Environmental Specifications

Attribute	Value
Temperature, operating	IEC 60068-2-1 (Test Ad, Operating Cold), IEC 60068-2-2 (Test Bd, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock): 0...60 °C (32...140 °F)
Temperature, nonoperating	IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold), IEC 60068-2-2 (Test Bb, Unpackaged Nonoperating Dry Heat), IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock): -40...85 °C (-40...185 °F)
Relative humidity	IEC 60068-2-30 (Test Db, Unpackaged Damp Heat): 5...95% without condensation

Environmental Specifications

Attribute	Value
Vibration, operating	IEC 60068-2-6 (Test Fc, Operating): 1 g @ 5...2000 Hz
Vibration, nonoperating	2.5 g @ 5...2000 Hz
Shock, operating	30 g (3 pulses, 11 ms) – for all modules except relay contact 10 g (3 pulses, 11 ms) – for relay contact modules 1746-OWx and 1746-IOx combo
Shock, nonoperating	50 g, 3 pulses, 11 ms
Free fall (drop test)	Portable, 2.268 kg (5 lb) or less @ 0.762 m (30 in.), six drops Portable, 2.268 kg (5 lb) or less @ 0.1016 m (4 in.), three flat drops
Isolation voltage	Isolation between communication circuits: 500V DC Isolation between backplane and I/O: 1500V AC

Certifications

Certifications when product is marked ⁽¹⁾	Value
UL	UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations. See UL File E10314.
c-UL	UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for Canada. See UL File E10314.
CE	European Union 2004/108/EC EMC Directive, compliant with: EN 61000-6-2; Industrial Immunity EN 61000-6-4; Industrial Emissions EN 61131-2; Programmable Controllers (Clause 8, Zone A & B) European Union 2006/95/EC LVD, compliant with: EN 61131-2; Programmable Controllers (Clause 11)
C-Tick	Australian Radiocommunications Act, compliant with: AS/NZS CISPR 11; Industrial Emissions
KC	Korean Registration of Broadcasting and Communications Equipment, compliant with: Article 58-2 of Radio Waves Act, Clause 3

(1) See the Product Certification link at <http://www.rockwellautomation.com/products/certification/> for Declarations of Conformity, Certificates, and other certification details.

SLC 500 System Checklist

Use the following Checklist as a guide to completing your own system specification.

✓	Step	See
	1 Select I/O Modules <ul style="list-style-type: none"> • consider using an interface module or pre-wired 1492 cables • use a spreadsheet to record your selections 	page 9
	2 Select Communication Modules/Devices <ul style="list-style-type: none"> • determine your network communication requirements and select the necessary communication modules/devices • include appropriate communication cables • record your module/device selections on the system spreadsheet 	page 51
	3 Select an SLC 500 Processor <ul style="list-style-type: none"> • choose a processor based on memory, I/O, performance, programming requirements, and communication options 	page 69
	4 Select an SLC 500 Chassis <ul style="list-style-type: none"> • determine the number of chassis and any interconnect cables required based on the physical configuration of your system 	page 75
	5 Select an SLC 500 Power Supply <ul style="list-style-type: none"> • use the power supply loading worksheet to ensure sufficient power for your system • consider future system expansion when selecting a power supply 	page 79
	6 Select Programming Software <ul style="list-style-type: none"> • select the appropriate package of RSLogix 500 Programming Software for your application 	page 91

Step 3 - Select:

- *processor-based on memory, I/O, speed, communications, and programming requirements*
- *memory modules*
- *adapter sockets*
- *battery assembly*

Select an SLC 500 Processor

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. See Selecting an SLC 500 Chassis on page 64 for details.



SLC 5/01



SLC 5/02



SLC 5/03



SLC 5/04



SLC 5/05

SLC 5/01

This processor offers a basic set of 51 instructions with the choice of 1K or 4K of memory in a modular hardware configuration. Modular I/O systems that include an SLC 5/01 processor can be configured with a maximum of three chassis (30 total slots) and from 4 I/O points to a maximum of 3940 I/O points.

SLC 5/02

This processor offers additional complex instructions, enhanced communications, faster scan times than the SLC 5/01, and extensive diagnostics that allow it to function in more complex applications. Modular I/O systems can be configured with a maximum of 3 chassis (30 total slots) and from 4 I/O points to a maximum of 4096 I/O points.

