

Particle measuring

PSYS

APPLICATIONS

- Automotive
- Sensors and optics
- Woodworking
- Painting and surface coating
- Electronics, pharmaceutical and medical technology

In a wide variety of manufacturing areas, there are many places that have varying levels of particulate contamination and can lead to contamination of products and machinery as well as harm to human health. Controllable air purity is thus a decisive factor in ensuring continuous compliance with quality standards and occupational health and safety regulations. The overall pSYS system is an out-of-the-box total solution for the continuous and seamless recording and evaluation of dust concentrations of dust classes PM1 to PM10 at up to 5 measuring points simultaneously. Coordinated hardware and software components enable real-time data acquisition in order to interpret the values recorded from the sensor system with the integrated evaluation software and to illustrate the data in a dashboard for analysis purposes.

Specifications

Memory	7 GB data storage
Power supply	230 V \pm 10 %, 24 V internal power supply unit
Measuring cycle	internal 1 x per second
Interfaces	1 x service interface/network, 1 x temperature and humidity sensor with 10 m cable length each, 5 x particle sensor
HMI	Grafana dashboard, characteristic curves, alarms, limits, reports, data storage 12 months in device
Operating system	IIoT operating system SIINEOS
Particle classes and sizes of the particle sensors	PM1.0 / PM2.5 / PM4.0 / PM10 0,3 μ m – 1,0 μ m / 2,5 μ m / 4,0 μ m / 10 μ m
Working ranges of the temperature and humidity sensor	Temperature: -5 ... 55 $^{\circ}$ C \pm 0,3 $^{\circ}$ C Relative humidity: 10 ... 90 % RH \pm 3 % rF (30...70 % rF), otherwise \pm 5 % rF
Range of temperature	In operation: 0 $^{\circ}$ C to 50 $^{\circ}$ C Storage: -40 $^{\circ}$ C to 85 $^{\circ}$ C
Relative humidity	In operation: 20 % to 90 % RH non-condensing Storage: 10 % to 95 % RH non-condensing
Dimensions	250 x 160 x 150 mm
Protection area	IP65



Grafana
&
siineos



area