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CO2 monitor and Indoor Air Quality monitoring stations

eLichensâ€™ mission is to pioneer the smart sensor networks through innovative air quality sensing solutions and services for citizens, communities and organizations. eLichens relies on a wide portfolio of patents, know-how and skills to offer a complete range of air quality and multi-gas detections solution, addressing indoor air quality application for schools, offices, at home, ...

Additional submitted attachment is included below.

eLsi - Indoor AQ Station

eLICHENS

MARKETS

- Smart Home / Building
- HVAC
- Smart City

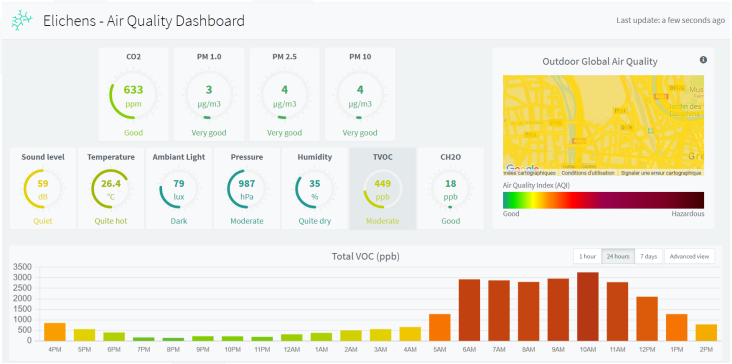
APPLICATIONS

- Indoor air quality monitoring
- Schools, offices, homes, …
- Building Management System

MAIN FEATURES

- Real-time Air Quality monitoring
- Embedded Air Quality analytics
- eLichens' unique ultra low power NDIR CO_2 sensor
- 3.5" touchscreen and LED status indicator
- Online data storage and building management dashboard
- API and iOS/Android application
- Proprietary outdoor air quality data
- Auto-calibration with automatic report generation

W 110 x H 75 x T 30 mm



EMBEDDED SENSORS	
Carbon Dioxide (CO_2)	Temperature
PM 1.0/2.5/10	Humidity
Total VOC	Pressure
Ambient noise	Ambient light

DIFFERENTIATORS

ALL-IN-1 SOLUTION

DATA FUSION EXPERTISE

HIGH DATA ACCURACY

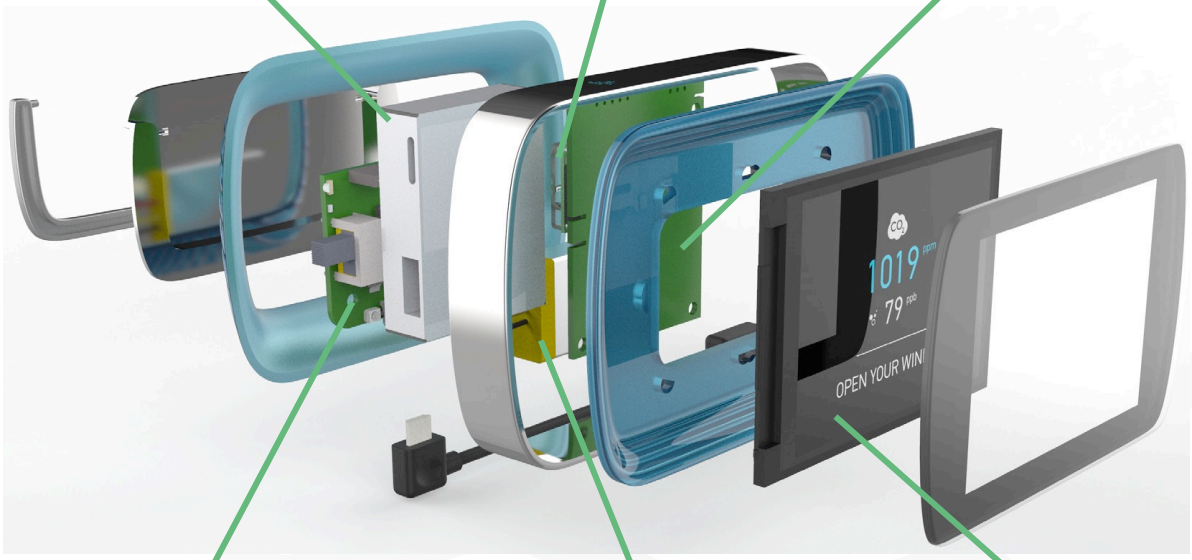
LOW POWER

eLsi - Indoor AQ Station

CO_2 sensor
Accuracy ±30ppm ±3% of reading
Output data rate: Every 10 min

PM 1, 2.5, 10 sensor
Consistency ±10µm/m³ @<100µm/m³
Output data rate: Every 10 min

