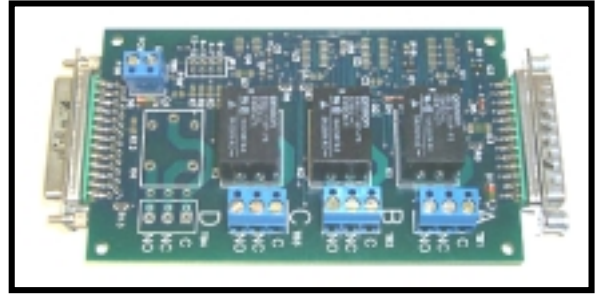


Turn On/Off Devices with Your PC

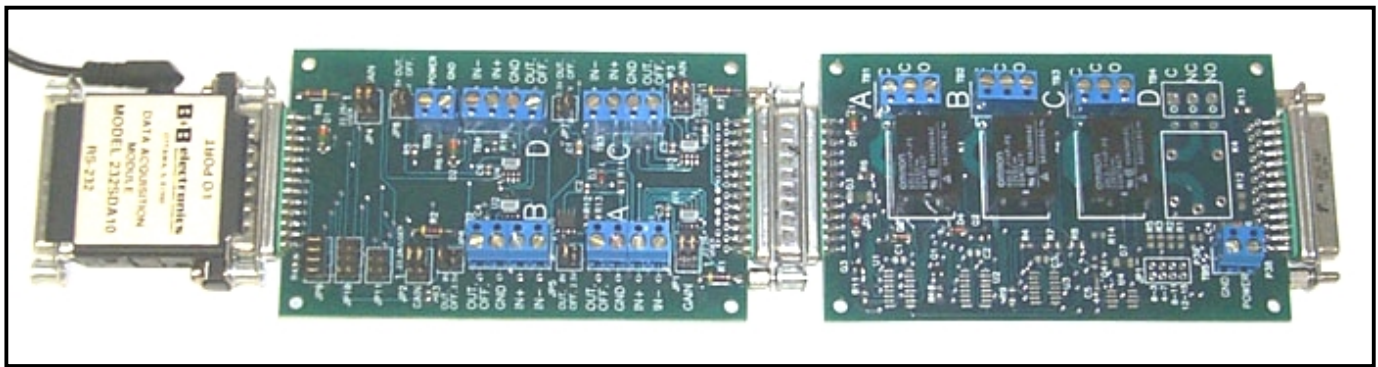
Model SDARB3



Introduction

The SDARB3 is a modular board with three relays designed to work with the B&B line of 232SDAxx and 485SDAxx data acquisition modules. Relay connections on the SDARB3 are made through terminal blocks or solder pads. I/O lines pass through on DB25 connectors that interface directly with the B&B line of SDA modules. The SDARB3 passes all 25 lines through, allowing the SDARB3 to be “stacked” with other data acquisition units as shown in Figure 1. Measuring 5.6 X 2.75 inches (14 X 7cm) this board is compatible with our SNAPTRACK mounting track. The SDARB3 can be powered separately on terminal blocks, or on pins 2 and 7, allowing for a single power supply for the entire system. An SDARB3 requires 110mA at 10 to 16VDC.

Figure 1: System consisting of a 232SDA10, SDAIBB, and SDARB3 all powered from a single power supply



Power Connections

The SDARB3 can be powered either directly on the board or by passing power through from an SDA module. To power the board directly, connect a stripped and tinned power supply into the terminal blocks labeled “Power” and “GND” or the solder pads directly in front of them. An SDARB3 requires 10 to 16VDC at 110mA maximum. To power the SDARB3 from an SDA module, simply plug the male connector of the SDARB3 into the I/O connector of the SDA module. Power is carried through from the SDA to the SDARB3 on pins 2 and 7. Power is also carried out on pins 2 (power) and 7 (GND) of the SDARB3’s female connector with a 0.4V drop across the board. **Note: When powering multiple devices be sure to supply enough current and follow the voltage constraints for the entire system.**

I/O Connections

Connections to the I/O lines on the SDAs are made through DB25 connectors. The male connector plugs directly into the SDA and all lines are carried straight through to the female connector where the analog lines are still available for use. Table 1 shows the channel each relay connects to.

Table 1

A		B		C	
Channel	Pin	Channel	Pin	Channel	Pin
0	14	1	15	2	16

Relay Connections

Normally Closed (NC), Normally Open (NO), and Common (C) relay connections are provided on terminal blocks. When the relay is not energized (digital 0) there is continuity between NC and C. When the relay is energized (digital 1) there is continuity between NO and C.

Specifications

Dimensions	5.6 X 2.8 inches (14.2 X 7 cm)
Power Requirements	
Single Board	10 to 16 VDC @ 110 mA max.
Max Current Throughput	1 A
Relays	
Number of Channels	3
Contact Rating	10 A @ 120 VDC 8 A @ 30 VDC (resistive)
Max. Switching Capacity	1200 VA/240 W
Max. Operating Voltage	250 VAC/125 VDC
Max. Carrying Current	10 A (AC), 8 A (DC) (standard)
Relay Form	Form C, Single-Pole Double-Throw (SPDT)
Output Terminals	Normally Open (NO) , Normally Closed (NC)
Relay Life (mech.)	10 million operations minimum
Relay Life (load dependent)	100 thousand operations minimum
Operating Time	10 msec. max. (mean ~5.1msec.)
Environment	
Operating temperature	0° to 70° C (32° to 158° F)
Storage Temperature	-20° to 70° C (-4° to 158° F)
Operating Humidity	5% to 95% non-condensing

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This product designed and manufactured in USA of domestic and imported parts by

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