What is Purple Air?

Purple Air sensors measure airborne particulate matter (PM). Particulate matter describes solid particles suspended in air, including dust, smoke, pollen, and other organic and inorganic particles.

Two lasers within the device alternate every five seconds and count the number of particles by particle size (0.3, 0.5, 1, 2.5, 5, and 10 μm). From there, the device calculates mass concentrations of PM1.0, PM2.5, and PM10. These masses are then used to compare to the Air Quality Index, a guide created by the EPA to quantify different thresholds and their related air quality impacts on human health.

To visit the Purple Air website and learn more, scan the QR codes below:

Purple Air FAQ's

Purple Air Map

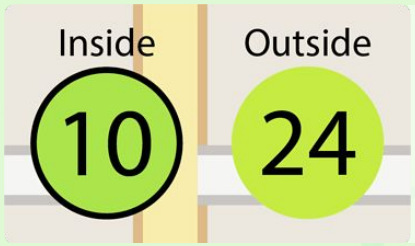
Map Startup Guide

Purple Air

User Guide

How Do I Use the Purple Air Map?

The Purple Air map is a web application that displays a network of community-owned, Purple Air sensors. Each sensor uploads data to the Purple Air map in real time. To use the map, simply log on to map.purpleair.com and use the search bar, located in the upper right hand corner to search a location. From there, click on a point to see that sensor's name and data.



A black or transparent border around a point indicates whether the device is installed indoors or outdoors.

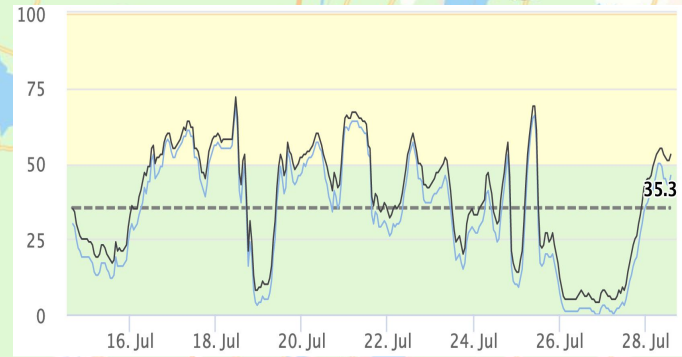
One Hour Average US EPA PM2.5 AQI is now **52**

51-100: Air quality is acceptable. However, there may be a risk for some people with 24 hours of exposure, particularly those who are unusually sensitive to air pollution.

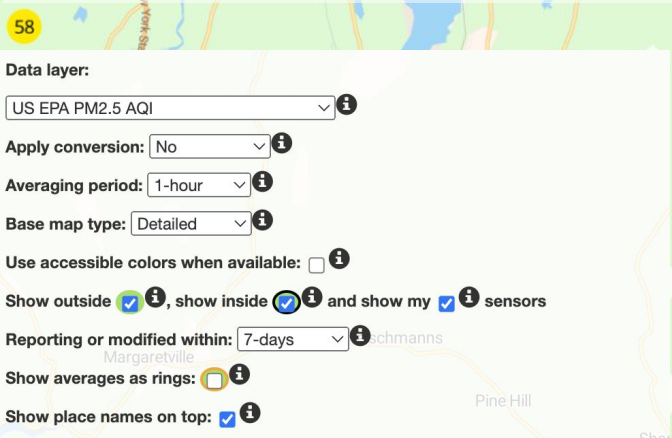
By default, the largest number displayed is the PM 2.5 average of the last current hourly data. Below that number is the AQI description of the range that it falls within.

Now	10 Min	30 Min	1 hr	6 hr	1 Day	Week
46	48	49	49	40	28	30

To see averages representing different time periods, be sure to look at the lower counts bar



The default graph shows hourly PM2.5 values collected by that sensor over the past weeks. Each line represents data collected by each of the Purple Air lasers within the device ("A" and "B), with an average represented as a dashed line.



To change the default data being displayed, toggle through the setting toolbar in the upper left hand corner to manipulate the "Data Layer" window.

What Do the Numbers Mean?

The Purple Air Map uses the Air Quality Index (AQI) Thresholds created by the EPA for their map interface. This index ranges from 0-500, and uses colors to indicate air quality based off of particulate matter counts.

AQI Color	Levels of Concern	Values of Index	Breakpoints (24-hour average)	Description of Air Quality
Green	Good	0 to 50	0 - 12.0 µg/m3	Air quality is satisfactory, and air pollution poses little or no risk.
Yellow	Moderate	51 to 100	12.0 - 35.4 µg/m3	Air quality is acceptable. However, there may be a risk for some people, particularly those who are unusually sensitive to air pollution.
Orange	Unhealthy for Sensitive Groups	101 to 150	35.5 - 55 µg/m3	Members of sensitive groups may experience health effects. The general public is less likely to be affected.
Red	Unhealthy	151 to 200	55.5 – 150.4 µg/m3	Some members of the general public may experience health effects; members of sensitive groups may experience more serious health effects.
Purple	Very Unhealthy	201 to 300	150.5 – 250.4 µg/m3	Health alert: The risk of health effects is increased for everyone.
Maroon	Hazardous	301 and higher	250.5 - 500 µg/m3	Health warning of emergency conditions: everyone is more likely to be affected.