

ALLNET MSR ALL4472 / Particulate Matter Sensor *white*



EAN CODE



Highlights:

- compatible with ALL34xx/35xx/4500/5000
- Particulate matter sensor shows the values in $\mu\text{g}/\text{m}^3$, particles per cubic cm
- Aluminium housing with bracket for wall mounting
- Fine dust measuring range 1 to 1000 $\mu\text{g}/\text{m}^3$
- Measurement accuracy $\pm 10 \mu\text{g}/\text{m}^3$ @ 0 to 100 $\mu\text{g}/\text{m}^3$ / $\pm 10 \%$ @ 100 to 1000 $\mu\text{g}/\text{m}^3$
- Connections: 1x RJ45 input / 1x RJ45 output
- (no longer compatible with ALL3000/400x & ALL4504/4404 8 Port Multiplexer)

Particulate Matter Sensor ALL4472

For HVAC and Air Quality Applications

With this new particulate matter sensor, ALLNET expands its range of environmental sensing solutions and opens up a new dimension in indoor and outdoor air quality applications.

The ALL4472 particulate matter (PM) sensor represents a new technological breakthrough in optical PM sensors. Its measurement principle is based on laser scattering and makes use of ALLNET's innovative contamination-resistance technology. This technology, together with high-quality and long-lasting components, enables accurate measurements from the device's first operation and throughout its lifetime of more than eight years.

PM2.5 and PM10 refer to particulate matter with particle diameter up to 2.5 microns and 10 microns, respectively, and are among the most dangerous air pollutants. Due to their small size, PM2.5 particles can travel deep into the human lung and cause a variety of health issues; for instance, by triggering asthma attacks or contributing to cardiovascular disease. The ALL4472 will enable the implementation of innovative air quality monitoring devices

that prevent air pollution damage.

Technical Details:

Particulate Matter Sensor Specifications

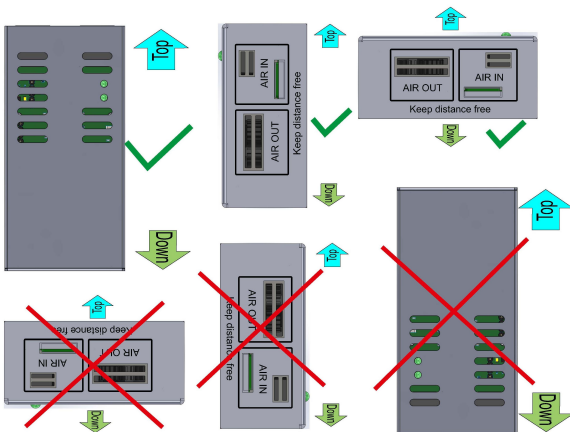
Mass concentration accuracy ¹	$\pm 10 \text{ ?g/m}^3$ @ 0 to 100 ?g/m^3
Mass concentration range	$\pm 10 \%$ @ 100 to 1000 ?g/m^3
Mass concentration resolution	1 to 1000 ?g/m^3
Particle detection size range ²	1 ?g/m^3
Lower limit of detection	Mass concentration: PM1.0, PM2.5, PM4 and PM10
Minimum sampling interval	Number concentration: PM0.5, PM1.0, PM2.5, PM4 and PM10
Lifetime	0.3 ?m
Dimensions	1 sec (continuous mode)
Operating temperature range	> 8 years operating continuously 24h/day
Storage temperature range	40.6 x 40.6 x 12.2 mm^3
Electrical Specifications	-10 to +60 °C
Interface	-40 to +70 °C
Supply voltage	UART, I ² C, RJ45 "ALLNET"
Average supply current	4.5 – 5.5 V
@ 1 Hz measurement rate	< 60 mA

¹ Specified for PM2.5 at 25 °C using potassium chloride salt particles and the TSI DustTrak™ DRX Aerosol Monitor 8533 as a reference.

² PM_x defines particles with a size smaller than "x" micrometers (e.g., PM2.5 = particles smaller than 2.5 ?m).

Additional Images





Accessories

Part No.	Name
134571	ALLNET MSR Zentrale "ALL3419" inkl. 3 Sensor Ports & WLAN & Temperaturfühler "ALL3006" für IP Gebäude Automation
98686	ALLNET MSR Zentrale "ALL3500" inkl. 4 Sensor Ports & WLAN für IP Gebäude Automation
81174	ALLNET MSR Zentrale "ALL5000" inkl. 16 Sensor Ports & 19" für IP Gebäude Automation
104126	ALLNET MSR Zentrale "ALL3505" inkl. 8 Sensor Ports & Hutschienen Montage für IP Gebäude Automation
101636	ALLNET MSR Zentrale "ALL3500PoE" inkl. 4 Sensor Ports & PoE & WLAN für IP Gebäude Automation