

X2-SDLMC

SUBMERSIBLE DATA LOGGER

- Wet-mateable sensor and power ports
- Cellular or Iridium satellite telemetry
- Optimized for use with CB-25 data buoy
- Supports a variety of environmental sensors
- Complete system is truly submersible

The **X2-SDLMC** Submersible Data Logger is a rugged, self-powered remote data logging system specifically designed for offshore use without fear of accidental flooding. The system is configured with two sensor ports for connection to industry-standard digital interfaces including RS-485, RS-232 and SDI-12. Additional sensor inputs are available through the use of port splitters and adapters. All connections are made using MCIL/ MCBH wet-mate connectors, and the built-in sensor library automatically facilitates setup and configuration. Sensor data is recorded on common or independent schedules.

Unlike many data loggers, the **X2-SDLMC** is truly submersible. The housing and battery compartment are completely sealed and waterproof. Internal circuit boards and communication modules are shock mounted, and all access ports incorporate redundant sealing. The **X2-SDLMC** withstands extreme wave action, floods, periodic & long-term deployment underwater, and more. When fitted for wireless remote communication, the cellular and satellite antennas are also waterproof.

The **X2-SDLMC** can be powered by internal SLA battery or external 5-16 VDC power. The internal SLA battery is intended for use with the **CB-25** data buoy for continuous power via solar charging. Common sensor connections include multi-parameter sondes, water quality sensors, temperature strings, Doppler velocity meters, water level sensors, and weather stations. Optional integrated cellular or satellite telemetry modules offer real-time remote communications via the **WQData LIVE** web datacenter. There, data is presented on a fully-featured and easy-to-use dashboard. Other features include automated reports, alarms, push notifications and much more.



X2-SDLMC

SUBMERSIBLE DATA LOGGER

specifications

Material	Housing: PVC; Connectors: Type 316 SS, neoprene; Pressure valve: Anodized aluminum
Weight	5.0 lbs. without batteries; 8.3 lbs. with SLA battery pack
Dimensions	5.5" (13.97 cm) diameter; 15.0" height (38.10 cm)
Internal Power	6 A-Hr SLA battery, 12VDC
External Power Requirements	5-16 VDC \pm 5% (Reverse polarity protected)
Current Draw (Typical @ 12VDC)	Low power sleep: 350uA; Active: 45mA; Cellular transmitting: 300mA; Iridium satellite transmitting: 170mA
Peak Current	Power supply must be able to sustain a 500mA 1-second peak current (@ 12V)
Operating Temperature	-20 to 70°C
Rating	100m depth rating (standalone); 10m depth rating (with telemetry)
User Interface	RS-485 direct to CONNECT Software, WQDataLive Web Datacenter
Data Logging	256MB microSD card (expandable up to 4GB)
Data Processing	Parameter level polynomial equation adjustment; Basic & burst averaging (min, max, standard deviation, and raw data available)
Real Time Clock (RTC)	<30sec/month drift ¹ ; Auto-sync weekly ² ; Internal backup battery
Log Interval	User configurable from 1 minute (10 minute default) ³ ; Unique interval per sensor
Transmission Trigger	Time-based; Selective parameter upload option
Sensor Interfaces	SDI-12, RS-232 (2 channels), RS-485
Sensor Power	(2) independent switches from input supply ^{4,5}
Built-in Sensors	Temperature (-40 to 85°C, 0.1°C resolution, \pm 3°C accuracy); Humidity (0-100%, 0.1% resolution, \pm 4% accuracy from 5-95% RH & -20 to 70°C); Battery voltage; System & sensor current
Sensor Ports	(2) MCBH-8-MP for sensor interface (RS-232, RS-485, SDI-12, Switched Power, GND)
Power Port	(1) MCBH-6-FS for power and communication (12V Solar In, Power Switch, RS-485 Host, GND)
Telemetry Options	4G LTE cellular, CAT-M1 cellular, Iridium satellite
Antenna Port	Type N female

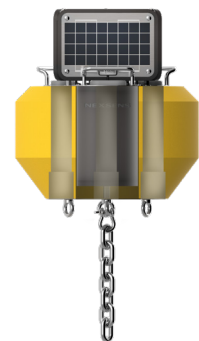
¹ Assumes 25°C operating temperature

² Requires the X2-SDLMC to be connected to the internet

³ Minimum log interval dependent on sensor limitations and processing time

⁴ Cumulative concurrent current limit of all three channels is 2A

⁵ Logger power supply must be able to support current requirements of sensors



parts list

Part #	Description
X2-SDLMC	X2-SDLMC submersible data logger
X2-SDLMC-C-2G3G	X2-SDLMC submersible data logger with 2G/3G cellular telemetry
X2-SDLMC-C-NA4G	X2-SDLMC submersible data logger with North American 4G LTE cellular telemetry
X2-SDLMC-C-CATM	X2-SDLMC submersible data logger with CAT-M1/NB2 LTE cellular telemetry
X2-SDLMC-I	X2-SDLMC submersible data logger with Iridium satellite telemetry



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