SLC 5/03

This processor provides 8 K, 16 K, or 32 K of memory. A built-in RS-232 channel gives you the flexibility to connect to external intelligent devices without the need for additional modules. Modular I/O systems can be configured with a maximum of 3 chassis (30 total slots) and from 4 I/O points to a maximum of 4096 I/O points.

SLC 5/04

The standard DH-485 port has been replaced with a DH+ port, providing high-speed SLC 5/04-to-SLC 5/04 communications and direct connection to PLC-5 controllers. Modular I/O systems can be configured with a maximum of 3 chassis (30 total slots) and from 4 I/O points to a maximum of 4096 I/O points. The available memory options are 16 K, 32 K, or 64 K. In addition, there is an SLC 5/04P option, which is designed

specifically for the Plastics Industry and contains ERC2 algorithms for Plastics Machinery Control.

SLC 5/05

The SLC 5/05 processor provides the same functionality as the SLC 5/04 processor with standard Ethernet communications rather than DH+ communications. Ethernet communication occurs at 10 Mbps or 100 Mbps, providing a high performance network for program upload/download, online editing, and peer-to-peer messaging. Modular I/O systems can be configured with a maximum of 3 chassis (30 total slots) and from 4 I/O points to a maximum of 4096 I/O points.

Controller Specifications

SLC 500 Modular Controllers Specifications

Specification	SLC 5/01		SLC 5/02	SLC 5/03			SLC 5/04			SLC 5/05 ⁽³⁾		
	L511	L514	L524	L531	L532	L533	L541	L542	L543	L551	L552	L553
Memory Size (Words)	1 K	4 K	4 K	8 K	16 K	32 K	16 K	32 K	64 K	16 K	32 K	64 K
Backplane Current (mA) @ 5V	90 mA			500 mA			1000 mA			1000 mA		
Backplane Current (mA) @ 24V	0 mA			175 mA			200 mA ⁽²⁾			200 mA		
Digital I/O, max	7880		8192									
Local chassis/slots, max.	3/30											
On-board communications	DH-485 Slave		DH-485	DH-485 and RS-232			DH+ and RS-232			Ethernet and RS-232		
Optional memory module	EEPROM			Flash EEPROM								
Programming	RSLogix 500											
Programming Instructions	52		71	107								
Typical Scan Time ⁽¹⁾	8 ms/K		4.8 ms/K	1 ms/K			0.9 ms/K					
Program scan hold-up time after loss of power	20 ms...3 s (dependent on power supply loading)											
Bit Execution (XIC)	4 μs		2.4 μs	0.44 μs			0.37 μs					
Clock/calendar accuracy	N/A			±54 seconds/month @ 25 °C (77 °F) ±81 seconds/month @ 60 °C (140°F)								

- (1) The scan times are typical for a 1K ladder logic program consisting of simple ladder logic and communication servicing. Actual scan times depend on your program size, instructions used, and the communication protocol.
- (2) SLC 5/04 processors manufactured prior to April 2002 draw 200 mA @ 24V dc. Check the label to verify your processor's current draw.
- (3) The 5/05 Series C processors can communicate to 100 Mbps and support increased connections: 1747-L551 = 32 connections; 1747-L552 = 48 connections; 1747-L553 = 64 connections.

SLC 500 Programming Instruction Set

The following table shows the SLC 500 instruction set listed within their functional groups.

