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# Model A5B40

## Millivolt-Level Isolation Amplifier with Filter

Campbell Scientific's Model A5B40 Isolation Amplifier is a peripheral that provides electrical isolation for the analog inputs of CSI dataloggers. The A5B40 is designed around the Analog Devices model 5B40-03 millivolt input module. A fourth-order, low-pass filter, (with a 50 Hz cutoff frequency), was added to reject noise while maintaining measurement rates of up to 10 samples per second.

The A5B40 is powered by the datalogger's 12 volt output, (automatically switched to conserve power), and isolates one differential analog input. In most applications, a single A5B40 is used between a model AM32 multiplexer and the datalogger, thus providing isolation for up to 32 analog channels with a single amplifier. When measuring thermocouples, the Model A5B40 requires special datalogger PROMs. These PROMs contain special instructions used to linearize the thermocouple signals and compensate for the reference junction temperature. Please specify the datalogger PROM number when placing your order (see below).

### Specifications:

Power Requirements: 9.6 to 16 VDC	Input Protection: $\pm 300$ V
Input Range: -100 to +100 mV	Common Mode Voltage Range: $\pm 300$ V
Output Range: -5 to +5 V	Common Mode Rejection: >100 dB (from DC to 1Mhz)
Settling Time to $\pm 0.005\%$ : 67 milliseconds	Power Consumption: 30 mA active
Gain Accuracy: $\pm 0.05\%$	Temperature Range: $-25^\circ$ to $+60^\circ$ C
Nonlinearity: $\pm 0.02\%$	Size: 7.25" L x 3.5" W x 1" D
Offset Error: $\pm 20$ microvolts	

### Datalogger PROM Numbers:

- CR7: Specify PROM #OS7-0.1
- 21X(L): Specify one of the following PROM #'s: OSXA5-0.1, OSXA5-1.1, or OSXA5-2.1
- CR10: Specify PROM #OS10A5-0.1

Model A5B40 Millivolt-Level Isolation Amplifier with Filter .....\$530.00  
See U.S. Price List for terms and conditions. (Price subject to change without notice.)



**CAMPBELL SCIENTIFIC, INC.**

815 W. 1800 N. • Logan, Utah 84321-1784 • (435) 753-2342 • FAX (435) 750-9540  
Offices also located in: Australia • Canada • England • France • South Africa

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