

MODEL CSM4 STORAGE MODULE

FEATURES

- **Safeguard and Transport Data or Programs Between Data Logger and Computer**
- **Provide Long-Term Redundant Data and Program Storage**
- **Provides 2,000,000 Low Resolution Data Values**
- **Stores up to Eight Programs**
- **Requires CSC532 Interface to Communicate with a Computer**
- **Requires CPC208W / SMS Software**

The CSM4 Storage Module is housed in a sealed canister fitted with a single, 9-pin D-connector. The storage module is connected to, and powered by, a data logger via a CSC12 9-pin cable or a CSC12R (rugged version) cable.

Two LEDs are located adjacent to the cable connector. A red LED indicates the operational status of the module at power-up. A green LED indicates when data is being stored. The storage modules are addressable allowing specific data to be directed to a specific storage module. Up to four storage modules can be connected to a data logger at one time.

The module uses non-volatile flash EEPROM memory, which does not require power to retain data. There is no internal battery to wear out. The flash memory retains data for approximately 10 years and can be erased and rewritten at least 100,000 times. The CSM4 memory is split into 64 Kbytes blocks (64 blocks in a CSM4). This equates to a capacity of more than two million low-resolution storage values for the CSM4.

When connected to a PC for program or data transfer, the storage module requires a data retrieval interface such as the CSC532. The CSC532 connects to the storage module via a CSC12 cable and to the computer's serial I/O port through a 9-to-25-pin or 25-to-25 pin cable. A CR10X sends historical or real-time data to a CSM4. Data can be sent automatically to a connected module or manually initiated via the CCR10KD keyboard/display. Standard operating temperature range is -35° to +65°C; extended range is -55° to +85°C.



MODEL CSM4 SPECIFICATIONS

Storage Capacity	2 million low-resolution data values	
Program Storage	Up to eight programs with a total capacity of 128 Kbytes (including labels). Storing programs does not affect available data storage capacity.	
Canister	Sealed	
Processor	Hitachi H8S	
Operating System	64 Kbytes, flash memory based, user downloadable	
Operating Temp. Range	-35° to +65°C (-55° to +85°C extended)	
Data transfer rates		
Data storage	9600, 76800 bps	
Telecommunications	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 bps	
Memory Configuration	User selectable for either ring style or fill-and-stop; default is ring style	
Power Requirements	5 ±0.3 VDC @ 100mA (max.)	
Dimensions	135 mm x 75 mm x 20 mm	
Weight	200 g	
Current Drain	Active, processing, e.g. memory test:	30–40 mA (avg)
	Active, but waiting, e.g. communications mode:	10mA (avg)
	Typical current during data storage from a logger:	15 mA (avg)
	Low Power Standby State:	less than 200 µA
	Peak current (flash erase):	60 mA
Maintenance	There are no user-serviceable parts inside the storage module.	
Shipped with	CSC12 cable	



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