

# Particulate Matter Sensor SPS30

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

Sensor Specifications	
Mass concentration precision <sup>1</sup>	±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 <sup>2</sup>	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

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

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