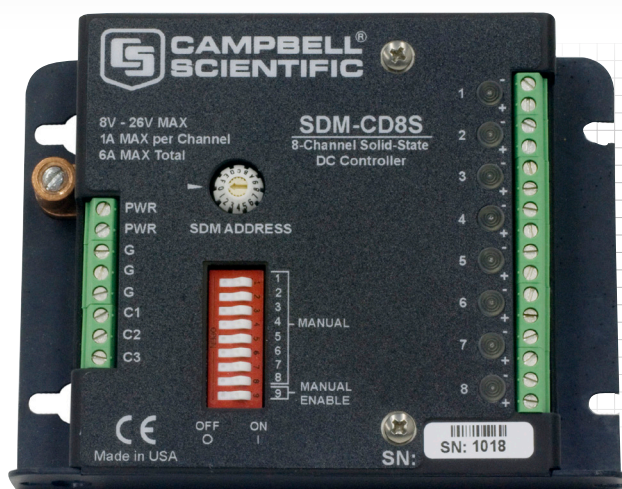




## SDM-CD8S

*Eight-Channel Solid-State DC Controller*



# Expands Datalogger Control Capacity

For dc devices with moderate current loads

## Overview

The SDM-CD8S controls dc devices that have a moderate current load, such as solenoids, solenoid valves, dc motors, stepper motors, lights, horns, heaters, and fans. The SDM-CD8S is ideal for applica-

tions requiring only a few control ports, where a larger, high-powered relay module such as the SDM-CD16S is not necessary.

## Benefits and Features

- › Allows the datalogger to control dc devices that have a moderate current load, such as solenoids, solenoid valves, dc motors, stepper motors, lights, horns, heaters, and fans
- › Provides a manual override
- › Enables multiple SDM-CD8S devices to be wired to one datalogger, increasing the number of devices that can be controlled
- › Includes LEDs that provide a visual indicator of active outputs

## Technical Description

The SDM-CD8S has eight dc-voltage outputs and returns that can be switched on and off manually or under datalogger control. When the manual control switch is in the ON position, outputs are controlled by the position of the individual rocker switches. In the OFF position, the state of the relays is controlled by the SDM commands from the datalogger.

The voltage range for this device is 8 to 26 Vdc. It can deliver up to 1 A per channel with a maximum of 6 A total for all channels. The power input (8 to 26 Vdc) powers both the outputs and the SDM-CD8S logic.

questions & quotes: 435.227.9000

[www.campbellsci.com/sdm-cd8s](http://www.campbellsci.com/sdm-cd8s)



## SDM Operation

The SDM-CD8S is a synchronously addressed datalogger peripheral. Datalogger control ports 1, 2, and 3 are used to address the SDM-CD8S, then clock out the desired state of each of the 8

control ports. Up to 15 SDM-CD8S Controllers may be addressed, making it possible to control a maximum of 120 ports from the first three datalogger control ports.

## Power Considerations

The SDM-CD8S power requirements may be large compared to most Campbell Scientific products. For most applications, an external power supply is recommended to power the SDM-CD8S.

For some applications, it may be convenient to use the datalogger's sealed-rechargeable battery. If the datalogger's rechargeable batteries are used, the batteries need to be float charged via a wall charger or solar panel. The current available from the wall charger limits the SDM continuous output current. Campbell Scientific does not recommend using the datalogger's alkaline power supply.

## Ordering Information

### Synchronous Device for Measurement

**SDM-CD8S** Eight-Channel Solid State DC Relay Controller

### SDM-to-Datalogger Cable

**CABLE5CBL-L** 5-conductor, 24 AWG cable with drain wire and Santoprene jacket. Enter cable length, in feet, after the -L. Must choose a cable termination option (see below).

### Cable Termination Options (choose one)

- PT** Cable terminates in stripped and tinned leads for direct connection to a datalogger's terminals.
- PW** Cable terminates in connector for attachment to a prewired enclosure.

## Specifications

- › Supply Voltage Range: 8 to 26 Vdc
- › Logic Current Drain @ 12 Vdc: 15 mA quiescent; 2.5 mA per active LED (manual or auto)
- › Maximum Current: 1 A (per channel), 6 A (all channels total)
- › Toggle Switch: MANUAL, OFF, AUTO; individual dip switches for manual
- › Actuation/Release Times: 8  $\mu$ s/200  $\mu$ s
- › Operating Temperature Range: -40° to +70°C
- › Dimensions: 11.1 x 8.6 x 2.4 cm (4.4 x 3.4 x 0.9 in)

