

# 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 $\mu\text{g}/\text{m}^3$	0–1000 $\mu\text{g}/\text{m}^3$	0–1000 $\mu\text{g}/\text{m}^3$
Resolution	1 $\mu\text{g}/\text{m}^3$	1 $\mu\text{g}/\text{m}^3$	1 $\mu\text{g}/\text{m}^3$
Accuracy	$\pm 10\%$	$\pm 10\%$	$\pm 10\%$

## 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



Conformité Européenne



Federal Communications Commission (USA)



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