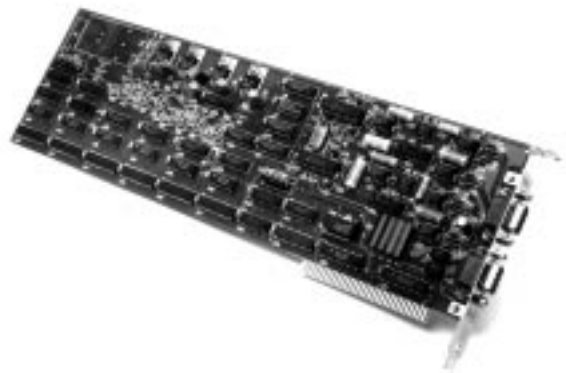


Model SCB1 Signal Conditioning Board 1 or 2 Channel

- Nonlinearity <0.003% full scale
- 20-bit resolution
- High thermal stability
- Shunt calibration, software selectable
- Single or dual channel versions
- Bipolar
- Isolated output



The SCB1 signal conditioning board comes in a one or two-channel configuration. The single-channel unit is used with a dead weight system and/or for test machine verification, while the two-channel unit is used for calibrations where a reference (Standard) load cell is being used. One channel is connected to the reference standard and one channel is connected to the cell being calibrated.

ACCESSORIES*

- CT-139-10 Interconnect cable
(1600 type)
- CT-142-10 Interconnect cable
(1000 type)
- CT-154-10 Interconnect cable
(pigtailed)
- DA-101 Digital-Analog board,
used with automated systems
(consult factory)

* See appendix for more technical information

SPECIFICATIONS

EXCITATION

Excitation Voltage.....10V DC
Current120 mA max

PERFORMANCE

Resolution 20 bits
Signal Input Range..... $\pm 2.5, \pm 5.0, \text{ or } \pm 7.5 \text{ mV/V}$
Conversion Rate..... 8 readings/second
Nonlinearity <.003% full scale
Span Temperature Coefficient<10ppm/ $^{\circ}\text{C}$
Zero Temperature Coefficient<0.2 microvolt/ $^{\circ}\text{C}$
Span Stability—after warm up $\pm .003\%$ per 24 hrs.,
 $\pm .01\%$ per year
Zero Stability—after warm up ± 10 microvolt/per year
Settling Time<0.25 sec to within .01%
Frequency Response5Hz (-3 dB points)
Input Resistance>100 megohm
Common mode rejection>90 dB
Common mode voltage re: signal ± 8 volts without damage
Common mode voltage re: ground $\pm 500\text{V}$ peak without damage
(isolated version only)
Isolation Resistance>100 megohms to ground
Noise<0.3 μvolt typical, 0.6 μvolt max
(digital filter ON)
<0.7 μvolt typical, 1.5 μvolt max
(digital filter OFF)

ENVIRONMENTAL

Operating Temperature.....35 to 105 $^{\circ}\text{F}$
Relative Humidity – MAX80%

POWER

DC+5v PC Supply
Power Consumption.....10 watts max

MECHANICAL

Outline 3.75 x 14 x .75 inch
(95 x 356 x 19 mm)
Full Size Card
Connector.....DE-9 Socket (1 per channel)