

SCD1 SERIES SIGNAL CONDITIONERS

The Model SCD1 is a series of signal conditioners which provide bridge excitation, amplification, span and balance controls and a choice of ± 10 Vdc and/or 4-20 ma outputs. Primary input power is available in 120 Vac or a variety of Vdc voltage levels.

The SCD1 can accommodate up to four channels with ± 10 Vdc outputs or a maximum of 2 channels with 4-20 ma outputs.

Standard SCD1 models are packaged in a NEMA-12 rated cabinet (NEMA-4X packages are available).

Each input channel is connected via a six (6) pin receptacle (PT02A-10-6S)

All output signals are provided at a terminal strip inside the signal conditioner cabinet. Each output signal has an individual terminal connection and each signal shares a single common return.



SPECIFICATIONS

EXCITATION:	
Output Voltage:	5 VDC ($\pm 0.2\%$)
Output Current:	100 ma (maximum)
Regulation:	0.05% Load Regulation 0.05% Line Regulation
Temp. Coefficient:	0.002% F.S. / Deg. F
INPUT:	
Bridge Type:	350 Ohm or 120 Ohm
Sensitivity:	0.5-mv/V (minimum)
VOLTAGE AMPLIFIER:	
Input Impedance	> 1 Megohm
Output Impedance	<0.1 Ohms
GAIN:	
Adjustment:	$\pm 5\%$ F.S.
Stability:	$\pm 0.002\%$ F.S. / Deg. F
Linearity:	$\pm 0.02\%$ F.S.
ZERO:	
Adjustment:	$\pm 10\%$ F.S.
Stability:	$\pm 0.006\%$ F.S. / Deg. F
Source Current:	± 7.5 ma

OUTPUT:	
Voltage Output:	± 10 Vdc @ 7.5 ma
Current Output:	4-20ma (500 Ohm Load Max.)
Protection:	Voltage Output protected against continuous short to ground. Current Output protected against continuous short to common and + Vcc
DYNAMIC RESPONSE:	
Filter:	5 Hz, 40 dB/Octave, L.P. Butterworth
Settling Time:	< 500us to within $\pm 0.1\%$ of the final value.
Slew Rate:	0.55V/us
POWER INPUT:	
AC Power:	105 to 125 Vac, 50 to 440 Hz (specify)
DC Power:	5, 12, 15, 24, 28, 48 Vdc (specify)
Dimensions:	6" (H) x 6" (W) x 4" (D)
ENVIRONMENTAL:	
Operating Temp.:	-10 to 150 °F
Storage Temp.:	-65 to 200 °F

Note: When ordering specify input sensitivity, and desired full scale output.

Signal Conditioner Models

Model SCD1/Gxx

Power Supply Voltage	1-Chan. ± 10 Vdc Output	2-Chan. ± 10 Vdc Output	3-Chan. ± 10 Vdc Output	4-Chan. ± 10 Vdc Output	1-Chan. 4-20 ma Output	2-Chan. 4-20 ma Output
120 Vac	G01	G08	G15	G22	G29	G43
5 Vdc	G02	G09	G16	G23	G30	G44
12 Vdc	G03	G10	G17	G24	G31	G45
15 Vdc	G04	G11	G18	G25	G32	G46
24 Vdc	G05	G12	G19	G26	G33	G47
28 Vdc	G06	G13	G20	G27	G34	G48
48 Vdc	G07	G14	G21	G28	G35	G49

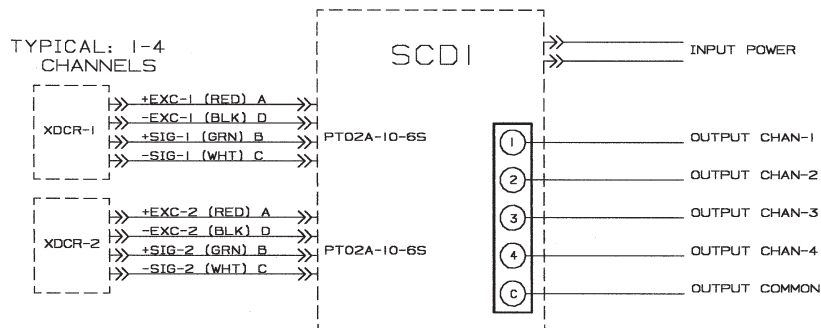
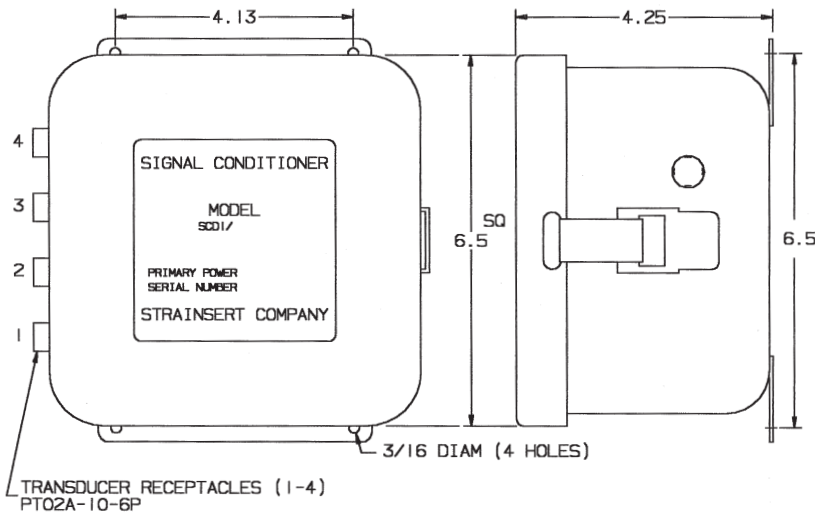
ORDERING EXAMPLES

Model SCD1/G27

Four Channel Input / Output
350 Ohm Bridge
2 - mv/V input
0 - 10 Vdc Output
28 Vdc Power Source

Model SCD1/G29

One Channel Input / Output
350 Ohm Bridge
2 - mv/V Input
4 - 20 ma Output
120 Vac Power Source



TYPICAL CONNECTION DIAGRAM