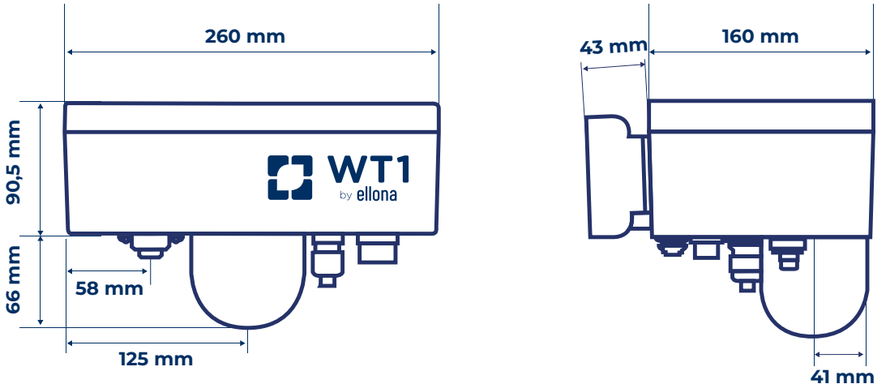
Technical specifications and options

Weight: 3 kg
Ingress Protection ranging: IP 65



CONNECTIVITY & POWER :

- **Communication options:** Multi-Band 2G/3G/4G, Wi-Fi, Ethernet, Modbus RTU Slave, or recommended LTE-M/GPRS (used as LTE-M fallback)
- **Power consumption:** Between 4.5 W and 6 W
- **Power options:**
  - 100-240 V AC, 50-60 Hz
  - 12 V DC power adapter included: Power over Ethernet, or 12 V solar panel battery (optional accessory)
- **Geolocation:** Built-in GNSS (GPS, Galileo, Beidou, Glonass)
- **Data logging:** Data logger with up to 1 month of storage in case of connection loss
- **Customizable settings:** Down to 1 data set every 10 seconds
- **Installation:** Installation time under 2 hours / Delivered fully calibrated
- **Connectors:**
  - Option 1: Ethernet (RJ45 female)
  - Option 2: Micro USB
  - Option 3: 4-20 mA, 0-10 V, Lumberg
  - Option 4: External slot for SIM
- **Remote management:**
  - Bidirectional communications

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Air Quality
Gases
Odours

Particles
Noises
Liquids

Temperature
Humidity
Atmospheric pressure

AIRLAB sensor Challenge 2023

WT1

Effective oversight of your operational environmental footprint

Complete solution for monitoring and identifying in real time outdoor nuisances and pollutants

Environmental Intelligence

The WT1 is a versatile multisensor device excelling in comprehensive and continuous data collection, monitoring parameters ranging from gas levels and odours to VOCs, fine particles, and noise, providing an all-encompassing solution for seamlessly capturing physical, chemical, and perception metrics.

- **Average / Data sending periods:** Every 10 seconds for real-time information updates
- **Multisensor device:** Continuous collection of physical, chemical, and sensory data.
  - Native functionalities : temperature, humidity, atmospheric pressure
  - Optional sensors: noise, particles (24 classes from 0.3µm to 40 µm), up to 8 different gases (from a 24 gas list) and odours (4 metal oxide gas sensors (MOX) - possible correlation with Dynamic Olfactometry campaigns - EN 13725 /ASTM679)
- **Alarm mode:** Customizable thresholds on all measurement channels
- **Automation features:** On-off relay and 4-20 mA switch for automated triggering of processes or sampling
- **Standalone design:** Ideal for automated pollution control processes
- **Cutting-edge software:** Data acquisition and processing software platform
- **Dispersion plume tracking:** Real-time and historical tracking of dispersion plumes
- **Software updates:** Up-to-date with software hosted on secured servers and online update functionality
- **Odour data banks:** Repository for odour identification and qualification
- **Subjective perception reporting:** QR Code on each module for database adaptation, device training, and alarm threshold adjustment

How it works

DATA COLLECTION

- Pollutants
- Nuisances
- Weather

DATA PROCESSING AND STORAGE

- Principal component analysis (PCA)
- AI algorithms
- Quantification
- Identification

DATA ACCESS AND VISUALIZATION

- Secure client account
- Custom settings
- SaaS mode
- 24/7 access

Main application fields

Construction & Industrial sites

Waste & Wastewater Treatment Plants

Seaports & Airports

Smart Cities

The only scalable and customizable solution on the market

- Air quality
- VOCs

- Simultaneous monitoring of up to **8 distinct gases**

- Odours
- Intensity (OU)
- Identification

- **PM1, PM2.5, PM4, PM10 (24 classes from 0.3µm to 40 µm)**

- Noise
- Intensity (dBA)
- Identification

- Turbidity
- pH
- NKP (soil)
- Dissolved O_2

- Dispersion plume
- Impact on the neighborhood

- Human perceptions (subjective feedback)
- Customizable multi-parameter survey