01 / Product dashboard

OPTO 22

SNAP-AIV-8

Voltage Input Module

Product role

Opto 22 SNAP-AIV-8 is an eight-channel analog voltage input module for SNAP PAC I/O, with individually selectable ±10 VDC or ±5 VDC ranges.

Voltage sources
Eight shared returns

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SNAP-AIV-8
Configured input ranges

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SNAP PAC
I/O processing

Selection boundary

SNAP-AIV-8 has eight shared-reference voltage channels. SNAP PAC brain or rack-mounted controller compatibility is required; channel-to-channel isolation is not provided.

02 / Technical capability map

Item	Design fact	Item	Design fact
Product type	Analog voltage input module	Maximum common-mode voltage	250 V operating
Input channels	8	Maximum survivable input	220 VAC or 300 VDC; not a measuring range
Channel range	±10 VDC or ±5 VDC, individually selected	Power requirement	5 VDC ±0.15 V, 170 mA
Over-range limits	±11 V / ±5.5 V for ±10 V / ±5 V ranges	Operating temperature	-20 to +70 °C
Resolution	0.4 mV at ±10 V; 0.2 mV at ±5 V	Storage temperature	-40 to +85 °C
Input filtering	-3 dB at 64 Hz	Humidity	5–95%, non-condensing
Maximum data freshness	0.28 s	Hold-down screw torque	Maximum 0.11 N·m
Input resistance	1 MΩ; common reference	Connector screw torque	0.19 N·m
Accuracy	0.05%; 5 mV at 10 VDC / 2.5 mV at 5 VDC		
Module isolation	1500 V; no channel-to-channel isolation		

03 / Applications and system integration

Multi-channel voltage acquisition

Acquire eight voltage signals with individual ±10 VDC or ±5 VDC range selection. Match each configured range to its connected source.

SNAP PAC rack integration

Use the module with a SNAP PAC brain or rack-mounted controller and the appropriate SNAP rack. Include its 170 mA requirement in the 5 V supply budget.

Shared-reference instrumentation

Connect compatible signal returns to the common reference. Channels do not provide independent isolation, so source grounding must be reviewed as one electrical arrangement.

Process signal monitoring

Use the 64 Hz input filtering and 0.28-second maximum data freshness when evaluating measurement response. Confirm that these characteristics suit the control task.

04 / Installation and engineering precautions

Select the correct range

Configure every channel for its actual ±10 VDC or ±5 VDC signal before checking readings. The over-range and survivable-input values do not extend the normal measurement range.

Review common returns

All eight channels share a reference, including even-numbered terminals on both connectors. Avoid connecting incompatible grounded sources to the same module.

Check processor compatibility

Use a SNAP PAC brain or rack-mounted controller. Do not assume compatibility with an older SNAP processor merely because the module fits a rack.

Plan rack power

Provide 5 VDC ±0.15 V and allow 170 mA for this module. Verify the total installed rack load before energizing the system.

Use the specified torque

Keep module hold-down torque at or below 0.11 N·m and tighten connector screws to 0.19 N·m. Support and identify field wiring before replacement.

Verify measurements before release

With the installation safe and complete, confirm channel assignments, ranges, polarity and representative readings. Operate within -20 to +70 °C and non-condensing humidity conditions.

05 / Reference, support and portfolio

Lifecycle and supply

A current formal manufacturer lifecycle phase for SNAP-AIV-8 has not been confirmed. Request current support and replacement guidance using the complete installed identity. Apter Power availability and dispatch are confirmed separately in the quotation.

Reference basis

Opto 22 SNAP Analog Input Modules Data Sheet, Form 1065-240702.

Apter Power technical summary; not a manufacturer-issued manual. Apply the original instructions for the actual installation.

Related industrial automation products

Navigation only; no substitution or compatibility claim.

Opto 22 SNAP-AIMA-4

Allen-Bradley 1756-IRT8I

Honeywell TC-IAH161

Discuss your installed configuration

Send the full unit marking and connection details.

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