PM Sensor

A device designed to monitor air pollution levels and safeguard against harmful particulate matter (PM) present in the air. This device, belonging to the PRO sensor series, includes Aranet Sub-GHz ISM band radio which wirelessly transmits sensor measurements to the Aranet PRO base station.

Product numbers

European Union	TDSPPM02
United States	TDSPPMU2
Asia	TDSPPMU2

Particulate matter concentration measurement performance

	PM1.0	PM2.5	PM10
Range	0–1000 μg/m^3	0–1000 μg/m^3	0–1000 μg/m^3
Resolution	1 μg/m^3	1 μg/m^3	1 μg/m^3
Accuracy	±10 %	±10 %	±10 %

General specifications

Ingress protection rating	IP42	
Operating temperature range	-10–60 °C	14–140 °F
Operating relative humidity range	0–95 %	
Dimensions	104×67×37 mm	4.10×2.64×1.46 in
Weight (excl. wall mount)	116 g	4.1 oz
Power input	12–24 VDC power supply	
Power consumption	0.5 W	
Packaging includes	Power supply unit, wall mount	

LED mode description

LED mode	Air quality index	Category
Green	0–50	Good
Yellow	51–100	Moderate
Orange	101–150	Unhealthy for sensitive groups
Red	151–200	Unhealthy
Purple	201–300	Very unhealthy
Flashing	>301	Hazardous

- The calculation of the air quality index and the corresponding implementation of LED modes were guided by the document titled: *U.S. Environmental Protection Agency, "Technical Assistance Document for the Reporting of Daily Air Quality" (2018)*.

Aranet radio parameters

Line of sight range	3 km	1.9 mi
Transmitter power	14 dBm	25 mW
Data transmission interval	1, 2, 5 or 10 min	
Data protection	XXTEA encryption	

Important notes

- The sensor best performs when operated within 10–40 °C (50–104 °F) and 20–80 % RH, should be placed in stable temperature and relative humidity locations. Avoid operating in a heavily contaminated environment, under excessive ambient light, and/or wind.

Compliance information

CE Conformité Européenne

FC Federal Communications Commission (USA)

IC Innovation, Science and Economic Development Canada