

Allen-Bradley 1746 1747 Series Service Manual

1746-IV8

1. Description

The Allen-Bradley 1746-IV8 is an SLC 500 Discrete input module. This module mainly features eight (8) 24 Volt DC sourcing input channels in a single group. It has a backplane current consumption of 0.050 Amperes @ 5 Volts DC. It is a single slot module that directly installs to any SLC 500 chassis. Technical specifications for 1746-IV8

2. Specifications

Specification	Value
Manufacturer	Rockwell Automation
Signal	delay ON = 8 ms; OFF = 8 ms
Module	Type 24VDC input module
Part	Number/Catalog No. 1746-IV8
Brand	Allen-Bradley
No.	of groups: 1
Input	voltage range: 10-30 VDC
Off-state	voltage, max 5.0V DC
Off-state	current, max 1 mA
Input	current 8 mA @ 24V DC, nom
Storage	Temperature -40°C to +85°C (-40°F to +185°F)
Operating	Temperature 0...+60 °C (+32...+140 °F)
Relative	Humidity 5 to 95% without condensation
Series	SLC 500
Voltage	Range 10-30 Volts DC Source
Inputs	8
Backplane	Current (5 Volts DC) 50 milliamps
Off	State Current 1 milliamps
Applications	Combination 120 Volts AC I/O Description
The	Allen Bradley 1746-IV8 is one version of the SLC 500 Digital Input Module series. It comes with 8 channels and operating voltage of 24 Volts DC. The 1746-IV8 module can also be referred to as a Current Sourcing DC Input Module. Its requires use of 14 AWG (2 millimeter) cables for signal termination It is also provided with LED indicators on the front. The operati

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The Allen-Bradley 1746-IV8 is a 24 Volt DC sourcing input module. This module is used to directly interface signaling devices, allowing the SLC 500 control system to recognize change of state for use in the execution of the user program. Typical compatible devices include limit switches, limit switches, sensors and other similarly operating devices.

Each channel of the 1746IV8 accepts an input signal voltage range of 10-30 Volts DC and supports sourcing circuit type. It may be installed to any vacant slot of the SLC 500 chassis and occupies only a single slot of the chassis. It does not require an external power supply to operate as it draws 0.05 Amperes from the backplane.

Each channel of this signal module operates with a signal delay. Both transition - specifically, Off to On and On to Off transitions has an 8-millisecond signal delay with a maximum off-state voltage of 5.0 Volts DC and maximum off-state current of 1 milliamperes with a minimum input current of 8 milliamperes @ 24 Volts DC, nominal.

The number of module instances is limited by the I/O capability of the host processor as well as the number of slots available and the number of chassis.

When installing this module to the rack, power must be removed from the rack power supply as the power supply provides the backplane power. This is required to prevent electrical arching which may damage not only the module, but the nearby electronic components as well.