SLC Programming Instruction Set

Functional Group	Description	Instruction(s)	SLC 5/01	SLC 5/02	SLC 5/03	SLC 5/04	SLC 5/05
Bit	monitor and control status of bits	XIC, XIO, OTE, OTL, OTU, OSR	✓	✓	✓	✓	✓
Timer and Counter	control operations based on time or number of events		✓	✓	✓	✓	✓
Compare	compare values using an expression or specific compare instruction	EQU, NEQ, LES, LEQ, GRT, GEQ, MEQ	✓	✓	✓	✓	✓
		LIM		✓	✓	✓	✓
Compute	evaluate arithmetic operations using an expression or specific arithmetic instruction	ADD, SUB, MUL, DIV, DDV, CLR, NEG	✓	✓	✓	✓	✓
		SQR, SCL		✓	✓	✓	✓
		SCP, ABS, CPT, SWP, ASN, ACS, ATN, COS, LN, LOG, SIN, TAN, XPY, RMP			✓	✓	✓
Logical	perform logical operations on bits	AND, OR, XOR, NOT	✓	✓	✓	✓	✓
Conversion	perform conversion between integer and BCD values, and radian and degree values	TOD, FRD, DCD	✓	✓	✓	✓	✓
		DEG, RAD, ENC			✓	✓	✓
Move	move and modify bits	MOV, MVM, RPC	✓	✓	✓	✓	✓
File	perform operations of file data	COP, FLL, BSL, BSR	✓	✓	✓	✓	✓
		FFL, FFU, LFL, LFU, FBC, DDT		✓	✓	✓	✓
Sequencer	monitor consistent and repeatable operations	SQO, SQC	✓	✓	✓	✓	✓
		SQL		✓	✓	✓	✓
Program Control	change the flow of ladder program execution	JMP, LBL, JSR, SBR, RET, MCR, TND, SUS, IIM, IOM, END	✓	✓	✓	✓	✓
		REF		✓	✓	✓	✓
User Interrupt	interrupt your program based on defined events	STD, STE, STS, IID, IIE, RPI, INT		✓	✓	✓	✓
Process Control	close-looped control	PID		✓	✓	✓	✓
Communications	read or write data to another station	MSG, SVC, BTR, BTW, CEM, DEM, EEM (SLC 5/05 only)		✓	✓	✓	✓
ASCII	read, write, compare, convert ASCII strings	ABL, ACB, ACI, ACL, ACN, AEX, AHL, AIC, ARD, ARL, ASC, ASR, AWA, AWT			✓	✓	✓

Controller Accessories

Memory Modules

These optional memory modules provide non-volatile memory in convenient modular form. The modules plug into a socket on the processor.

Memory Module Specifications

Catalog Number	Description
1747-M1	1 K, EEPROM Memory Module for SLC 5/01 Processors
1747-M2	4 K, EEPROM Memory Module for SLC 5/01 and SLC 5/02 Processors
1747-M13	64 K, Flash EPROM Memory Module for SLC 5/03, SLC 5/04, and SLC 5/05 Series C (or later) OS Firmware only

Adapter Sockets

Adapter sockets are required when using commercial PROM programmers to program and erase memory modules. The memory module fits into the adapter socket, and then the adapter socket fits into the zero insertion force (ZIF) socket on the PROM burner.

Adapter Socket Descriptions

Catalog Number	Description
1747-M5	SLC 5/01 and SLC 5/02 Adapter Socket - Five Sockets Per Package
1747-M15	SLC 5/03, SLC 5/04, and SLC 5/05 Adapter Socket for 1747-M13

Program Storage Device

The 1747-PSD simplifies PLC program development, backup and upgrade shipping issues for SLC 5/03 and higher processors, as well as MicroLogix controllers. The PSD allows you to:

- upload and download to your industrial programming station using RSLogix 500 software.
- back up PLC programs without using a computer or programming software.
- make multiple copies of an installed program.

Before downloading a program, the PSD performs error-checking to ensure that the program is compatible with the target PLC. It also provides automatic baud rate detection, CRC or BCC error detection, and connection via a standard RS-232, 9-pin,

D-shell connector. Stored programs are retained in Flash EPROM memory even if the batteries or the power supply fails.

Program Storage Device Specifications

Attribute	Description
Compatible Controllers	SLC 5/03 and higher, MicroLogix 1000, 1100, 1200, and 1500
Memory Size	64K words maximum
Memory Type	Flash EPROM
Operating Power	(2) AAA batteries, or power supply (7...30V dc, 250 mA max)
Compatible Cables	1747-CP3 and 1761-CBL-PM02 (not included)

Upgrade Kits

SLC 500 OS upgrade kits allow you to access the latest functional enhancements for your existing controller. .

