

**FC100***Fiber Optic Converter*

Lightning Protection

Long-term, trouble-free
protection for your datalogger

Overview

The FC100 is typically used with the SG000 Strike Guard Lightning Detector as part of the CS110 and LW110 lightning warning systems. The SG000 outputs its data signal via fiber-optic cable, and the FC100 is installed at the end of the fiber-optic cable and before the datalogger. The FC100 converts a fiber-optic data signal into an RS-232 signal for a lightning-proof connection between the sensor and the datalogger.

The FC100 can also be used as an RS-232 link between two serial devices (datalogger to PC) separated by less than 100 m (328 ft). The FC100 is a DCE device so a null modem cable will be needed between it and a datalogger.

Benefits and Features

- Lightning-proof and lightning-safe serial communication
- Robust design for long, trouble-free operation
- Instant termination without connectors, crimping, polishing, or epoxy

Specifications

- Electrical Connector: 9-pin, D sub, DTE compatible
- Baud Rate: 1,200 to 19,200 bps at 100 m guaranteed with the FC100CBL-L cable
- Power: 12 Vdc via pn 14291 or pn 15966
- Current: 5 mA average

Ordering Information

Fiber Optic Module

FC100 Fiber Optic Converter

Accessories

14291	Field Power Cable allows the FC100 to be powered from a suitable 12 Vdc battery.
15966	Wall charger required for ac power to serve as the power source for the FC100. It accepts inputs from 90 to 260 Vac at 47 to 63 Hz, then outputs 12 Vdc at 880 mA.
FC100CBL2-L	Duplex PMMA Plastic Fiber Optic Cable used to connect the FC100 to the SG000. Enter the cable length, in feet, after the -L.
FC100CBL1-L	Simplex PMMA Plastic Fiber Optic Cable used to connect the FC100 to the SG000. Enter the cable length, in feet, after the -L.
18663	Null Modem Cable 9-Pin Male to Male used to connect the FC100 to the datalogger's RS-232 port.
SC932A	CS I/O to 9-Pin RS-232 DCE Interface used to connect the FC100 to the CS I/O port of a datalogger or CS110. The CS110CBL2 cable (see below) is also required to connect the SG000 to the CS110's CS I/O port.
CS110CBL1-L	CS110 RS-232 (DTE) Cable connects the FC100 to the CS110's RS-232 port. Enter the cable length, in feet, after the -L.
CS110CBL2-L	CS110 CS I/O Cable connects the FC100 to the CS110's CS I/O port. Enter the cable length, in feet, after the -L. The SC932A (see above) is required if this cable is used.
16987	Peripheral Mounting Kit provides hardware for affixing an SC932A to an enclosure backplate.
10873	9-pin female to 9-pin male Serial Data Cable with 6 ft length. Used to connect the FC100 to a PC's 9-pin serial port.
17394	USB to RS-232 converter DB9 Male cable with 6 ft length. Used to connect the FC100 to a computer's USB port.



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