

# iAeris 1

## IAQ Detector



## Large touchscreen shows multiple air quality data

The iAeris1 indoor air quality detector is a multifunctional device that can detect CO<sub>2</sub>, PM<sub>2.5</sub>, TVOC, temperature, humidity, and more, with up to 9 detection factors

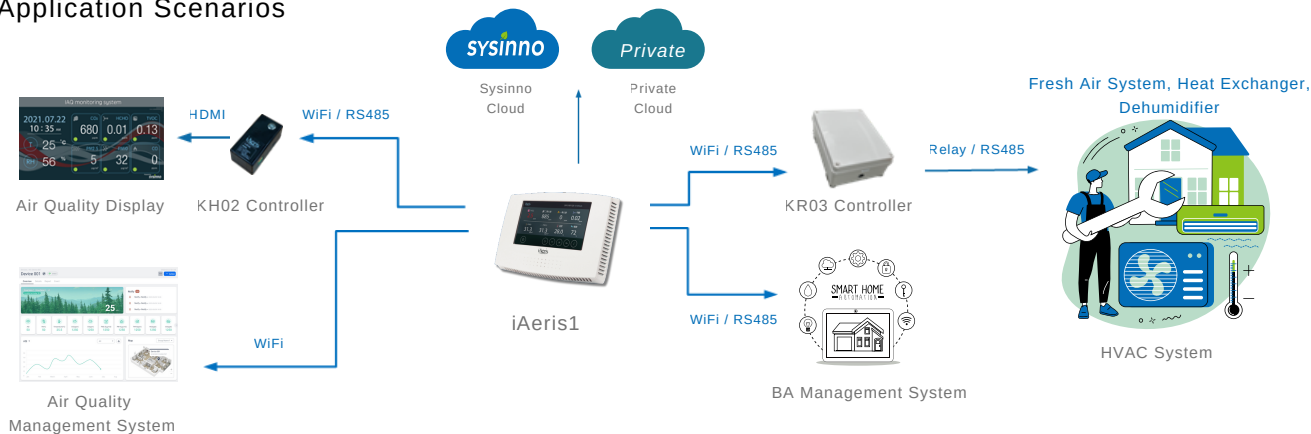
The iAeris1 features a seven-inch touchscreen for an intuitive and easy-to-use display interface. With a professional body structure, it can be wall-mounted or placed on a desk, catering to various indoor space requirements.

The iAeris1 indoor air quality detector is an efficient and versatile product, offering a comprehensive indoor air quality monitoring solution to help you create a healthier and more comfortable living environment.

### Product Features

- **Touchscreen:** 7-inch touchscreen, wall-mount or desktop.
- **Modular sensors:** Expandable as needed.
- **Advanced algorithms:** independent sensor calibration.
- **Communication options:** RS485, WiFi (optional), Bluetooth BLE4.0 (optional).
- **Improvement devices connection:** Integrated two dry contact points for devices linkage
- **Alert:** Individual adjustment for air quality factor alerts
- **Built-in memory:** easy data storage and analysis

## Application Scenarios



## Specification

| Measurement Index | Operating Range | Resolution | Accuracy (*)            | Detection Method | Response time | Warmup time |
|-------------------|-----------------|------------|-------------------------|------------------|---------------|-------------|
| Temperature       | -40~125 °C      | 0.1 °C     | ±0.5°C                  | MEMS             | 30 sec        | 60 sec      |
| Humidity          | 0~100% RH       | 1% RH      | ± 5% RH                 | MEMS             | 30 sec        | 60 sec      |
| CO2               | 0~5,000 ppm     | 1 ppm      | ±30ppm±3% of reading    | NDIR             | 120 sec       | 60 sec      |
| PM2.5             | 0~1000 µg/m3    | 1 µg/m3    | ±10ug/m3±10% of reading | Optical          | 10 sec        | 300 sec     |
| PM10              | 0~1000 µg/m3    | 1 µg/m3    | ±10ug/m3±10% of reading | Optical          | 10 sec        | 300 sec     |
| TVOC              | 0~60 ppm        | 0.01 ppm   | ±0.1ppm±10% of reading  | MEMS             | 10 sec        | 300 sec     |
| CO                | 0~1,000 ppm     | 1 ppm      | ± 5ppm±5% of reading    | Electrochemical  | 60 sec        | 60 sec      |
| HCHO              | 0.01~5 ppm      | 0.01 ppm   | ±0.02ppm±10% of reading | Electrochemical  | 30 sec        | 300 sec     |
| O3                | 0~5 ppm         | 0.01 ppm   | ±0.1ppm±10% of reading  | Electrochemical  | 60 sec        | 600 sec     |

(\*) Testing conditions at 25°C environment

## System Specification

|                               |                                            |                          |                               |
|-------------------------------|--------------------------------------------|--------------------------|-------------------------------|
| <b>Operating Environment</b>  | 10°C ~ 50°C, below 90% RH                  | <b>Power Supply</b>      | DC 5V, 2.0A                   |
| <b>Storage Temperature</b>    | -20°C ~ 70°C, below 90% RH                 | <b>Power Consumption</b> | 6.4W max.                     |
| <b>Screen</b>                 | 7" Touch TFT LCD                           | <b>Safety Standards</b>  | CE / NCC / BSMI               |
| <b>Control Interface</b>      | Two dry contacts                           | <b>Dimensions</b>        | 233mm(L) x 159mm(W) x 46mm(H) |
| <b>Transfer Interface</b>     | Supports WiFi / RS485 / BLE 4.0 (optional) | <b>Weight</b>            | 580g                          |
| <b>Communication Protocol</b> | Modbus-RTU/Modbus-TCP/HTTP/MQTT            |                          |                               |

## Model

| Model    | Temperature | Humidity | CO2 | PM2.5 | HCHO | PM10 | TVOC | CO | O3 |
|----------|-------------|----------|-----|-------|------|------|------|----|----|
| iAeris11 | V           | V        | V   |       |      |      |      |    |    |
| iAeris12 | V           | V        | V   | V     |      |      |      |    |    |
| iAeris13 | V           | V        | V   | V     | V    | V    |      |    |    |
| iAeris14 | V           | V        | V   | V     | V    | V    | V    | V  |    |
| iAeris15 | V           | V        | V   | V     | V    | V    | V    | V  | V  |

- Sensors can be customized based on customer requirements



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