SLC 500 Upgrade Kit Descriptions

Catalog Number	Description
1747-OS302	SLC 5/03 Upgrade Kit – includes 5 upgrade labels
1747-OS401	SLC 5/04 Upgrade Kit – includes 5 upgrade labels
1747-DU501	SLC 5/05 Flash Upgrade Kit – includes CD, instructions, and 5 upgrade labels
1747-RL302	SLC 5/03 Upgrade Kit Labels – includes 10 labels
1747-RL401	SLC 5/04 Upgrade Kit Labels – includes 10 labels
1747-RL501	SLC 5/05 Upgrade Kit Labels – includes 10 labels

1747-BA Lithium Battery Assembly

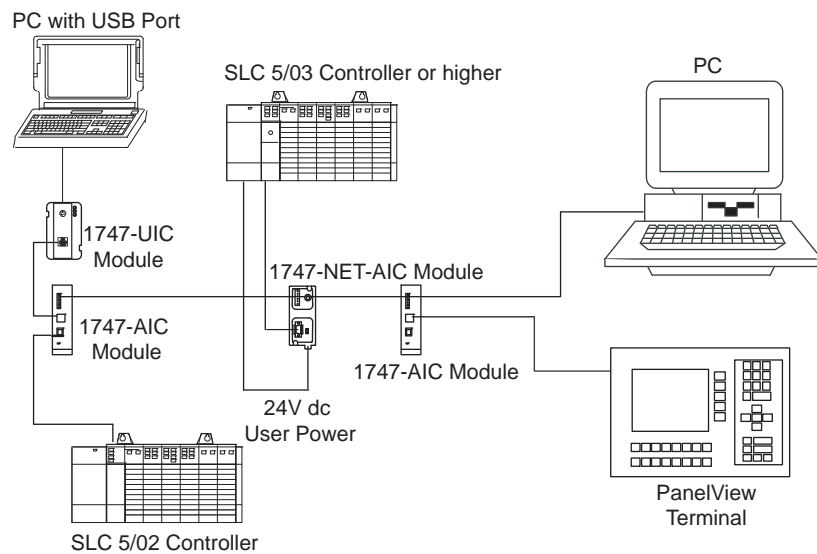
Backup power for RAM is provided by a replaceable lithium battery. The lithium battery provides backup for approximately five years for the 1747-L511 and two years for the 1747-L514. It provides backup for approximately two years for SLC 5/02, 5/03, 5/04, and SLC 5/05, as well. A battery LED on the processor alerts you when the battery voltage is low.

DH-485 Network

The DH-485 communication network allows devices on the plant floor to share information. Via the network, application programs can:

- monitor process and device parameters and status, including fault and alarm detection.
- perform data acquisition.
- perform supervisory control functions.
- upload/download PLC programs over the network.

The network offers connection to up to 32 nodes, token passing access control, and the ability to add or remove nodes without disrupting the network. DH-485 supports slave devices and features multiple-master capability.



The SLC 500 family includes the following DH-485 devices:

- 1747-KE DH-485/RS-232C Interface Module
- 1761-NET-AIC Advanced Interface Converter
- 1747-AIC Isolated Link Coupler
- 1747-UIC USB to DH-485 Converter

DH-485/RS-232C Interface Module

The 1747-KE module is a communication interface that acts as a bridge between DH-485 networks and RS-232C devices using DF1 protocol. It allows you to access your SLC 500 processor through an RS-232C link. When used in an SLC 500 chassis with a modem, the 1747-KE module enables remote programming and troubleshooting of any single SLC 500 processor, remote communication to a DH-485 network of SLC 500 processors, and remote data collection from the data table of any SLC 500 processor. The interface module allows you to use the SLC 500 as a remote terminal unit.

Remote I/O Device Specifications

Remote I/O Device Catalog Numbers and Specifications

Catalog Number	Description	Backplane Current (mA) @ 5V
1747-SN	Remote I/O Scanner Module	600 mA
1747-BSN	Backup Scanner Module	800 mA
1747-ASB	Remote I/O Adapter	375 mA
1747-DCM	Direct Communication Module	360 mA

Remote I/O Device Catalog Numbers and Specifications

Baud Rate		Maximum Cable Distance	Terminating Resistor Size
Using Extended Node Capability	57.6 K baud	3048 m (10,000 ft)	82Ω 1/2 W
	115.2 K baud	1524 m (5000 ft)	82Ω 1/2 W
	230.4 K baud	762 m (2500 ft)	82Ω 1/2 W
Not Using Extended Node Capability	57.6 K baud	3048 m (10,000 ft)	150Ω 1/2 W
	115.2 K baud	1524 m (5000 ft)	150Ω 1/2 W
	230.4 K baud	762 m (2500 ft)	82Ω 1/2 W

Serial Network

The SLC 5/03, SLC 5/04, and SLC 5/05 processors have a serial port which is configurable for RS-232 compatible serial communication. Use the serial port to connect to devices that:

- communicate using DF1 protocol, such as modems, communication modules, programming workstations, or other Encompass partner devices.
- communicate using DH-485 protocol.
- send and receive ASCII characters, such as ASCII terminals, bar code readers, and printers.

