Sensor Module 4 (SM4)

Features & Benefits

- Highly accurate temperature and humidity sensors make the SM4 ideal for monitoring in critical environments, with NIST traceability.

- The compact design, with all three sensors housed in a single stainless steel enclosure, makes it versatile and easy to place in many locations.

- All of the SM4's electronic circuitry is housed inside a watertight stainless steel enclosure, allowing the SM4 to be placed in harsh environments. All units include a guard to protect the sensor probes.

- The sensors are Lonworks compatible meaning the sensors can be daisy chained together requiring less wiring and lower installation costs.

- Several different models are available with different sensor combinations including:
  - Temperature, humidity, light
  - Temperature, light
  - Light only

- PulseCMC™ integration verifies proper lighting cycles are being maintained, and temperature and humidity are within appropriate range, for breeding and Good Laboratory Practices (GLP) studies.

Description

The Sensor Module 4 (SM4) is a networked sensor monitoring temperature, humidity, and light in research facilities. The sensors are engineered for critical and harsh environments, with all three sensors in a single stainless steel enclosure. The SM4 offers several configurations to meet the needs of the application. The SM4 is integrated with Edstrom environmental monitoring systems.

PART NUMBER	CONFIGURATION FOR PULSECMC*
7910-9630-201	Temperature, Humidity and Light
7910-9630-202	Temperature and Light
7910-9630-203	Light

PART NUMBER	CONFIGURATION FOR WATCHDOG V5*
7900-9630-201	Temperature, Humidity and Light
7900-9630-202	Temperature and Light
7900-9630-203	Light

* Includes cable and wall mount base

DS-000024 Rev A

Specifications

UNIT SPECIFICATIONS
- Sealed 316 L stainless steel enclosure measures
  3.25 in. W x 7.0 in. H x 3.13 in. D
  (82.5 mm W x 178 mm H x 79.5 mm D).
- Watertight connections.
- Power: 18 to 28 VDC.

INTERFACE
- Lon-based network for secure, peer-to-peer
  networking.

  Temperature: 0°F to 120°F (-18°C to 49°C).
  Readings are sent from the sensor once per minute
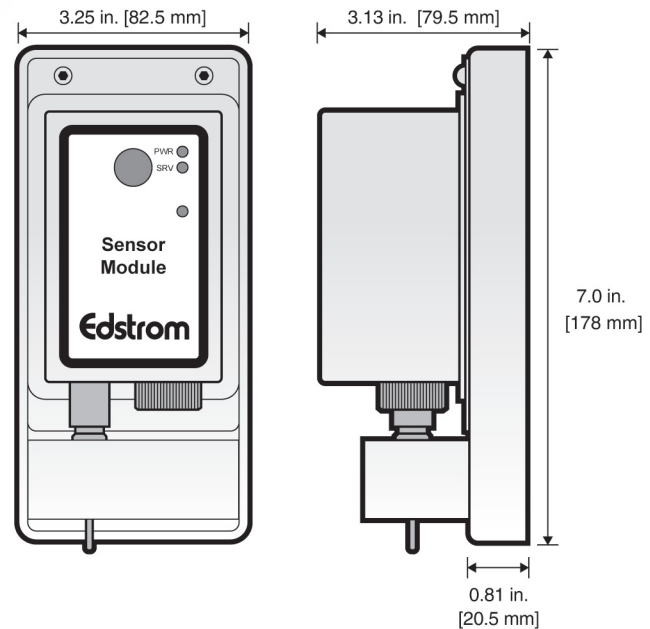 or when there is a change of 0.25°F (17.6°C).

  Humidity: 0% to 100% RH.
  Readings are sent from the sensor once per minute
  or when there is a change of 0.5% RH.

  Light:
  Lighting is calibrated and recorded as On, Off, and
  On-High. Readings are sent from the sensor once
  per minute or when there is a change of
  0.5 footcandle.

SENSORS
- Temperature accuracy: ± 1°F (± 0.6°C).
- Humidity accuracy: ± 5% RH.
- Range: 20% to 85% RH.
- Humidity and temperature sensors are
  NIST traceable.

All specifications are subject to change without notice.

3.25 in. [82.5 mm] 3.13 in. [79.5 mm]

PWR
SRV

Sensor
Module

Edstrom

7.0 in.
[178 mm]

0.81 in.
[20.5 mm]

Operation

The SM4 is a key component in many environmental monitoring applications. The
placement of sensors in a room is critical. When monitoring temperature, humidity
and light in an animal holding room, the recommended mounting location is slightly
above the top of the door frame. The location should have an unobstructed path to
the light source, and be away from humidity sources, such as sinks.