

# Plugsensor

## Qualidade do Ar

CO, O3, PM2.5, PM10, NO2, SO2 e TSP.



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CO, O<sub>3</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, NO<sub>2</sub>, SO<sub>2</sub> e TSP.

The **Plugsensor Qualidade do Ar** measures particulate matter PM<sub>2.5</sub>, PM<sub>10</sub>, and total suspended particles (TSP), as well as gases such as carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), and ozone (O<sub>3</sub>), also integrating a temperature and relative humidity sensor. Using laser detection technology and electrochemical sensors, the equipment ensures reliable measurements with high resolution and operational stability. The Plugsensor provides essential data for air quality analysis to support strategic decision-making.



## Technical Specifications

Parameter	Description
Detection Principle	Laser Method: PM2.5 and PM10
	Electrochemical Principle: CO, SO <sub>2</sub> , NO <sub>2</sub> and O <sub>3</sub>
Power Supply	DC 12 - 24V
Power Consumption	<1w @12V
Output	RS485 Standard, MODBUS RTU Protocol
Operating Temperature	-40 °C to 70 °C
Installation	Pole Mount Bracket
Material	ASA
Protection Rating	IP65

## Air Quality Sensors

Parameter	Minimum	Maximum	Resolution	Accuracy
PM2.5	0 ug/m <sup>3</sup>	1.000 0 ug/m <sup>3</sup>	1 ug/m <sup>3</sup>	± (10 ±10%) (<500ug/m <sup>3</sup> )
PM10	0 ug/m <sup>3</sup>	1.000 0 ug/m <sup>3</sup>	1 ug/m <sup>3</sup>	± (10 ±10%) (<500ug/m <sup>3</sup> )
TSP	0 ug/m <sup>3</sup>	1.000 0 ug/m <sup>3</sup>	1 ug/m <sup>3</sup>	± (10 ±10%) (<500ug/m <sup>3</sup> )
Carbon Monoxide	0 ppm	10 ppm	≤ 10ppb	±5% F.S
Sulfur Dioxide	0 ppb	5.000 ppb	≤ 10ppb	±5% F.S
Nitrogen Dioxide	0 ppb	5.000 ppb	≤ 10ppb	±5% F.S
Ozone	0 ppb	5.000 ppb	≤ 10ppb	±5% F.S
Temperature	-40 °C	85 °C	0.1 °C	±0,3 °C
Relative Humidity	0%	100%	0.1%	±3%

Sensor available only for integration with the Plugstation from model WS22 onwards.

