



**CAMPBELL  
SCIENTIFIC**  
WHEN MEASUREMENTS MATTER

## Synchronous Devices for Measurement (SDMs)

Expand your output and measurement capabilities



Synchronous Devices for Measurement (SDMs) are a group of addressable peripherals that expand the datalogger's output and measurement capabilities. The datalogger controls the SDM output device by storing a value in a memory location, which is then used by the SDM to set a voltage or relay. Measurement devices store data from sensors which are regularly read into the datalogger through a control port.

### SDM-AO4A

4-Channel Analog Output Module



The SDM-AO4A module increases the number of continuous analog outputs available to a datalogger. These outputs are used for proportional control or driving strip charts.

### SDM-CAN

Datalogger-to-CANbus Interface Module



The SDM-CAN allows a Campbell Scientific datalogger to sample data directly from a CANbus communication network. This allows testing and verification of CANbus-based data alongside measurements made independently via the datalogger's input channels. The SDM-CAN also supports transmission of data onto a CANbus network.

### SDM-CVO4

4-Channel Current and Voltage Output Module



The SDM-CVO4 is attached to a datalogger and outputs variable voltage or current signals under datalogger program control. Typical applications include driving remote current-loop display units, retransmitting measured values to industrial control systems, sending control signals to valve controllers, and providing excitation voltages or currents to external sensors.

### SDM-CD16AC

16-Channel AC/DC Relay Controller



The SDM-CD16AC allows a Campbell Scientific datalogger to automatically activate external ac or dc devices such as motors, pumps, heaters, valves, and fans.

### SDM-CD16D

16-Channel Digital Control Port Module



The SDM-CD16D increases the number of digital outputs that can be controlled by a Campbell Scientific datalogger. The SDM-CD16D is commonly used to drive normal logic level inputs.

### SDM-CD8S

8-Channel Solid-State DC Controller



The SDM-CD8S adds capability to a datalogger by controlling 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 targeted for applications requiring only a few control ports and where a larger, high-powered relay module (such as the SDM-CD16S) is not necessary.

### SDM-CD16S

16-Channel Solid-State DC Controller



The SDM-CD16S adds capability to a datalogger by controlling DC devices that have a relatively high-powered load, such as solenoids, solenoid valves, DC motors, stepper motors, lights, horns, heaters, and fans.

### SDM-IO16

16-Channel Input/  
Output Module



The SDM-IO16 expands the digital input and output channel count of Campbell Scientific dataloggers.

### SDM-SIO1A

1-Channel Serial I/O  
Module



The SDM-SIO1A is a serial I/O expansion module for Campbell Scientific dataloggers. It is designed to add an additional RS-232, RS-422, or RS-485 (half- or full-duplex) serial port to an SDM-capable datalogger for the purposes of interfacing with an intelligent sensor, actuator, or display. Up to 15 SDM-SIO1A modules can be connected to a single datalogger SDM port. The SDM-SIO1A behaves much like a native datalogger serial port and uses the same familiar serial I/O commands. The SDM-SIO1A is transient and surge protected to IEC61000-4-5 level 4 on the serial port interface, avoiding the need for separate transient protection in most applications.

### SDM-SIO4A

4-Channel Serial I/O  
Module

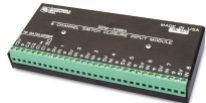


The SDM-SIO4A is a serial I/O expansion module for Campbell Scientific dataloggers. It is designed to add four additional and individually configurable and addressable RS-232, RS-422, or RS-485 (half- or full-duplex) serial ports to an SDM-capable datalogger for the purposes of interfacing with intelligent sensors, actuators, or displays. Up to three SDM-SIO4A modules can be connected to a single datalogger SDM port. The SDM-SIO4A channels behave much like a native datalogger serial port and use the same familiar serial I/O commands. The SDM-SIO4A is transient and surge protected to IEC61000-4-5 level 4 on the serial port interfaces, avoiding the need for separate transient protection in most applications.

*Note: The SDM-SIO4A is not a direct replacement for the SDM-SIO4. The SDM-SIO4A consists of four SDM-SIO1A modules in a single package. Consequently, the SDM-SIO4A is a good replacement for up to four SDM-SIO1 modules or as an alternative to the SDM-SIO1A.*

### SDM-SW8A

8-Channel Switch  
Closure Input Module



The SDM-SW8A increases the number of switch closures or voltage pulses a datalogger can measure. Sensors that output a switch closure or voltage pulse signal include tipping bucket rain gages, flow meters, and anemometers.

For comprehensive details, visit: [www.campbellsci.eu/sdm-old](http://www.campbellsci.eu/sdm-old) 



80 Hathern Road, Shepshed, LE12 9GX UK | +(0)1509 828888 | [sale@campbellsci.co.uk](mailto:sale@campbellsci.co.uk) | [www.campbellsci.eu](http://www.campbellsci.eu)  
UK | AUSTRALIA | BRAZIL | CANADA | CHINA | COSTA RICA | FRANCE | GERMANY | THAILAND | SOUTH AFRICA | SPAIN | USA

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