



Expands Data Logger Input Channels

For switch closure or voltage
pulse sensors

Overview

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.

Benefits and Features

- ▶ Well suited for use in energy management studies
- ▶ Provides eight individually configured channels
- ▶ Measures a variety of signals: reed switches, dry contacts, or slow voltage pulses
- ▶ Allows up to four SDM-SW8As to be connected to a single data logger

Technical Description

The SDM-SW8A provides eight channels for connecting the sensors. Each channel is individually configured for single-pole double-throw (SPDT), single-pole single-throw (SPST), or voltage pulse measurements. Output options include counts, duty cycle, and state.

SDM Operation

The data logger enables individual modules through an addressing scheme; multiple SDMs (in any combination) can be connected to one data logger. We recommend a maximum of four SDM-SW8As be connected to a single data logger. After a module is enabled, it operates independently of the data logger until additional commands are received or results are transmitted.

Specifications

Function	Increases the number of switch closures or voltage pulses a data logger can measure.	Input Voltage Threshold	From below 0.9 to above 4.0 Vdc (± 20 Vdc maximum)
Number of Channels	8	Maximum Input Frequency	100 Hz (50% duty cycle)
Measurement Types	Switch closure (SPDT, SPST), dc voltage pulse	Minimum Input Pulse Width	5 ms high, 5 ms low
		Maximum Bounce Time	3 ms open without counting
		Output Options	State, duty cycle, counts



Maximum Count/Port	65535
Internal Sampling Frequency	500 Hz
Watchdog Reset	Yes
Operating Temperature	-25° to +55°C
Operating Voltage	9.6 to 16 V
Typical Current Drain	» 6 mA active (maximum) » 3 mA quiescent

Relative Humidity	0 to 90% RH (non-condensing)
Maximum Cable Length	6 m (20 ft) total to all SDM devices Consult Campbell Scientific if longer lengths are necessary.
Dimensions	15.7 x 6.9 x 2.3 cm (6.2 x 2.7 x 0.9 in.)
Weight	0.23 kg (0.5 lb)

For comprehensive details, visit: www.campbellsci.eu/sdm-sw8a 



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