SC32B Optically Isolated Datalogger to RS-232 Interface



The SC32B Optically Isolated Interface is used to connect a datalogger's CS I/O port with a PC's RS-232 port. This interface converts the computer's RS-232 voltage levels to the CMOS levels of the datalogger. It also isolates the computer's electrical system from the datalogger, thereby protecting against ground loop, normal static discharge, and noise.

An interface such as the SC32B is required for direct communications between a PC and a CR510, CR10X, or CR7 datalogger. For our CR800, CR850, and CR1000 dataloggers, the SC32B is often used to provide optical isolation between the datalogger 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 cable for attachment to the datalogger and a 10873 cable for attachment to the PC. Alternatively, an SC12R-6 cable (purchased separately) can be used instead of the standard SC12 when a longer cable is needed.



Specifications

Baud rates supported: up to 115 kbps

Power: Drawn from the serial ports of the PC and datalogger

Current (supplied by datalogger): <200 µA quiescent; ~15 mA active

Connections:

9-pin RS-232 female port configured as DCE9-pin male port

Operating temperature range: -25° to +50°C

Size: 1.6" x 0.9" x 3.0" (4.1 x 2.3 x 7.6 cm)

Weight: 1.6 oz (45.4 g)



