

Allen-Bradley 1746-NO4V Manual

Brand	Allen-Bradley
Product Series	1746 1747
Product Type	Analog Output Module

Description

The Allen-Bradley 1746-NO4V is an SLC 500 Analog Output Module. This Analog Output Module has Four (4) output channels that provide output Voltage range of -10 to +10 VDC. This module is used with SLC 500 fixed or modular style hardware. Technical specifications for 1746-NO4V

Manufacturer Rockwell Automation

Brand Allen-Bradley

Part Number/Catalog No. 1746-NO4V

Series SLC 500

Module Type Analog Output Module

Backplane Current (5 Volts) 55 milliamps

Outputs Four (4)

Backplane Current (24 Volts) 145 milliamps

Output Voltage -10 to +10VDC

Full Scale Output 10 VDC

Conversion Method R-2R Ladder

Voltage Output Coding -32,768 to +32,764

Update Time 512 microseconds

Backplane Current (5 Volts) 55 milliamps; (24 Volts DC) 145 milliamps

Resolution 14 bits

Step Response 2.5 milliseconds

Indicators LEDs

UPC 10662073735929

Ambient Operating Temperature 0 to 60 degrees Celsius The Allen-Bradley 1746-NO4V is a Four (4) point, non-isolated SLC 500 standard analog voltage output module. It has an output range of -10 to 10 Volts -1 LSB DC with backplane current ratings of 55 mA at 5 Volts and 145 mA at 24 Volts. AN external 24 VDC power supply may use with this module by activating SW1 external. If the backplane power is sufficient, the backplane power may be used as the power source of this module instead of an external supply. The 1746-NO4V has a field wiring to backplane isolation of 500 Volts DC, and a maximum load reactance of 1 μ F and maximum load current of 10 mA. This module is a factory calibrated module and uses a 16-bit two's complement binary communication format. The 1746-NO4V is enclosed in an open-type enclosure and mounts on a 1746 chassis. It is also equipped with an LED status indicator and a removable terminal block (RTB). Recommended wire size for this module is #14 AWG maximum wire size. Its update time is 512 μ s for all the channels that are in parallel, and it has a step response time of 2.5 ms at 95%. The 1746-NO4V's operating temperature ranges from 32 to 140 degrees Fahrenheit, its non-operating temperature ranges from -40 to 185 degrees Fahrenheit and its non-condensing relative humidity for operation and storage is 5 to 95%. The 1746-NO4V's has a maximum overall accuracy drift of +/- 54 ppm/degrees Celsius full scale.

The Allen-Bradley 1746-NO4V module is a Programmable Logic Controller (PLC) analog output module that belongs to the SLC 500 product platform. The output channels of this module produce voltage signal ranging from -10 to +10VDC signals.

When installing this module to the chassis, certain guides may be used for determining the ideal slot or chassis assignment of the module. Two (2) general factors are considered such as ambient Temperature and Electrical noise. For electrical noise, the module is

recommended to be installed away from AC or high levels of DC voltage. Additionally, it is best to install this module away from the system power supply. For ambient temperature consideration, the chassis that is nearest to the enclosure bottom is the recommended installation chassis.

This module does not support removal under power. Never remove this module when power is applied as electrical arcs may happen causing damage to the electronic circuitry. The module may also be installed with the Removable Terminal Block (RTB) installed in its front panel. Use 14 AWG wire and limit a maximum of Two (2) wires terminated in the same terminal. This is to provide room for troubleshooting as well as be able to close the module cover. Analog outputs may be assigned to a PID controller output, a result of Mathematical operation or a manual value entered from a Human Machine Interface (HMI), or Supervisory Control and Data Acquisition (SCADA). These are control commands sources. It may also be used to re-transmit signals for reference of other devices to implement their monitoring, recording and conversion applications. For stand alone controllers that require control coordination such as load sharing function, analog outputs may be used to send the reference signal of all involved controllers and devices.

Technical Specifications

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