When configured for system mode, the serial port supports DF1 protocol. Use system mode to communicate with other devices on the serial link. You can select the following DF1 modes:

- DF1 full-duplex: provides communication between an SLC 500 controller and other
- DF1 compatible devices. In point-to-point mode, the SLC 500 controller uses DF1 full-duplex protocol.
- DF1 half-duplex master: polls and transmits messages between the master and each remote node. In master mode, the SLC 500 controller uses DF1 half-duplex polled protocol.
- DF1 half-duplex slave: uses the controller as a slave station in a master/slave serial network. In slave mode, the SLC 500 controller uses DF1 half-duplex protocol.

DF1 radio modem: a hybrid between DF1 full-duplex and DF1 half-duplex, this protocol is optimized for use with radio modem networks.

In system mode, the serial port also supports supervisory control and data acquisition (SCADA) applications. SCADA systems allow you to monitor and control remote functions and processes using serial communication links between master and slave locations.

When configured for user mode, the serial port supports ASCII devices. Use the SLC 500 ASCII instructions to send information to and receive information from these devices.

RS-232/DF1 Port Splitters

The 1747 Port Splitters let a single RS-232/DF1 full-duplex communication port on a controller split into two separate ports for simultaneous connection with two external devices. The Port Splitter supports the following: SLC 500, PLC-5, MicroLogix, ControlLogix, CompactLogix, and FlexLogix controllers.

The Port Splitter has three ports for Controller, Network and Programmer/HMI connections. It also has a connection for a +24V external power source and status LEDs.

- The Controller port connects to the RS-232/DF1 full-duplex port of a controller. The port configuration is set at DF1 full-duplex, 8 bits, no parity, 1 stop bit and CRC checksum on powerup. The port automatically sets the baud rate to 19.2 K or 38.4 K baud taking advantage of the controller's maximum baud rate and can also match the controller's CRC or BCC checksum.
- The Network port on the 1747-DPS1 connects to a 1761-NET-AIC, 1761-NET-DNI or 1761-NET-ENI module and receives any messages initiated from the controller. The network port can source power from the port splitter's external power supply to one of the above modules if a 1761-CBL-AM00 or 1761-CBL-HM02 cable is used.
- The Network port on the 1747-DPS2 provides similar functionality, but can be configured for communications with DH-485, DF1 half-duplex (master or slave), DF1 full-duplex, and DF1 radio modem networks. The port is programmed for DH-485 communication at the factory.
- The 1747-DPS2 port splitter has fully-isolated communication ports. Therefore, no external isolation is required.
- The Prog/HMI port connects to a programming station or HMI device (PanelView Standard, PanelView Plus, VersaView CE) for respond only operations.

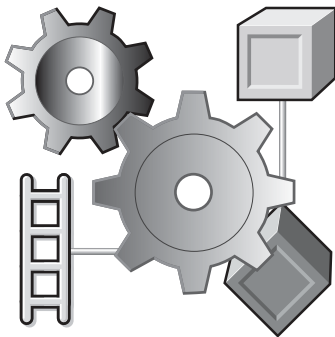
The serial configuration for the Network and Programmer/HMI ports on the 1747-DPS1 port splitter must be set to DF1 full-duplex, 8 bits, no parity, 1 stop bit, 19.2 K baud and CRC checksum.

The Network port on the 1747-DPS2 port splitter can be configured for wonderduplex, and DF1 radio modem networks.

