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
- Helps protect components from electrical damage
- High data transfer rates—up to 1 Mbps

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

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

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

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable Length</td>
<td>1.8 m (6 ft)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>7.5 x 4 x 2 cm (3 x 1.6 x 0.8 in.)</td>
</tr>
</tbody>
</table>

**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)