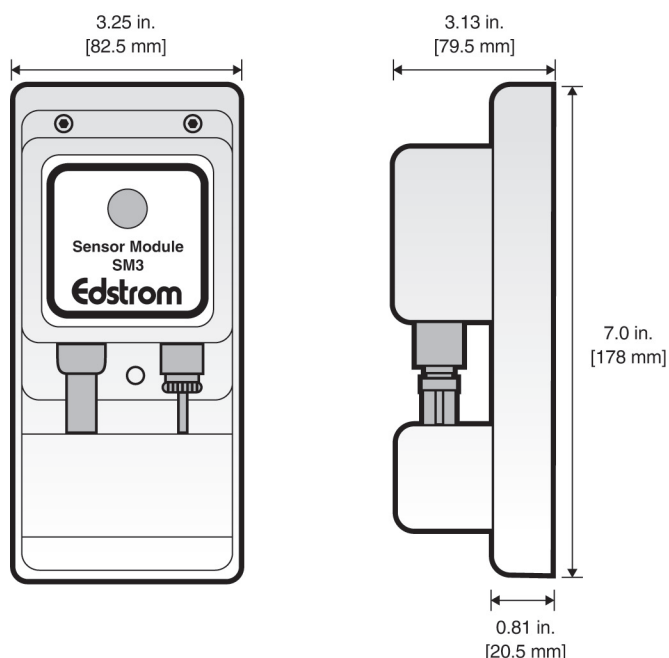


Sensor Module 3 (SM3)



Description

The Sensor Module 3 (SM3) is a versatile and cost effective solution for monitoring temperature, humidity, and light. The SM3 is an integral component of the Edstrom environmental monitoring systems. The SM3 uses an industry standard interface making it compatible with many other systems and applications.



Features & Benefits:

- All of the SM3's electronic circuitry is housed inside a watertight stainless steel enclosure, allowing the SM3 to be placed in harsh environments. All units include a guard to protect the sensor probes.
- With all three sensors housed in a single stainless steel enclosure, the compact design allows for a variety of placement options.
- Several different models are available that allow users to select the temperature range on the temperature probes. The multiple sensor combinations include:
 - **Temperature, humidity, light**
 - **Temperature, light**
 - **Light only**
 - **Temperature only**
- SM3 analog sensors are used with Edstrom Environmental Watchdog® Local Processors, Environmental Sentry Panels, and the Input/Output panels of PulseCMC™.
- The sensor provides highly accurate temperature and humidity readings with NIST traceability.
- The sensor provides highly accurate temperature and humidity readings with NIST traceability.
- Configurations available with vial for use in the reduction of fluctuations of sensor readings caused by brief changes in environmental conditions.

Sensor Module 3 (SM3)

Specifications

INTERFACE

- Analog Communication.
- Temperature: 4 to 20 mA.
- Humidity: 4 to 20 mA.
- Light: 0 to 20 mA.

PHYSICAL CHARACTERISTICS

- Sealed 316L stainless steel enclosure
3.25 in. W x 7.0 in. H x 3.13 in. D
(82.5 mm W x 178 H mm x 79.5 D mm).

POWER

- 18 to 28 VDC.

SENSORS

- Temperature range: See table in right column.
- Temperature accuracy: $\pm 1^{\circ}\text{F}$.
- Humidity
 - Range: 0% to 100% RH.
 - Accuracy: $\pm 5\%$ RH (Range 20% to 85%).
- Humidity and temperature sensors are NIST traceable.
- Light – State detection Off, On, On-High; derived from scaled 0-100% reading.

Contact Edstrom for the availability of additional configurations.
All specifications are subject to change without notice.

Operation

The SM3 is a key component in many environmental monitoring applications including:

- Monitoring the temperature in animal rooms, refrigerators, freezers, and cold rooms.
- Verifying proper lighting cycles for breeding and Good Laboratory Practices (GLP).
- Monitoring temperature and humidity parameters when used in conjunction with heating, ventilating and air conditioning systems.

The SM3 is compatible with most industry leading monitoring systems. The SM3 communicates with other devices using the industry standard 0 to 20 mA and 4 to 20 mA output signals. All three sensors share a common power input line. Each sensor has a dedicated line for the output signal, as well as its own signal conditioning circuitry.

Standard Assemblies



CONFIGURATION FOR PULSECMC

PART NUMBER

Temperature, Humidity and Light; 0°F to 120°F [-18°C to 49°C]	7700-9070-850
Temperature, Light; 0°F to 120°F [-18°C to 49°C]	7700-9070-851
Light Only	7700-9070-852

CONFIGURATION FOR WATCHDOG V5

PART NUMBER

Temperature, Humidity and Light; 0°F to 120°F [-18°C to 49°C]	7700-9070-550
Temperature, Light; 0°F to 120°F [-18°C to 49°C]	7700-9070-551
Light Only	7700-9070-552



CONFIGURATION

PART NUMBER

Temp Trans + Probe 3 Inch; 0°F to 300°F [-18°C to 149°C]	7700-9060-905
Temp Trans/RTD Probe; -148°F to 32°F [-100°C to 0°C]	7700-9060-920
Temp Trans/RTD Probe; -50°F to 50°F [-46°C to 10°C]	7700-9060-921
Temp Trans/RTD Probe; 0°F to 120°F [-18°C to 49°C]	7700-9060-922
Temp Trans/RTD Probe w/ Vial; -148°F to 32°F [-100°C to 0°C]	7700-9060-930
Temp Trans/RTD Probe w/ Vial; -50°F to 50°F [-46°C to 10°C]	7700-9060-931
Temp Trans/RTD Probe w/ Vial; 0°F to 120°F [-18°C to 49°C]	7700-9060-932

Edstrom Industries, LLC
819 Bakke Avenue Waterford, WI 53185 USA
Tel: 262-534-5181 or 800-558-5913
www.edstrom.com

Edstrom

Our Quality Management System is Certified to ISO 9001