

# APC1



## Smallest Air Quality Combo Sensor for Air Purification, Ventilation and Home & Building Automation

- All-in-One combo comprising PM1.0, PM2.5, PM10, TVOC, eCO<sub>2</sub>, Air Quality Index, temperature and humidity
- Smallest matchbox-size form factor
- Up to twenty environmental output parameters

**SciSense**<sup>®</sup>

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## Smallest Air Quality Combo Sensor for Air Purification, Ventilation and Home & Building Automation

The APC1 is a compact, box-shaped, all-in-one environmental sensor solution to precisely measure particulate matter and aerosols, volatile organic compounds, temperature and humidity. It leverages the SciSense leading edge sensor technology to provide an accurate, fully calibrated, maintenance-free solution to air quality monitoring.

For maximum flexibility the APC1 provides up to 20 environmental signal parameters through UART and I<sup>2</sup>C interfaces. Moreover, it features temperature compensation algorithms to simplify integration on system level, thereby accelerating time to market at minimal overall BOM costs.

The APC1 is a proven, maintenance-free technology, designed for high volume and reliability.

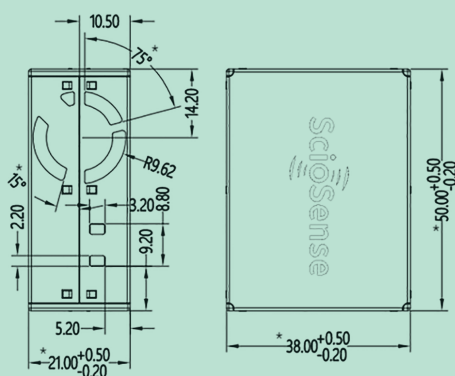
### Features

- Up to 20 calibrated signal outputs (PM1.0, PM2.5, PM10, TVOC, eCO<sub>2</sub>, AQI, temperature and relative humidity).
- Matchbox-size, fully orchestrated design
- Particle detection down to 0.3µm
- Superior accuracies over wide temperature and humidity ranges

### Properties

- Smallest form factor: 50 x 38 x 21mm
- Environment: 5 to 50°C / 10 to 95% rH
- V<sub>CC</sub>: 5V; V<sub>CCIO</sub>: 3.3V
- UART and I<sup>2</sup>C interface

### Dimensions



### Benefits

- All-in-one air quality module, easy integration
- Self-compensated, best temperature and humidity accuracy in the market
- Compliant with international standards
- Smallest form factor

### Applications

- Home appliances
  - Air cleaners / purifiers
- Building automation / smart home / HVAC
  - Indoor air quality detection
  - Demand-controlled ventilation
  - Smart thermostats
- IoT devices & air quality monitors

### Application circuit

