



1746sc 8-Channel Analog Output Modules

Catalog No. 1746sc-NO8i 1746sc-NO8v



Product Profile

- Eight channels of current or eight channels of voltage
- Best price per point and performance for SLC 500
- Unparalleled accuracy with 16-bit precision to ensure optimal performance
- Optional advanced functions—programmable engineering units, user-defined ramp rates, limits and alarms

The 1746sc-NO8i provides eight channels of current, while the 1746sc-NO8v provides eight channels of voltage. In both modules, the voltage or current ranges are independently configurable for each channel. These modules provide new, advanced features to make your control systems more dependable and flexible.

Increase System Reliability

The 1746sc-NO8i and 1746sc-NO8v provide high-performance with 16-bit module precision. They also provide 500 Vdc field-wiring-to-backplane isolation to protect the processor and rack. These modules feature factory calibration for maximum accuracy and do not require any additional user calibration.

Reduce System Costs

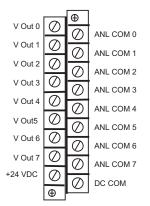
The high channel density of the 1746sc-NO8i and 1746sc-NO8v modules allows you to save on costly system installation costs. Expensive, low channel density modules are simply not required. Both modules provide a single-slot solution for applications requiring up to eight analog outputs resulting in lower hardware and system integration cost.

Get State-of-the-Art Features

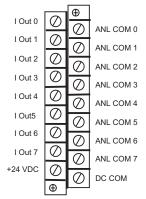
The 1746sc-NO8i and 1746sc-NO8v incorporate proprietary Allen-Bradley technology so they mirror Allen-Bradley in operation and performance. They also provide user-programmable engineering units, limits, ramping, alarms and safe states in case of a fault. The modules also supply extended status information so that you may monitor your process more effectively. You can use an external 24 volt power supply to power your loops resulting in reduced PLC power consumption. The 1746sc-NO8i and 1746sc-NO8v are directly compatible with low density output modules making them an excellent upgrade to existing systems.

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1746sc-NO8 Specifications 1746sc-NO8 Wiring



1746sc-NO8v



1746sc-NO8i

1746sc-NO8 A-B Pre-Wired Terminal Block

AB AIFM Cat. No. 1492-AIFM8-3

AB Cable Cat. No. 1492-ACABLEC

Outputs per Module	8 (single ended)
Input Types	8 Current Only or 8 Voltage Only
Module Location	1746 I/O chassis—1 slot
Output Current Ranges (1746sc-NO8i)	4 to 20 mA 0 to 20 mA 0 to 21 mA 0 to 21.5 mA
Output Voltage Ranges (1746sc-NO8v)	-10 to +10 VDC -10.25 to +10.25 VDC 0 to 10 VDC 0 to 5 VDC 1 to 5 VDC
Resolution Current (1746sc-NO8i) Voltage (1746sc-NO8v)	366 nA per count 320 µV per count
Advanced Features	Extended output ranges, factory-calibration Programmable limits, ramping and safe states
SLC Communication Formats	16-bit two's complement Scaled engineering units Scaled for PID 1746-NO4 format User-defined proportional counts
Accuracy Current (1746sc-NO8i) Voltage (1746sc-NO8v)	0.10% of full scale @ 25 °C 0.20% of full scale @ 0-60 °C 0.10% of full scale @ 25 °C 0.20% of full scale @ 0-60 °C
Non-Linearity	0.02% of full scale
Opto-Electrical Isolation	500 Vdc field-wiring-to-backplane
Output Impedance Current (1746sc-NO8i) Voltage (1746sc-NO8v)	>1 MΩ <1.0 Ω
Max. Resistance, Current Mode (-NO8i)	500 Ω
Max. Current, Voltage Mode (-NO8v)	10 mA
Backplane Current Required (max.)	120 mA @ 5 V; 250/160mA @ 24 V (-NO8i/-NO8v)
Thermal Dissipation	6.6 Watts, maximum
Update Time (maximum)	5 ms for all 8 channels (Class I) 10 ms for all 8 channels (Class III)
Step Response Time (typical)	1 ms (0–95% of full scale)
Environmental Conditions Operational Temperature Storage Temperature Relative Humidity	0° to 60°C (32° to 140°F) -40° to 85°C (-40° to 185°F) 5 to 95% (non-condensing
Certifications	UL/CUL (Class I, Div 2, Groups ABCD) and CE
Recommended Cable	Shielded, twisted-pair, Belden 8761

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