

Air duct fine dust sensors from Siemens detect smallest harmful particles in buildings

- **Measurement and control of particulates with a particle size of 0.3 to 2.5 µm (PM2.5) or 0.3 to 10 µm (PM10)**
- **Unique mechanical design for highly accurate measurements**
- **Easy installation on existing and new air handling units (AHU)**

The new PM2.5 duct type fine dust sensor from Siemens Smart Infrastructure comes in two variants and creates a healthy as well as productive indoor air climate. Part of the Symaro product group, the sensors measure dust and dirt particles, including fine sand, transmitting them rapidly and precisely to advanced building management systems for comprehensive climate monitoring and control. This improves the indoor air quality of residential and commercial buildings, which in turn has a positive effect on the health and comfort of room occupants. By ensuring the early detection of hazardous particles, the sensors help achieve energy and cost-efficient control of the entire HVAC system.

Improved safety for buildings and users

Increasing air pollution leads to high levels of fine dust pollution, impacting not only the environment, but also the human respiratory system. Urban areas are particularly affected as the level of pollutants in the air is rising steadily. Particulates created by different combustion processes enter through the nose, mouth, as well as throat and penetrate deep into the lungs, potentially causing a multitude of cardiovascular diseases, bronchitis, asthma, or lung cancer. The new PM 2.5 air duct fine dust sensors precisely measure and monitor the indoor and outside air quality, thus protecting the safety of building occupants. Together with a building management system, the sensors control the air quality in air handling units and can follow the air pollution in one or multiple rooms. Designed especially for a healthy

room climate, the new sensor is available in two variants. One sensor has duct probes that detect fine dust PM2.5, which are harmful to humans, and PM10. The other option has multiple measurement capabilities to measure fine dust, humidity and temperature. The new duct type fine dust sensor design makes maintenance fast and easy.

Unique design for maximum precision

PM 2.5 duct type fine dust sensors offer incredibly high sensitivity as well as easy installation and configuration, especially in air handling units. The module has a service life of more than six years and is easy to replace. The probes rapidly provide correct measurements irrespective of room and building occupancy, thus reducing commissioning, service and operating costs. With their unique mechanical design, which allows air to enter and exit through the same opening, the sensors offer a very level high precision. This unique feature provides an exact measurement in the inlet or outlet air ducts of the air handling unit. After the assembly of the head and detection chamber, the chamber is completely sealed off from the sensor head, making it impossible for air from the head to enter the chamber. This ensures that only air drawn in from the air duct is measured. The new PM2.5 air duct fine dust sensors expand the Symaro sensor portfolio for CO2, humidity, volatile organic compounds (VOC), temperature, fine dust and much more applications.

This press release and press pictures are available at <https://sie.ag/38DcPsZ>

For more information on Siemens Smart Infrastructure, see

www.siemens.com/smart-infrastructure

For further information on the Symaro portfolio, please see

www.siemens.com/global/en/products/buildings/hvac/sensors.html

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Siemens AG (Berlin and Munich) is a global technology powerhouse that has stood for engineering excellence, innovation, quality, reliability and internationality for more than 170 years. The company is active around the globe, focusing on the areas of intelligent infrastructure for buildings and distributed energy systems, and automation and digitalization in the process and manufacturing industries. Through the separately managed companies Siemens Energy, the global energy business of Siemens, and Siemens Mobility, a leading supplier of smart mobility solutions for rail and road transport, Siemens is shaping the energy systems of today and tomorrow as well as the world market for passenger and freight services. Due to its majority stakes in the publicly listed companies Siemens Healthineers AG and Siemens Gamesa Renewable Energy (as part of Siemens Energy), Siemens is also a world-leading supplier of medical technology and digital healthcare services as well as environmentally friendly solutions for onshore and offshore wind power generation. In fiscal 2019, which ended on September 30, 2019, Siemens generated revenue of €86.8 billion and net income of €5.6 billion. At the end of September 2019, the company had around 385,000 employees worldwide. Further information is available on the Internet www.siemens.com.