



# SC-USB

Optically Isolated USB Interface



## Overview

The SC-USB allows Campbell Scientific data loggers to communicate directly with computers that have a USB interface. The SC-USB is optically isolated, which helps

eliminate noise pickup associated with PC power supplies and ground connections. The SC-USB can be used in place of an SC32B interface.

## Benefits and Features

- › Connects a PC to the CS I/O port of a data logger
- › High data transfer rates—up to 1 Mbps
- › Helps protect components from electrical damage

## Detailed Description

The SC-USB Optically Isolated Interface is used to connect a data logger's CS I/O port to a PC's USB port. Multiple devices can be connected to the SC-USB in parallel. Because the connection is optically isolated, the SC-USB interface can replace an SC32B/USB converter combination. Optical isolation

helps eliminate noise pickup associated with PC power supplies and ground connections.

The SC-USB supports synchronous high-speed data transfer for up to 1 Mbps (when supported by data logger). Asynchronous communication is supported from 9600 to 115200 bps. The USB transfer rate is up to 12 Mbps.

## Specifications

Power	Drawn from the PC and data logger	Operating Temperature Range	-25° to +50°C
CS I/O Port	Opto-isolated (signal isolation only) from the PC's USB port to 47 Vac or dc	Cable Description	Type-A male to type-B male
		Campbell Scientific Protocols Supported	› Synchronous Device Communications protocol (SDC)

SDC only works with data logger operating systems created since October 2002 (CR10X 1.18 or higher, CR23X 1.15 or higher, etc.)

- › Modem-Enable (ME)
- › Concurrent-SDC (CSDC)  
CSDC only works with PakBus dataloggers and the CR5000.

Cable Length	1.8 m (6 ft)
Dimensions	7.5 x 4 x 2 cm (3 x 1.6 x 0.8 in.)

Weight 85 g (3.0 oz)

### Current Drain

Drawn from Data Logger › < 20 mA (active)  
› < 1 mA (standby)

Drawn from PC › < 18 mA (standby)  
› < 85 mA (active)

### Communication Rates

Asynchronous 9600 bps to 115 kbps

Synchronous Up to 1 Mbps

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



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