Step 6 - Select:

- the appropriate RSLogix 500 package for your application
- other software packages, such as RSNetworkx for ControlNet or RSNetworkx for DeviceNet, if required

RSLogix 500 Software

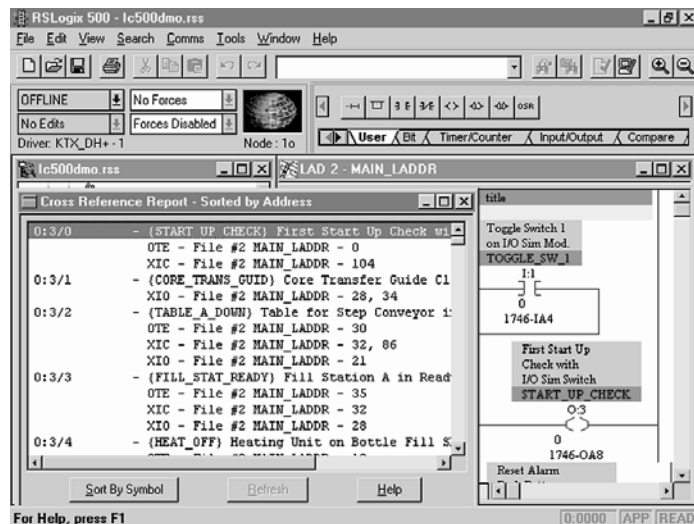


Select Programming Software

Familiar ladder diagram programming makes the SLC 500 family easy to program using a personal computer and RSLogix 500 Programming Software.

The RSLogix 500 ladder logic programming package was the first PLC programming software to offer unbeatable productivity with an industry-leading user interface. RSLogix 500 is compatible with programs created using Rockwell Software's DOS-based programming packages for the SLC 500 and MicroLogix families of processors, making program maintenance across hardware platforms convenient and easy.

RSLogix 500 may be used with Windows 98, Windows NT (4.0), Windows 2000, or Windows XP.



Flexible, Easy-to-use Editing Features

Create application programs without worrying about getting the syntax correct. A Project Verifier builds a list of errors that you can navigate through to make corrections at your convenience.

Powerful online editors allow you to modify your application program while the process is still operating. The Test Edits feature tests the operation of your modification before it becomes a permanent part of the application program. Online and offline editing sessions are limited only by the amount of available RAM.

Drag-and-drop editing lets you quickly move or copy instructions from rung to rung within a project, rungs from one subroutine or project to another, or data table elements from one data file to another.

Context menus for common software tools are quickly accessible by clicking the right mouse button on addresses, symbols, instructions, rungs, or other application objects. This convenience provides you with all the necessary functionality to accomplish a task within a single menu. This is a time-saving feature because you don't have to remember the placement of functionality options in the menu bar.

Point-and-Click I/O Configuration

The easy-to-use I/O Configurator lets you click or drag-and-drop a module from an all-inclusive list to assign it to a slot in your configuration. Advanced configuration, required for specialty and analog modules, is easily accessible. Convenient forms speed entry of configuration data. An I/O auto configuration feature is also available.

Powerful Database Editor

Use the Symbol Group Editor to build and classify groups of symbols so that you can easily select portions of your recorded documentation for use across multiple projects. The Symbol Picker list allows you to assign addresses or symbols to your ladder logic instructions simply by clicking on them.

Export your database to Comma-Separated-Value (CSV) format to use or manipulate the data in your favorite spreadsheet program. When finished, simply import the CSV file into RSLogix 500.

Diagnostics and Troubleshooting Tools

Quickly locate the specific area in the application that is causing a problem with Advanced Diagnostics. Diagnose the interaction of output instructions within a section of your program by viewing them at the same time.

Simultaneously examine the status of bits, timers, counters, inputs and outputs all in one window with the Custom Data Monitor. Each application project you create can have its own Custom Data Monitor window.

Use the tabbed Status displays to easily review status bit settings specific to your application programming, including Scan Time and Math Register information, Interrupt settings, and more.

Assistance on Demand

Comprehensive online help provides an instruction reference as well as step by step instructions for common tasks.

RSLogix 500 Programming Packages

All of the packages described in the table below are English versions on CD-ROM. They can be used with Windows 98, Windows 2000, Windows ME, Windows XP, or Windows NT (4.0) only.

RSLogix 500 Software

Description		
RSLogix 500 Programming for the SLC 500 and MicroLogix Families	9324-RL0300ENE	Create, modify, and monitor application programs used by both the SLC 500 and MicroLogix Programmable Controller families.
RSLogix 500 Starter	9324-RL0100ENE	An effective solution for cost-conscious or entrylevel users, this package provides the basic functionality of the full-featured version with some of the advanced features disabled.
RSLogix 500 Professional	9324-RL0700NXENE	This package combines the features of the RSLogix 500 Standard plus Microsoft VBA scripting capability, and includes RSLogix Emulate 500, RSNetwork for ControlNet, RSNetwork for EtherNet/IP and RSNetwork for DeviceNet.

