

# Honeywell

# C7363A Wall Particulate Matter Sensor



## APPLICATION

The C7363A Particulate Matter Sensor uses an optical sensor based on laser scattering principles and features innovative contamination resistance technology to perform highly accurate and reliable PM measurements. The sensor measures particles of PM2.5 and PM10, with a continuous operation lifetime of more than 8 years. The sensor will provide long-term reliability and high resolution particle size grouping for the detection of environmental dust and other particles.

## FEATURES

- Laser scatter method sensor
- Detection of environmental dusts and other particles
- Highly accurate and reliable PM measurements
- Selectable PM1.0, PM2.5, PM4.0 or PM10
- 4-20 mA, 0-5 Vdc or 0-10 Vdc signal
- Internal menu for easy setup

## SPECIFICATIONS

**Sensor:** Laser scatter method

## SPECIFICATION DATA

- Particulate Size:** PM1.0, PM2.5, PM4.0 or PM10 (selectable)
- Mass Concentration Range:** 0-1000  $\mu\text{g}/\text{m}^3$
- Resolution:** 1  $\mu\text{g}/\text{m}^3$
- Accuracy:**  $\pm 10 \mu\text{g}/\text{m}^3$  (0 - 100  $\mu\text{g}/\text{m}^3$ ),  $\pm 10\%$  (100 - 1000  $\mu\text{g}/\text{m}^3$ )
- Response time:** 1 second
- Sensor Lifetime:** >8 years
- Output Signals:** 4-20 mA (sourcing) or 0-5 Vdc / 0-10 Vdc (selectable)
- Output Resistive Load:**  
Current - 550 $\Omega$  max  
Voltage - 5,000 $\Omega$  min
- Output Scale:** 0 to 1000  $\mu\text{g}/\text{m}^3$  (menu selectable)
- Wiring:** Screw terminal block (14 to 22 AWG)
- Power Supply:** 24 Vac/dc  $\pm 20\%$  (non-isolated half-wave rectified)
- Protection Circuitry:** Reverse voltage protected, overvoltage protected
- Power Consumption:** 75 mA @ 24 Vdc, 100 mA max @ 24 Vac
- Operating Temperature:** 0 to 50°C (32 to 122°F)
- Operating Humidity:** 20 to 80% RH non-condensing
- Storage Conditions:** -30 to 60°C (-22 to 140°F)
- Enclosure:** White ABS, UL94-V0, IP30 (NEMA 1)
- Certifications:** CE, MCERTS, RoHS, FCC, ICES, Prop65
- MCERTS Certification:**  
The Particulate Matter series incorporates the SPS30 PM sensor for accurate and reliable PM sensing. The SPS30 particulate matter sensor has achieved MCERTS certification, which proves the performance of the PM sensor. In addition, the certification confirms that the SPS30 can be easily integrated into applications that comply with the European Air Quality Standard DIN EN 15267.



31-00393-01

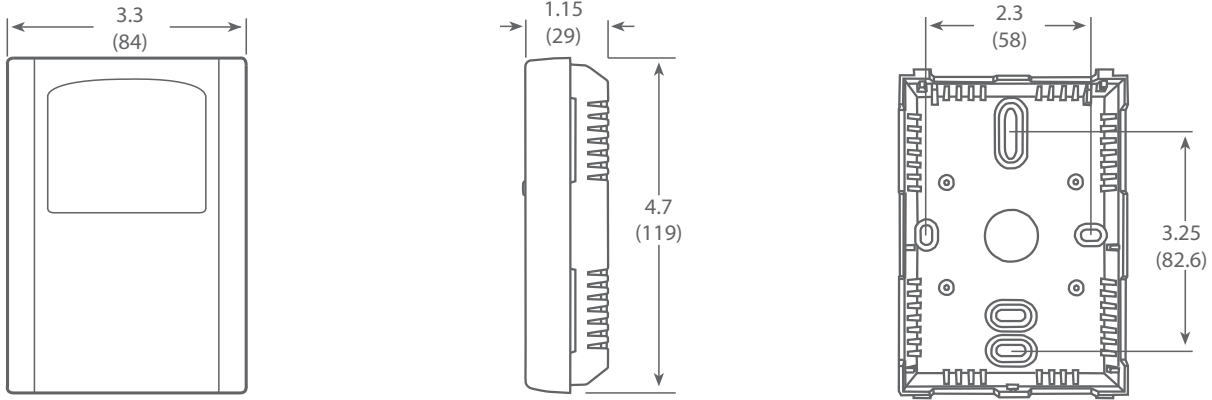


Fig. 1. C7363A dimensions in inches (mm).

## TYPICAL INSTALLATION

The C7363A series can be mounted directly to a single gang electrical box or directly to a wall. The backplate includes many mounting hole configurations to allow for mounting on a variety of electrical boxes.

The C7363A has a screw block terminal provided for connection to the Building Automation System.

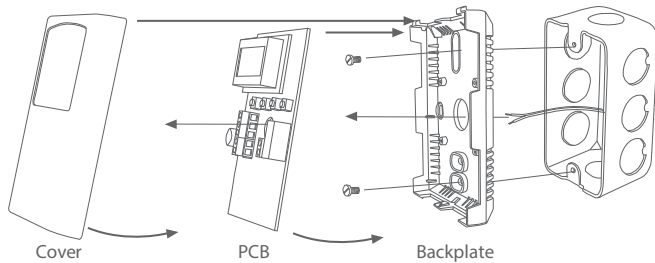


Fig. 2. C7363A Mounting

## TERMINAL IDENTIFICATION

Table 1. Terminal Description

Terminal	Function
PWR	+ 24 Vdc/24 Vac (HOT)
COM	Common
OUT	Analog Output

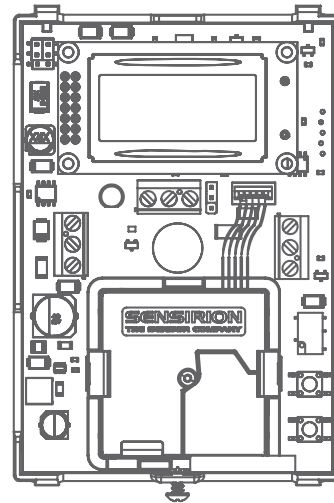


Fig. 3. C7363A Terminals

## Honeywell Building Technologies

In the U.S.:

Honeywell

715 Peachtree Street NE

Atlanta, GA 30308

customer.honeywell.com