

Allen-Bradley 1785-L11B

The Allen-Bradley 1785-L11B processor is a PLC 5 series standard processor. It comes with 8K of built-in memory. The 1785-L11B standard processor has a rated backplane current load of 2.3 Amps at 5 Volts. This standard processor can work with up to 512 total I/O points in the same system. The 1785-L11B standard processor dissipates about 12 Watts of power when it is operating under normal Technical specifications for 1785-L11B

Manufacturer Rockwell Automation

Brand Allen-Bradley

Part Number/Catalog No. 1785-L11B

Module Type Standard Processor

Processor PLC-5/11

Max User Memory Words 8 Kilowords

Battery-Backed Static RAM Yes

EEPROM Program Backup Option (using 1785-ME16, -ME32, -ME64, and -M100) Yes

Protected Memory No

Max Total I/O 512 (any mix) or 384 in + 384 out (complementary)

Max Analog I/O 512

I/O Scan Time Per Rack 10 ms at 57.6 kbits/s, 7 ms at 115.2 kbits/s, 3 ms at 230.4 mbits/s

Max I/O Chassis Total 5

Max I/O Chassis Extended Local 0

Max I/O Chassis Universal Remote 4

RS-232-C/422-A/423-A Ports 1

Control Coprocessor Expansion Port Yes Description

The Allen-Bradley 1785-L11B is a PLC-5 Programmable Controller. 1785-L11B is one of the enhanced programmable controllers of the PLC-5 series. The programmable controller 1785-L11B is at the very center of each control system. 1785-L11B interconnects I/O modules both local, extended and remote, devices on various type of communication interfaces and creates one control system suited for needs associated with controlling the processes. 1785-L11B has 1 built-in port for Data Highway Plus (DH+) or Remote I/O. DH+ can be used for remote programming and monitoring of 1785-L11B, and for creating peer to peer communication between the various PLC-5 controllers. Remote I/O connection supports real time data exchange for I/O, operator interface, and other device. 1785-L11B has several indicators on front panel used for displaying various statuses of the controller itself. Indicator marked BATT is battery indicator (red when battery is low). Indicator marked PROC is controller RUN/FAULT indicator and it is green when the controller is in RUN mode, and red when some fault exists. FORCE indicator is colored amber when I/O forces are enabled. COMM indicator is the channel 0 communication status indicator green when the channel is communicating. Channel 1A status indicator is also present, representing the status of Channel 1A.

You can contact us through the following contact information

www.sparetechplc.com +86 180 3000 5825 sales@sparetechplc.com

On the front panel of the 1785-L11B controller, there is a 25-pin connector marked channel 0. This is an optically isolated EIA RS232C port. Channel 0 supports ASCII and DF1 full-duplex, half-duplex master and half-duplex slave protocols. On the front panel, there is a channel 0 communication green indicator light. Besides channel 0, there is an 8-pin mini DIN connector marked as channel 1A. This is the DH+ programming terminal connection parallel to channel 1A. There is a three pin connector and it is used as communication port and it can be configured as remote I/O scanner, remote I/O adapter, DH+ communication. Channel 1A on 1785-L11B can be configured as remote I/O scanner or remote I/O adapter. Remote I/O scanner mode is used to read/write I/O information between a controller and remote I/O device. When in this mode, the controller acts as a supervisory controller for other controllers that are in adapter mode and remote I/O adapter modules. When channel 1A is configured as remote I/O adapter mode, then the controller monitors and control its controller-resident local I/O while communicating with the supervisory controller via a remote link. Data Highway Plus (DH+) link that can be configured on channel 1A of 1785-L11B can be used for data transfer to other PLC-5 controller or other higher level components of the control system. DH+ link can be used for programming multiple PLC-5 controllers. The maximum cable length for DH+ depends on the transmission rate. It is important to configure all devices on a DH+ link to communicate at the same transmission rate. That length goes from a maximum 3048m for speed 57.6 kilobits per second, to 762m for a speed of 230.4 kilobits per second.

On the front panel of 1785-L11B, there is a three position key-switch used to select controller mode. Each position corresponds to one mode of the processor. RUN mode is used for running controller program, outputs are enabled. In RUN mode I/O can be forced, data table values can be edited. Programs can be saved. When the 1785-L11B processor is in program mode (PROG position of key switch) outputs are disabled, and ladder files, SFC files or data files can be created, modified and deleted. Download and upload transfers with memory module are possible. Programs can be saved and restored. The third mode of 1785-L11B processor work is remote mode; it is selected by moving key switch to REM position. In this mode, it is possible to choose between three sub-modes: remote program, remote test, and remote run. When the processor is in remote run sub-mode, outputs are enabled and a program can be saved and restored and edited while operating. Remote program sub-mode is same as normal program mode. While in remote test sub-mode, ladder programs can be executed with outputs disabled, ladder programs or data files cannot be created or deleted. Programs can be saved, restored and edited while operating. 1785-L11B has 8000 words of user memory space. RAM of the controller has battery backup. EEPROM program backup option can be installed in front panel situated slot. Memory modules with various capacities are available. The total number of I/O (including local I/O and universal remote I/O combined) is 512 any mix. 384 inputs and 384 outputs complementary, meaning that in order to use this much I/O, pairs of modules must have duplicate addresses. The maximal number of analog I/O is 512. 1785-L11B can utilize a total of 5 I/O chassis, and among them, 4 can be universal remote I/O chassis. The backplane current load of the 1785-L11B IS 2.3 A at 5 Volts.

You can contact us through the following contact information

www.sparetechplc.com +86 180 3000 5825 sales@sparetechplc.com