



MODEL CSM4 STORAGE MODULE

Features:

- Provides 2 million low resolution data values
- Multiple storage modules be used (up to four)
- Allows data to be downloaded to your laptop while out in the field
- Can be taken back to the office for data extraction
- Stores up to eight programs
- Requires CSC532A interface to communicate with a computer
- Requires SMS software found in LOGGNET
- Operating range -35° to 65° standard
- Transport data or programs between data logger and computer
- Provide long-term redundant data and program storage
- Safeguard data during transport; sealed case is nearly "bullet-proof"
- Have built-in Status LEDs indicating when data transfer is occurring

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. Standard operating temperature range is -35° to +65°C; extended range is -55° to +85°C.

The CSM4 memory is split into 64 Kbytes blocks (64 blocks in a CSM4). This equates to a capacity of more than 2 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 CSC532A. The CSC532A 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.

An IMP-series data logger sends historical or real-time data to a CSM4. Data can be sent automatically to a connected module or manually initiated via the hand held keyboard/display.



SPECIFICATIONS:

Storage Capacity:	2 million low-resolution data values	Power requirements:	5 ±0.3 Vdc @ 100mA (max.)
Program storage:	Up to eight programs with a total capacity of 128 Kbytes (including labels). Storing programs does not affect available data storage capacity.	Dimensions:	135 x 75 x 20 mm
Canister:	Sealed	Weight:	200 g
Processor:	Hitachi H8S	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
Operating system:	64 Kbytes, flash memory based, user downloadable	Maintenance:	There are no user-serviceable parts inside the storage module.
Operating temp. range:	-35° to +65°C (-55° to +85°C extended)	Shipped with:	CSC12 cable
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		



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