

# Air Quality – Purple Air

Purple Air is an air quality monitor based on Open-Source hardware meant for citizen scientists to find and record air quality in their local area. Each device has an LED that changes color according to the different levels of air quality as determined by the EPA (Environmental Protection Agency).

Rose Villa Campus has seven RV-owned devices, and there are several more resident-owned devices. These are placed at strategic locations around the Rose Villa campus, both indoors and outdoors.

Outdoor sensors look like this



Indoor sensors look like this



The Data from these sensors is available in several places.

- On the sensor itself
- Online at: <https://map.purpleair.com>
- Via the iOS (iPhone and iPad only) Paku Application: <https://Paku.app>

Note that the Purple Air Map and Paku Application both show ALL Purple Air sensors around the world, not just those at Rose Villa.

## LED Color Meaning:

Daily AQI Color	Level of Concern	Values of Index	Description of Air Quality
Green	Good	0 to 50	Air quality is satisfactory, and air pollution poses little or no risk.
Yellow	Moderate	51 to 100	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	Members of sensitive groups may experience health effects. The general public is less likely to be affected.
Red	Unhealthy	151 to 200	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	Health alert: The risk of health effects is increased for everyone.
Maroon	Hazardous	301 and Higher	Health warning of emergency conditions: everyone is more likely to be affected.

An AQI (Air Quality Index) of 151 or above (red on this chart) triggers Rose Villa's Air Quality protocols.

These include:

- Warnings of poor air quality to residents
- Building Operations to change air intake on HVAC building systems
- Increased frequency of filter checks

Higher levels of poor AQI may force additional emergency procedures.

If you would like your own Purple Air sensor, they are available at:

<https://www2.purpleair.com/products/list>

If needed, Rose Villa's IT Techs are available to help with set-up and configuration of these devices for an additional fee. Please submit a work order for this service.