



SC32B

Optically Isolated RS-232 Interface



## Overview

The SC32B Optically Isolated Interface is used to connect the CS I/O port on a data logger with the RS-232 port on a PC. This interface converts the RS-232 voltage levels of the computer to the CMOS levels of the data logger. It also isolates the electrical

system of the computer from the data logger, thereby protecting against ground loop, normal static discharge, and noise.

## Benefits and Features

- › Connects a PC to the CS I/O port of a data logger
- › Helps protect components from electrical damage
- › No power source needed—powered by data logger and PC
- › Ships with cables needed for most uses
- › Baud rates up to 115 kbps supported

## Detailed Description

The SC32B, or another interface, is required for direct communications between a PC and a CR510, CR10X, or CR7 datalogger. For our CR800, CR850, CR1000, and CR1000X dataloggers, the SC32B is often used to provide optical isolation between the data logger and PC. Although the on-board RS-232 port of the CR3000, CR5000, or CR9000X dataloggers is isolated, the SC32B can be interfaced with their CS I/O port when a second RS-232 port is required in the application.

The SC32B is shipped with an SC12 (2 ft) cable for attachment to the data logger and a 10873 (6 ft) cable for attachment to the PC. Alternatively, an SC12R-6 (6 ft) cable (purchased separately) can be used instead of the standard SC12 when a longer cable is needed.

The SC32B can support RS-232 cable lengths of up to 50 feet; longer cable lengths are not recommended. The longer cable should be on the data logger side of the interface (CMOS logic levels) as opposed to the RS-232 side, which is typically more sensitive to drops in signal voltage levels.

## Specifications

Baud Rates Supported	Up to 115 kbps
Power	Drawn from the serial ports of the PC and data logger
Typical Current Drain	› < 200 $\mu$ A (quiescent) › ~15 mA (active)

Connections	9-pin RS-232 socket (female) port configured as DCE; 9-pin pin (male) port
Operating Temperature Range	-25° to +50°C
Dimensions	4.1 x 2.3 x 7.6 cm (1.6 x 0.9 x 3.0 in.)
Weight	45.4 g (1.6 oz)

For comprehensive details, visit: [www.campbellsci.com/sc32b](http://www.campbellsci.com/sc32b) 



Campbell Scientific, Inc. | 815 W 1800 N | Logan, UT 84321-1784 | (435) 227-9120 | [www.campbellsci.com](http://www.campbellsci.com)  
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