

Particulate Matter Sensor SPS30

Do you have any questions or want to discuss a future project? Please [contact us](#).

| Sensor Specifications | |
|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
| Mass concentration precision ¹ | ±10 µg/m³ @ 0 to 100 µg/m³ ±10 % @ 100 to 1000 µg/m³ |
| Mass concentration range | 1 to 1000 µg/m³ |
| Mass concentration resolution | 1 µg/m³ |
| 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 | > 10 years operating continuously 24h/day |
| Dimensions | 40.6 × 40.6 × 12.2 mm³ |
| Operating temperature range | -10 to +60 °C |
| Storage temperature range | -40 to +70 °C |
| Electrical Specifications | |
| Interface | UART, I²C |
| Supply voltage | 4.5 – 5.5 V |
| Average supply current @ 1 Hz measurement rate | 55 mA |

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

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