IMPORTANT You must provide a means of communication between the PC and the processor.

The table below indicates with an "✓", which cables are compatible with the SLC 5/01 through 5/05 processors.

Processor	SLC 5/01	SLC 5/02	SLC 5/03	SLC 5/04	SLC 5/05
1747-UIC	✓ requires 1747-C13		✓ requires 1747-C13 requires 1747-CP3	✓ requires 1747-CP3	
1747-CP3			✓	✓	✓
1747-KTX, -PKTX	✓ requires 1784-CP14			✓ requires 1784-CP13	

Processor	SLC 5/01	SLC 5/02	SLC 5/03	SLC 5/04	SLC 5/05
1747-PCMK	✓			✓	
	requires 1784-PCM4			requires 1784-PCM6	
10Base-T Ethernet					✓

RSLogix 500 Software Support

Warranty

Rockwell Software provides a full one-year limited warranty for RSLogix 500 programming software products.

Support Continuation Agreements

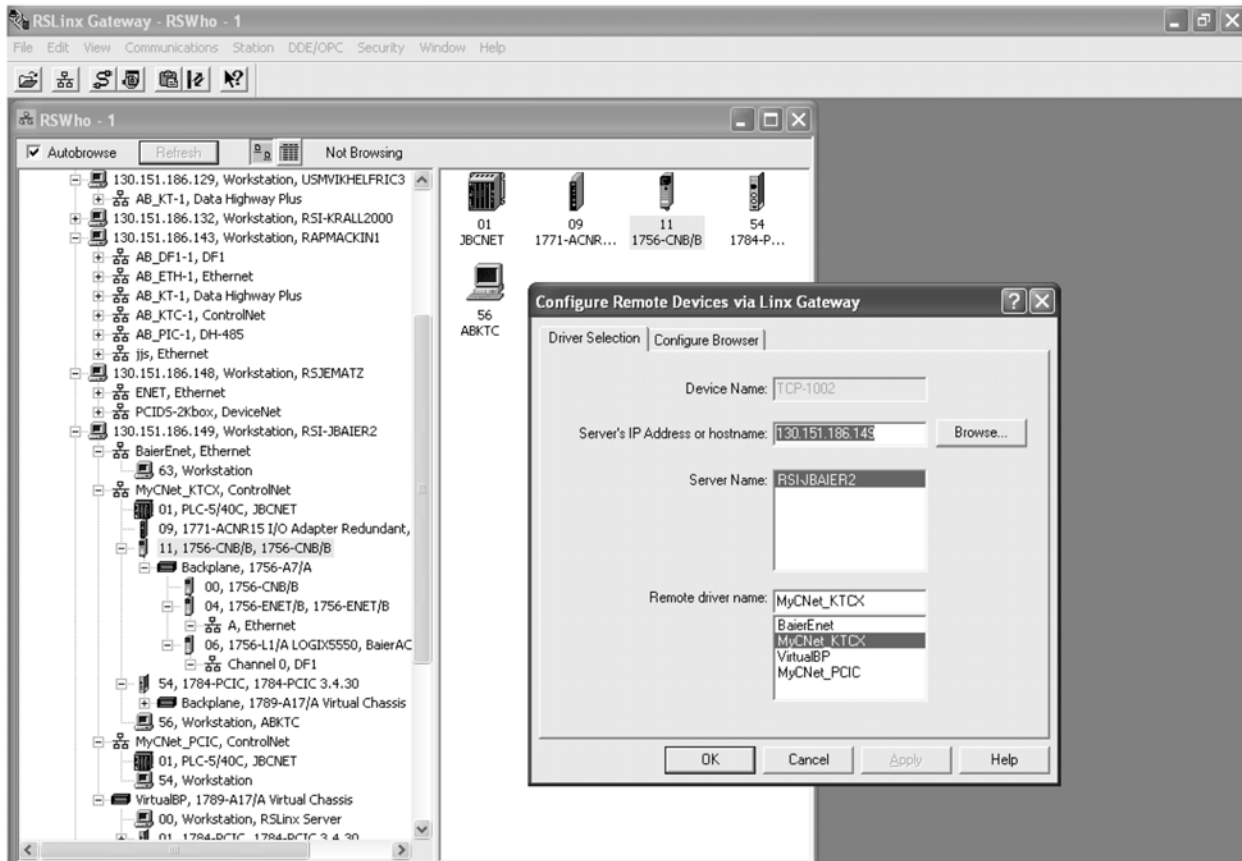
You can purchase additional one-year terms of support. Orders for support continuation agreements must be accompanied by your name, address, software serial number and version number (or a copy of your registration card). Contact your local Allen-Bradley sales office or authorized distributor.

