# Aura1

AMBIENT SENSOR · QUALIMETRIC

IN DEVELOPMENT · EXPECTED EARLY 2027

## The air at the balance, read at every weighing

Temperature, humidity and barometric pressure next to your balance, read by GasCatena or your own software — every value with its standard deviation and number of readings, ready for your uncertainty budget.




**T · RH · p**
three quantities in one compact module

**ISO/IEC 17025**
calibration by Qualimetric or by a laboratory of your choice

**USB-C**
plug in and weigh: no driver, no battery, no radio

**GasCatena**
read at every weighing, recorded with the preparation

APPLICATIONS

- **Air-buoyancy correction** of weighings
- **Ambient records** for ISO/IEC 17025
- **Checking conditions** before weighing
- **Calibration gas** preparation
- **Ambient contribution** to uncertainty
- **Air density** at the moment of weighing

BENEFITS

## Designed for the balance

### Measurement statistics

Each value is the average of independent readings (16 by default, set by your software), reported with its spread — ready for a type A uncertainty evaluation.

### Unfiltered sensor data

No smoothing or filters on the sensor data. What you see is what was measured.

### One clock

Your computer stamps each measurement at the moment it asks, so one clock governs every value.

### Made for GasCatena

Select it once under Settings → Sensors. GasCatena reads it at every weighing and records the air with the preparation.

### Plug in and weigh

Powered over USB-C, a standard USB device (HID class) that needs no driver. Three lights show power, connection and reading.

### Stand-alone and secure

No cloud, no account, no radio: a USB device on your own computer, in your own laboratory.

READING IT

## With GasCatena or your own software

- GasCatena reads the Aura1 at every weighing: air density and buoyancy, shown and reported with the preparation.
- Your own software reads it with the free Aura Python package: mean, SD and n per quantity, pressure in Pa.
- One program at a time; no log of its own. For monitoring around the clock, choose the Aura2.
- Allow 30 minutes after connecting or moving it to settle to the room.

### Calibration on request, traceable to the SI

Supplied uncalibrated as standard; calibration is optional, at additional cost:

- **By Qualimetric**, in accordance with ISO/IEC 17025; traceable to the SI.
- **By a calibration laboratory of your choice.**

Temperature, humidity and pressure are calibrated together, so that air density and buoyancy rest on calibrated values.

SPECIFICATIONS

| | |
|---|---|
| **Temperature** | 0 – 50 °C |
| **Relative humidity** | 0 – 95 %RH, non-condensing |
| **Barometric pressure** | 30 – 125 kPa |
| **Output** | mean, SD and n per quantity; pressure in Pa |
| **Averaging** | set by your software, 16 readings by default |
| **Sensors** | digital MEMS sensors (T, RH, p) |

| | |
|---|---|
| **Interface** | USB-C, standard USB device (HID), no driver |
| **Status lights** | ON · CONN · COMM |
| **Power** | 5 V DC via USB-C, no battery |
| **Enclosure** | 86 × 85 × 25.5 mm, cable gland at the bottom |
| **Use** | indoor, 0 – 50 °C, non-condensing |
| **Software** | GasCatena; free Aura Python package |

Not for safety-critical or life-support applications. The Aura1 has no clock and no log; the host software keeps the record.

## The Aura1 in development

Expected in early 2027. Register your interest to be kept informed of its release, or tell us about your balance and software so we can advise on its use.

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