

SCIM5B49

Voltage Output Modules

Description

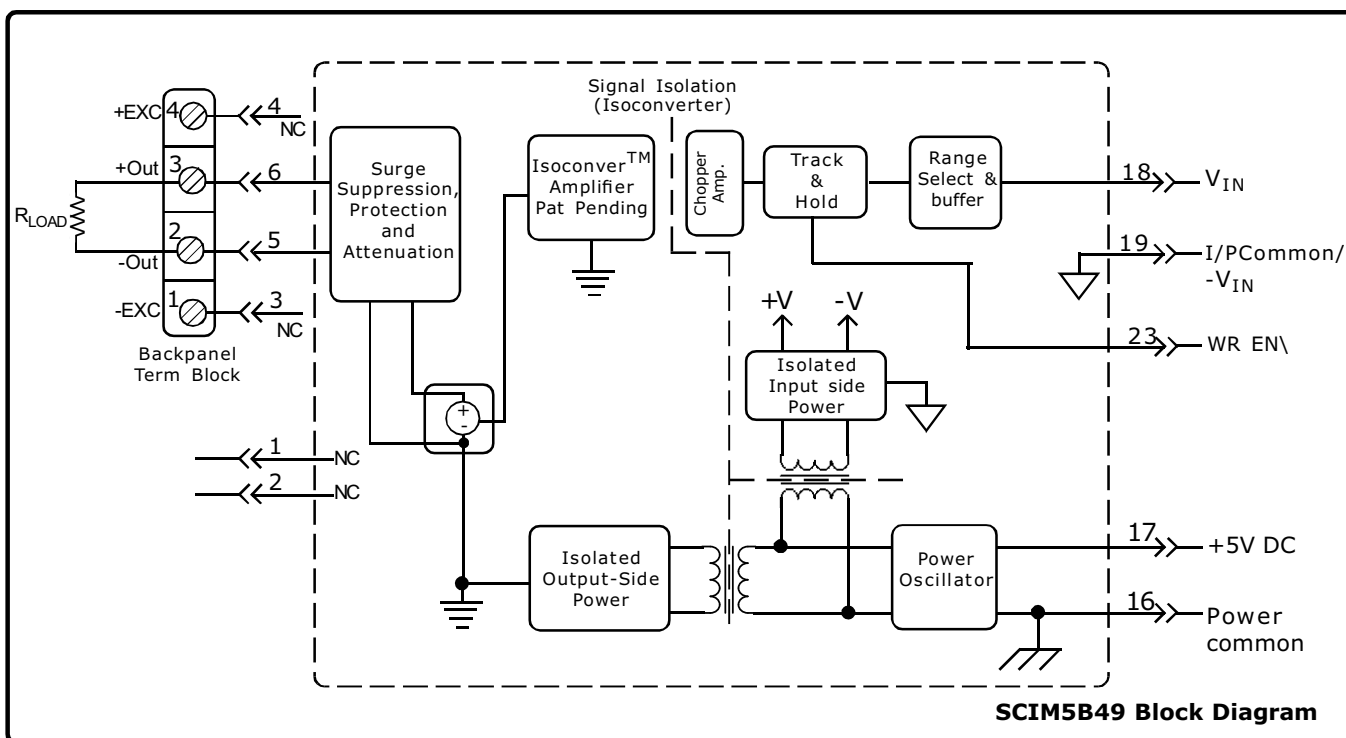
SCIM5B49 voltage output module provides a single channel of analog output. The track-and-hold circuit in the input stage can be operated in hold mode where one DAC can supply many output modules, or a track mode where one DAC is dedicated to each module. In addition to the track and hold circuit, each module provides single buffering isolation filtering and conversion to a standard level output.

Setting of the track or hold mode is controlled by the logic state of WR EN/, module pin 23. When pin 23 is low, the track mode is enabled and when is high, the hold mode is enabled. The module designed with a completely isolated output side circuitry which can be floated to more than +50V from power common pin 16. No connection is required between I/O common and power common for proper operation of the track-and-hold circuit. For a low state, simply connect pins 23,19.

The SCIMPB02 and SCIMPB06 backpanels allow host computer control of the WR EN/, control line common which allows multiplexing of the host DAC to up to 64 SCIM5B49 output modules.

Features

- Accepts High level voltage inputs to $\pm 10V$
- Standard Outputs up to $\pm 10V$
- 1.5KV Isolation
- ANSI/IEEE C37.90.1 Transient Protection
- 5 poles of filtering
- 110dB CMR
- 400Hz Input Signal Bandwidth
- $\pm 0.03\%$ Accuracy
- $\pm 0.015\%$ Linearity
- CSA, FM, CE and ATEX Compliant
- Mixes and Matches with all SCIM5B Types on Backpanel



Specifications Typical at T_A=+25°C and +5V Power supply

Module	SCIM5B49
Input Voltage Range Voltage Maximum Resistance	±5V, 0 to ±5V, +10V, 0 to +10V ±36V (no damage) 50MΩ
Output Voltage Range Over range capability Drive Resistance I _{max} under fault condition, Protection Continuous Transient	±5V, 0 to +5V, ±10V, 0 to +10V 5% at 10V output 50mA max 0.5Ω 75 mA 250V rms max ANSI/IEEE C37.90.1
CMV, output to input Continuous Transient CMR (50 or 60Hz) NMR (-3dB at 400Hz)	1500V rms max ANSI/IEEE C37.90.1 110dB 80dB per Decade Above 400Hz
Accuracy ⁽¹⁾ Nonlinearity Stability Zero Span Noise Output Ripple 100KHz bandwidth Bandwidth -3dB Response Time 90% Span	±0.03% Span (0-5mA Load) ±0.015% Span +25ppm/°C ±20ppm/°C 2mV p-p 400Hz 1.25ms
Sample and Hold Output drop rate Acquisition Time	0.2% Span/s 50μs
Track and Hold Enable Control Max Logic "0" Min Logic "1" Max Logic "1" Input Current "0"	+0.8V +2.4V +36V 0.5μA
Power supply voltage Power supply Current Power supply Sensitivity	+5V DC ±5% 350mA Full load, 135mA no load ±12.5ppm/%
Mechanical Dimensions (H) (W) (D)	2.28" x 2.26" x 0.60" (58mm x 57mm x 15mm)
Environmental Operating Temp. Range Storage Temp. Range Relative Humidity Emissions EN61000-6-4 Radiated, Conducted Immunity EN61000-6-2 RF ESD,EFT, Surge, Voltage Dips	-40°C to +85°C -40°C to +85°C 0 to 95% Noncondensing ISM, Group 1 Class A ISM, Group 1 Performance A ±0.5% Span Error Performance B

Note:

1). Includes nonlinearity, hysteresis and repeatability.

Ordering Information

Model	Input Range	Output Range
SCIM5B49-01	0 to +5V	-5V to +5V
SCIM5B49-02	-5V to +5V	-5V to +5V
SCIM5B49-03	-5V to +5V	0V to +5V
SCIM5B49-04	0V to +10V	-10V to +10V
SCIM5B49-05	-10V to +10V	-10V to +10V
SCIM5B49-06	-10V to +10V	0V to +10V
SCIM5B49-07	-5V to +5V	+10V to -10V