

Specifications

This appendix lists the specifications for the 1746-NI8 Analog Input Module.

Electrical Specifications

Description	Specification
Backplane Current Consumption	200 mA at 5V dc 100 mA at 24V dc
Backplane Power Consumption	3.4W maximum (1.0W @ 5V dc, 2.4W @ 24V dc)
Number of Channels	8 (backplane isolated)
I/O Chassis Location	Any I/O module slot except slot 0
A/D Conversion Method	Successive approximation, switched capacitor
Input Filtering	Low pass digital filter with programmable filter frequencies
Normal Mode Rejection (between [+] input and [-] input)	Provided by low-pass filter
Common Mode Rejection (between inputs and chassis ground)	Greater than or equal to 75 dB at DC Greater than or equal to 100 dB at 50/60 Hz
Input Filter Frequencies	1 Hz 2 Hz 5 Hz 10 Hz 20 Hz 50 Hz 75 Hz
Calibration	The module performs continuous autocalibration.
Isolation	50V dc continuous between the analog inputs and the backplane 530V ac and 750V dc pulse withstand for 1 second
Common-Mode Voltage Range	±10.5V (21V maximum between any two terminals)

Physical Specifications

Description	Specification
LED Indicators	9 green status indicators one for each of 8 channels and one for module status
Module ID Code	Class 1 Interface: 3526 Class 3 Interface: 12726
Recommended Cable	Belden #8761 or equivalent
Maximum Wire Size	Two 14 AWG wires per terminal
Maximum Cable Impedance	Voltage Source (with less than 10Ω impedance): 40Ω maximum loop impedance, for <1LSB error Current Source (transmitter properly wired to its power supply): 250Ω maximum loop impedance, to meet common-mode voltage requirements
Terminal Block	Removable, Allen-Bradley spare part Catalog Number 1746-RT25G