RSLinx Software

RSLinx software is a complete communication server providing plant-floor device connectivity for a wide variety of software applications such as RSLogix 5, RSLogix 500, and RSLogix 5000, RSVIEW32, RSVIEW Enterprise Series, and RSSQL/RSBizWare software. In addition, several open interfaces are provided for third-party HMI, data collection and analysis packages, and custom client-application software. RSLinx software can support multiple software applications simultaneously, communicating to a variety of devices on many different networks.

RSLinx software, version 2.x, is now joined by RSLinx Enterprise software, a new product within the RSLinx family that provides unparalleled connectivity to Logix processors. RSLinx Enterprise software currently can support working as a data server for widely distributed RSVIEW Supervisory Edition products, RSSQL, RSBizWare Historian, and RSBizWare PlantMetrics applications, RSVIEW Machine Edition software including PanelView Plus and VersaView hardware platforms, and RSVIEW Supervisory Edition Station software.

You can communicate from anywhere to anywhere using RSLinx software.



RSLinx Software Requirements

Component	Description
Personal computer	Pentium100 MHz processor (faster processors will improve performance)
Operating system	Supported operating systems: <ul style="list-style-type: none"> • Microsoft Windows XP • Microsoft Windows 2000 • Microsoft Windows NT version 4.0 with Service Pack 3 or greater • Microsoft Windows ME • Microsoft Windows 98
RAM	32 MB of RAM min 64 MB or more of RAM recommended
Hard disk space	35 MB of free hard disk space (or more based on application requirements)
Video requirements	16-color VGA graphics display 800 x 600 or greater resolution

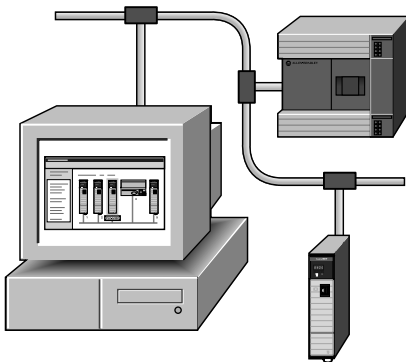
In most cases, RSLinx Lite software comes bundled with controller programming software packages.

You can also download RSLinx Lite for free from the Software Updates link on the Get Support Now website at <http://support.rockwellautomation.com>.

Select the RSLinx Software Package

Catalog Number	RSLinx Products
Available only bundled with other products such as RSLogix software products.	Pentium100 MHz processor (faster processors will improve performance)
9355-WABSNENE	Supported operating systems: <ul style="list-style-type: none"> • Microsoft Windows XP • Microsoft Windows 2000 • Microsoft Windows NT version 4.0 with Service Pack 3 or greater • Microsoft Windows ME • Microsoft Windows 98
9355-WABOEMENE	32 MB of RAM min 64 MB or more of RAM recommended
9355-WABENE	35 MB of free hard disk space (or more based on application requirements)
9355-WABGWENE	RSLinx Gateway
9355-WABCENE	RSLinx SDK
9355-RSLETENE	RSLinx Enterprise

RSNetWorx Software



RSNetWorx software is the configuration tool for your control network. With RSNetWorx software you can create a graphical representation of your network configuration and configure the parameters that define your network.

Use RSNetWorx software for:

- ControlNet software to schedule network components. The software automatically calculates network bandwidth for the entire network, as well as the bandwidth used by each network component. You must have RSNetWorx software to configure and schedule ControlNet networks.
- DeviceNet software to configure DeviceNet I/O devices and create a scan list. The DeviceNet scanner stores the configuration information and scan list.
- EtherNet/IP software to configure EtherNet/IP devices using IP addresses or host names.