

Allen-Bradley 1746 1747 Series Service Manual

1747-L543

1. Description

The 1747-L543 is a controller module for the SLC 500 Modular Hardware by Allen-Bradley. It comes with Memory or 64 KB, and built-in communication interfaces such as 9-Pin RS-232 Port and 3 Wire terminal Data Highway Plus (DH+) protocol. It is capable of 4096 Inputs points and 4096 Outputs points. Technical specifications for 1747-L543

2. Specifications

Specification	Value
Manufacturer	Rockwell Automation
Brand	Allen-Bradley
Part	Number/Catalog No. 1747-L542
Series	SLC 500
Inputs	4096
Module	Type SLC 5/04 Processor
Outputs	4096
Analog	I/O 480
Memory:	Up to 64 KB, Battery Backed-RAM
Program	Scan Time 0.9 ms/K
User	Memory 64,000 Words
I/O	Chassis 3
Chassis	Module Slots 30
I/O	Scan Time 0.225 milliseconds
Communication	Data Highway Plus (DH+), RS-232
Backup	Memory 1747-M13
Operating	Temperature 0 to 60 degrees Celsius
Battery	back-up memory: Yes; 1747-BA
UPC	10662468653036
UNSPSC	32151705 Description
The	Allen-Bradley 1747-L543 is an SLC 500 processor. This hardware is a processor which features maximum discrete input and output capacities of 4096 each. It has an integrated memory of 64K words, specifically 60K words for data and program and 4K words for data only. It also comes with a Flash EPROM backup memory and 107 programming instructions. The 64 KB RAM of the 1747-L543 processor is battery-backed. The I/O chassis of the 1747-L543 is a maximum of 3,

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Outputs 4096

Analog I/O 480

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Chassis Module Slots 30

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The 1747-L543 SLC is a SLC 5/04 controller which has the highest memory capacity among the Three (3) variants of 5/04 processors. This processor has integrated 64KB user memory which is sized to handle 4096 Input and outputs. Integrated front-panel indicators is included to allow quick diagnosis of the module's status.

The 1747-L543 application range is with medium to large control applications. This processor is supports distributed I/O topology that is a proven architecture for designing a centralized control over a widely spreaded I/O signals across the controlled area of the process. SLC racks may be installed near these IO signals, eliminating the need of long cable runs and multiple use of processors. Instead of processors, communication scanners are installed in each distributed IO rack while communication adapter is installed to rack where the CPU resides.

Though the SLC product family is a discontinued product family, Allen-Bradley has released most recent revisions compatible for each Microsoft operating systems.

This processor is capable of being programmed to perform basic control requirement through the basic bit logic instructions while it is also capable of performing advanced applications such as Proportional-Integral-Derivate (PID) controls, Motion and Position control as well as implement complex control strategies. This processor has an intuitive diagnostic buffer that when connected online, fault details and information are provided.