

Allen-Bradley 1746-IB32 Manual

Brand	Allen-Bradley
Product Series	1746 1747
Product Type	Digital DC Input Module

Description

The Allen-Bradley 1746-IB32 is an SLC 500 input module. This is a 24VDC sinking input module that features Thirty-Two (32) sink input channels, accepting signal voltage range of 15-30VDC at 50 Deg. Celsius and 15-26.4VDC at 60 Deg. Celsius. It has backplane current consumption of 0.05 A with signal delay of 3 ms for both transitions. Technical specifications for 1746-IB32

Manufacturer Rockwell Automation

Module Type Digital DC Input Module

Series SLC 500

Part Number/Catalog No. 1746-IB32

Brand Allen-Bradley

No. of Inputs Thirty-Two (32) Inputs

Input Voltage 24VDC

Operating Voltage Range 15 to 30V dc at 50° C; 15 to 26.4V dc at 60° C.

Input Delay Time, OFF to ON 3 ms

Power Dissipation, per channel 0.20 Watts

Power Dissipation, per module 6.65 Watts

Backplane Current at 24 Volts 0 mA

Backplane Current at 5 Volts 0.05 A

Voltage Range 15-30 Volts DC Sink

Inputs 32

Backplane Current (5 Volts DC) 103 milliamps

Signal delay 3 milliseconds

Off State Current 1 milliamps

Applications General Purpose DC Inputs

I/O Connection 1746-HT and 1746-HCA

Step Response 100 milliseconds in, 2.5 milliseconds out

Shock rating 30G

UPC 10662468092712 Description

The Allen-Bradley 1746-IB32 is an SLC 500 discrete input module. This module operates at a nominal voltage of 24VDC and at a voltage range of 15-30V DC @ 50 °C (122 °F) or 15-26.4V DC @ 60 °C (140 °F). This module is typically used to interface electrical devices such as Switches, Sensors, Auxiliary contacts and other binary or ON/OFF devices. Up to Thirty-Two (32) input signals may be wired to this module via the embedded 32 input module channels.

It is compatible for use with any SLC 500 processor, ideally with the SLC 500 Modular Style hardware. It supports being installed locally, along the controller or to an expansion I/O rack or to a Remote I/O chassis along an SLC 500 communication adapter. It directly installs to any available slot of the 1746 chassis except slot 1 which is reserved for the SLC 500 controller.

The 1746-IB32 has a backplane current draw of 50 mA at 5VDC with maximum Off-State Input voltage of 5VDC, Nominal Input Current of 5.1 mA @ 24V DC, maximum Off state input current of 1.5 mA with typical signal delay of 8 ms for both ON to OFF and OFF to ON signal transition.

When installing the module, ensure that the power is removed from the chassis as this module does not support Removal and Insertion Under Power (RIUP). It comes with a removable terminal block that permits wiring remote to the module as well as simplified maintenance as the RTB permits insertion to another module of the same type.

The 1746-IB32 offers isolation from the backplane tested at 1500 Volts AC for 60 seconds between the backplane and the I/O and it has a 1500 Volt AC dielectric withstand. The minimum voltage across its circuit in the ON state is 15.0 Volts DC and in its OFF state, it has a maximum voltage drop of 5.0 Volts DC and a maximum leakage current of 1.5 mA. The 1746-IB32 module has a maximum signal delay time of 3ms across its inputs in the ON and the OFF mode and it has an overall nominal input current of 5.1 mA at 24 Volts DC nominal voltage. The 1746-IB32 has an operating temperature bracket between 0 and 60 degrees Celsius (32 and 140 degrees Celsius) at 5 to 95% non-condensing humidity and it has an operational vibrational withstand of 1G at 5 to 200 Hertz and a shock rating of 30G.

Technical Specifications

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