

Allen-Bradley 1756 Series Service Manual

1756-L72S

1. Description

Mfr. Part Number:

2. Specifications

Specification	Value
Manufacturer	Rockwell Automation
User	Memory 4MB
Module	Type Processor Module
Series	GuardLogix 5570
Part	Number/Catalog No. 1756-L73S
Brand	Allen-Bradley
Product	Type Programmable Automation Controller
Safety	Partner controller 1756-L7SP
Safety	Memory 2 MB
Non-volatile	memory 1GB (ships with the controller)
Maximum	I/O 128000
Maximum	Analog I/O 4000
No.	of standard task 31
No.	of safety task 1
Programs	per task 100 programs
Event	Tasks All triggers
Built-in	communication 1 USB port
Energy	Storage Modules 1756-ESMCAP c (Integrated); 1756-ESMNSE; 1756- ESMNRM
I-O	Memory 0.98 MB
Maximum	I-O 128,000
Maximum	Analog I-O 4,000
Maximum	Digital I-O 128,000
Current	Draw (1.2 Volts I/C) 5 Milliampere
Current	Draw (5.1 Volts I/C) 800 Milliampere
Power	Dissipation 2.5 Watts
Thermal	Dissipation 8.5 BTU per hour
Isolation	Voltage 30 Volts Continuous
Enclosure	None (Open-Style)
UPC	10885630016471 Description
The	Allen-Bradley 1756-L72S is a GuardLogix 5570 controller that is a part of the Logix5000 fam

3. Product Information

Mfr. Part Number:

1756-L72S

Manufacturer: Allen-Bradley / Rockwell Automation

Description: Allen Bradley 1756-L72S GuardLogix Processor, 4MB Standard / 2MB Safety Memory

Full Description: Allen-Bradley 1756-L72S GuardLogix Logix5572S Processor with 4MB Standart Memory and 2MB of Safety Memory, 1 x Built-in USB Port and Energy Storage Module (ESM), for use in applications with SIL 3/PLC/Cat. 4 The 1756-L72S is part of the 5570 GuardLogix Programmable Automation Controller (PAC). This controller comes with standard and safety features and with embedded memory capacities of 4 Megabytes user memory, 2 Megabytes Safety memory, I/O memory of 0.98 Megabytes and 1 Gigabyte non-volatile memory which is provided by the 1784-SD1 that ships with the controller. It also Technical specifications for 1756-L72S

Manufacturer Rockwell Automation

User Memory 4MB

Module Type Processor Module

Series GuardLogix 5570

Part Number/Catalog No. 1756-L73S

Brand Allen-Bradley

Product Type Programmable Automation Controller

Safety Partner controller 1756-L7SP

Safety Memory 2 MB

Non-volatile memory 1GB (ships with the controller)

Maximum I/O 128000

Maximum Analog I/O 4000

No. of standard task 31

No. of safety task 1

Programs per task 100 programs

Event Tasks All triggers

Built-in communication 1 USB port

Energy Storage Modules 1756-ESMCAP c (Integrated); 1756-ESMNSE; 1756- ESMNRM

I-O Memory 0.98 MB

Maximum I-O 128,000

Maximum Analog I-O 4,000

Maximum Digital I-O 128,000

Current Draw (1.2 Volts DC) 5 Miliamperes

Current Draw (5.1 Volts DC) 800 Miliamperes

Power Dissipation 2.5 Watts

Thermal Dissipation 8.5 BTU per hour

Isolation Voltage 30 Volts Continuous

Enclosure None (Open-Style)

UPC 10885630016471 Description

The Allen-Bradley 1756-L72S is a GuardLogix 5570 controller that is a part of the Logix5000 family of controllers. It is a ControlLogix controller with safety control functions. It is a dual processor solution that must be used with a 1756-L7SP safety module to meet SIL 3 or Cat. 4/PLC safety standards. The safety partner controller is automatically configured, benefitting a single project. It has great processing capabilities and speed for motion and high-performance logic. It has a USB port for communication. It can support up to 500 controller connections. The 1756-L72S controller has 4MB of user memory, 2MB of Safety Memory, and 0.98MB of I/O memory. It can support 128,000 digital I/O and 4000 Analog I/O. It draws a current of 5mA at 1.2V DC and 800mA at 5.1V DC. It has a power dissipation of 2.5W and thermal dissipation of 8.5 BTU/hr. It weighs 0.55lbs and has an isolation voltage of 30V (continuous) for basic insulation. It can be installed in any slot of a ControlLogix 1756 Chassis and multiple controllers can also be installed in the same chassis. For safe communication, it uses ControlNet, DeviceNet, or EtherNet/IP networks. The 1756-L72S controller can control or monitor I/O over the backplane or through I/O links. For controller diagnostics, it has a front display that provides runtime information. It functions using energy storage modules, meaning that lithium batteries are not needed. A 1 GB (1784-SD1) Secure Digital card comes pre-installed as an optional non-volatile storage which can be expanded up to 2 GB (1784-SD2).

The Allen-Bradley 1756-L72S is a 5570 GuardLogix Programmable Automation Controller (PAC). This controller features standard and safety controller capabilities. This controller is the primary controller, used with a safety partner with catalog number 1756-L7SP or 1756-L7SPK to achieve Safety Integrated Level (SIL) Category Level (CL) 3/Performance Level e (PLC) /Cat. 4. Rating. Using the 1756-L72S, standard and safety projects are integrated in a single file unlike dedicated safety controllers.

The 1756-L72S features high-capacity standard memory and a dedicated safety memory. These memory areas amount to 4 Megabytes user memory, 2 Megabytes Safety memory, I/O memory of 0.98 Megabytes and 1 Gigabyte non-volatile memory which is provided by the 1784-SD1 that ships with the controller. It enables the 1756-L72S to interface up to a maximum of 128,000 Input and Output (I/O) signals which may be composed of 128,000 Discrete I/O along and 4000 Analog I/O.

The 1756-L72S is an environment-friendly controller, as it is equipped with modern energy storage modules rather than traditional Lithium batteries to retain the Random Access Memory (RAM). These memory storage modules include 1756-ESMCAP which ships with the controller; 1756-ESMNSE which is a removable, no residual WallClockTime power backup or 1756-ESMNRM that is nonremovable and helps prevent USB connection and SD card use to help secure the controller.

The 1756-L72S may be installed to any standard or conformally-coated ControlLogix chassis such as 1756-A4, 1756-A4K, 1756-A7, 1756-A7K, 1756-A10, 1756-A10K, 1756-A13, 1756-A13K, 1756-A17, and 1756-A17K, as well as standard power supplies such as 1756-PA50, 1756-PA72, 1756-PA72K, 1756-PA75, 1756-PA75K, 1756-PB50, 1756-PB72, 1756-PB72K, 1756-PB75, and 1756-PB75K.

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