TRIPLE VOC OUTDOOR SENSOR PLATFORM DATASHEET

SENSORS

- Triple redundant Sensirion Multi-Pixel MEMS detector module
 - VOC and CO2 equivalent gas concentration signals
 - VOC: 0 to 60000 ppb
 - CO2: 400 to 60000 ppm
 - Single-sensor-to-sensor difference < 40% unit to unit pre-calibration
 - < 3% long-term drift for 10 years of indoor use
 - Optional calibration to specific known gases
 - Dynamic baseline compensation and on-chip calibration.
 - Operates in -5C to 55C temperature range, 4-20g/m3 absolute humidity
 - 1Hz datastream downsampled to once every 30s
- Two HTU21D temperature and humidity sensors
- Optional additional sensors
 - PM2.5, ultrafines



Sensor networks can be deployed for hyperlocal and area monitoring of environmental conditions as well as tracking known emission sources in a wide range of commercial, residential, industrial / manufacturing, and metropolitan environments.

The sensing element features an unmatched robustness against contaminating gases present in real-world applications, enabling a unique long-term stability and low drift. Sensors have been selected after field testing and extensive research in partnership with Carnegie Mellon University's CREATE Lab.



ENCLOSURES

- Wall or pole mountable
- Weather-resistant for outdoor use
- Designed to be co-located with standard air quality instruments

CONNECTIVITY

- Flexible Wifi or Cellular cloud uplink platform
- Upload to ESDR, Microsoft Azure, or custom IoT cloud platform
- Configurable upload rates for low-bandwidth deployments

POWER SUPPLY

■ 5V 2.5A USB power