

Allen-Bradley 1746-NIO4I

The Allen-Bradley 1746-NIO4I is a SLC 500 Analog Combination Module. This Analog Combination Module has Two (2) Voltage or Current Inputs and Two (2) Current Output channels. This module is used with SLC 500 fixed or modular style hardware. Technical specifications for 1746-NIO4I

Manufacturer Rockwell Automation

Brand Allen-Bradley

Part Number/Catalog No. 1746-NIO4I

Series SLC 500

Module Type Analog Combination Module

Inputs 2

Input signal ranges -20 to +20 mA; -10 to +10V dc

Backplane Current (24 Volts) 145 milliamps

Output Voltage Range -10 to +10V dc - 1 LSB

Backplane Current (5 Volts) 55 mA; (24 Volts) 145 mA

Bandwidth 10 Hertz

Update Time 512 microseconds

Resolution 16 bits in, 14 bits out

UPC 10662073735882

Step Response 60 milliseconds in, 2.5 milliseconds out

UNSPSC 32151705

Tested Voltage Isolation 500 Volts Description

The 1746-NIO4I is an SLC 500 Four Channel Analog I/O module by Allen-Bradley. This module is combination module which comes with Two (2) inputs and Two (2) output points in a single slot module. It has 2 differential voltage or current input points and 2 current outputs with an overall backplane current draw of 55mA at 5 Volts and 14 5mA at 24 Volts. Its points have a common mode voltage of -20 to 20 Volts with a common mode rejection signal of 105 dB at 60 Hertz and a Normal mode rejection signal of 55dB at 60 Hertz. The 1746-NIO4I uses the Sigma-Delta ADC converter with a converter resolution of 16 bits, +/-1 LSB, and 0.01% repeatability and Non-Linearity. Its normal input current ranges between -20 and +20 mA with a current impedance of 250 Ohms and a resolution of 1.22 A per LSB. The 1746-NIO4I has an overall accuracy of +/-0.642% at 0 to 60 degrees Celsius with a drift accuracy of +79 ppm/5 degrees Celsius and maximum gain and drift errors of +/- 0.556% and +/- 67ppm/ degrees Celsius. The 1746-NIO4I also has a voltage input rating of -10 to 10 Volts DC and a 760 KOhms voltage impedance at a resolution of 305 microVolts per Least Significant Bit (LSB). It also has an accuracy of +/- 0.504%, and a drift accuracy and error of +/- 63 ppm/degree Celsius and +/- 57 ppm/degree Celsius. The 1746-NIO4I offers overvoltage at either 220 Volts AC (RMS) or 220 Volts DC (continuous). The current outputs have a load range of 0 to 500mA with its normal range at 0-20 mA and a 5% over-range capability at 2.56348 microA per LSB signal resolution. The 1746-NIO4I also has an overall accuracy of $\pm 0.541\%$ with a drift accuracy of ± 70 ppm/degree

You can contact us through the following contact information

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

Celsius and a gain and offset error of $\pm 0.516\%$ and ± 12 LSB. The entire module has a 500 Volt-tested isolation between fields in the wiring-to-backplane isolation and it has an aggregate update time of 512 microSeconds for all channels. The 1746-NIO4I's operational temperature ranges between 0 and 60 degrees Celsius at a 5 to 95% non-condensing relative humidity.

The 1746-NIO4I is an analog combination module that features Two (2) Voltage or Current differential, non-isolated input channels and Two (2) Voltage output channels. This module is a single slot module which combines the input and output capabilities

This combination module is compatible for use with SLC 500 fixed or modular style hardware. Install this module to any slot in the main chassis except slot 0 where the controller is mounted. It may also be installed in expansion modules or remote I/O stations. If used in Remote I/O stations, this module may not be installed in slot 0 the mentioned slot is reserved for communication adapters such as Remote I/O (RIO), Data Highway Plus (DH+) and Ethernet Communication Adapters.

This module contributes to saving panel space and maximizing the available slots of any SLC 500 rack. Especially in modular style hardware, this module may be strategically installed for proper IO segmentation.

The modules Current input range is -20 to +20 mA with maximum allowable ratings of -30 to +30 mA. For Voltage input, the allowable input range is -10 to +10V dc - 1 LSB. Current input is translated to -16,384 to +16,384 raw data and Voltage signal is translated to -32,768 to +32,767 raw data. The converter resolution of the input portions is 16 Bit with repeatability of ± 1 LSB. For output portion, converter resolution is 14 Bit with non-linearity 0.05 %.

You can contact us through the following contact information

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