

Stationary Air Pollution Analyzer (SAPA-A)



SAPA-A is a fully autonomous, solar-powered air pollution analyzer designed for continuous, real-time monitoring of air quality. Engineered for both urban and industrial environments, it provides accurate measurement of PM2.5, PM10, temperature, and humidity. With long-life sensors and remote connectivity, SAPA-A ensures reliable data collection without the need for grid electricity.

Application

- Fitted with high-durability, long-life sensors
- Remote data transmission via Internet connectivity
- Optional city-wide air quality display module available
- Includes an intelligent industrial-grade microcontroller
- Compatible with national air quality monitoring systems (optional)
- Powered by an integrated solar energy system – no grid electricity required



Specifications

Specifications	Parameter	Value		
Performance		Range	Method	Resolution
	PM2.5	0.0- 30000 $\frac{\mu g}{m^3}$	Laser-Based Light Scattering	0.1 $\frac{\mu g}{m^3}$
	PM10	0.0- 30000 $\frac{\mu g}{m^3}$	Laser-Based Light Scattering	0.1 $\frac{\mu g}{m^3}$
	Temperature	(-40) – (90) °C	-	0.1 °C
	Relative Humidity	0 – 100% RH	-	0.1% RH
Environmental Conditions	Operating Temperature	(-10) – (60) °C		
	Operating Humidity	0- 99% RH (no Condensation)		
	Recommended Environmental Conditions	For optimal performance		
Power Supply	Solar Panel	520 W		
	Weight	360 Kg		
Standard	Performance of the device is in accordance with EPA 40 CFR 50 standard.			

