



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 



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