

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

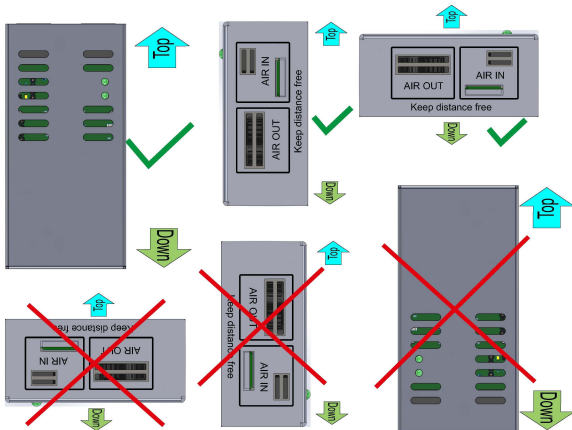
Attributes

Attribute	Value
Bauform:	Metallgehäuse
Einsatzorte MSR:	indoor
Kompatibilität Zentrale:	ALL3419;ALL3500;ALL3500PoE;PoE Signallampe;ALL3696;ALL3420;ALL5000;ALL4500;ALL5000v2;ALL3418;ALL5100;ALL4176;ALL3692;

Attribute	Value
Weight:	0.1 Kg
Warranty:	24.00 Months

Additional Images







Part No.: 166561
Vendor Part No.: ALL4472

Accessories

Part No.	Name
134571	ALLNET ALL3419 / IP Building-Autom. 3x I2C, 1x USB, LAN/WLAN
98686	ALLNET MSR control center "ALL3500v2" incl. 4 sensor ports & WLAN for IP building automation
206211	ALLNET MSR Central "ALL5000v2" incl. 16 Sensor Ports & 19" for IP Building Automation
104126	ALLNET ALL3505 / IP Homeautomation Appliance DIN-Rail 8x I2C
101636	ALLNET ALL3500PoE / IP Homeautomation Appliance