T°, RH, P sensor
Accuracy ±0.5°C, ±3%RH, ±1hPa
Output data rate: Every 1 min

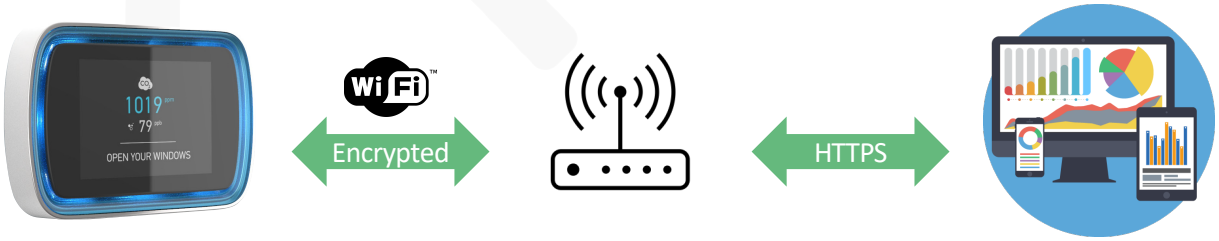


TVOC sensor
Resolution: 10 ppb
Output data rate: Every 1 min

Battery
Capacity: 1 Ah
Autonomy: 24 hours

LCD touchscreen
Size: 3.5”
Resolution: 480x320

DATA MANAGEMENT



The station gathers all the measurement data in real-time and arranges them according to the output data rate (ODR). The data are then encrypted using RSA, communicated via WiFi to a standard access point and stored in eLichens’ Cloud. The user can then access the data through a dedicated online dashboard, accessible using a secured HTTPS connection and credentials. A mobile application will be available too, to access data from anywhere.

IAQM - Indoor AQ Pro Station

eLICHENS

MARKETS	APPLICATIONS
Smart Home / Building	Indoor air quality monitoring
HVAC	HVAC control
Smart City	Building Management System

MAIN FEATURES

- Real-time Air Quality monitoring
- eLichens' unique ultra low power NDIR CO_2 sensor
- Online data storage and visualization dashboard
- API for integration into Building Management
- Proprietary outdoor air quality data
- Auto-calibration
- Encrypted wireless connectivity

EMBEDDED SENSORS	
Gas	**Environmental**
Carbon Dioxide (CO_2)	Noise level
PM 1.0/2.5/10	Humidity
Total VOC	Pressure
	Temperature
Others on request	

DIFFERENTIATORS

ALL-IN-1 SOLUTION

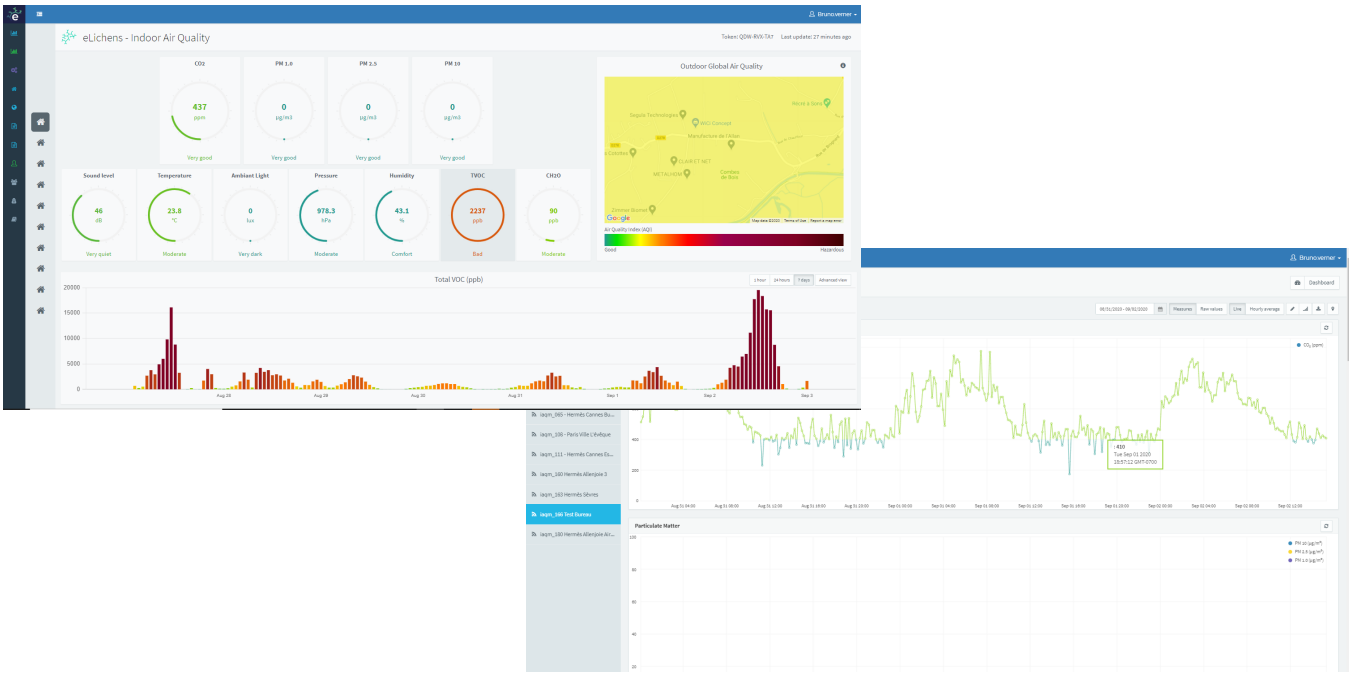
DATA FUSION EXPERTISE

HIGH DATA ACCURACY

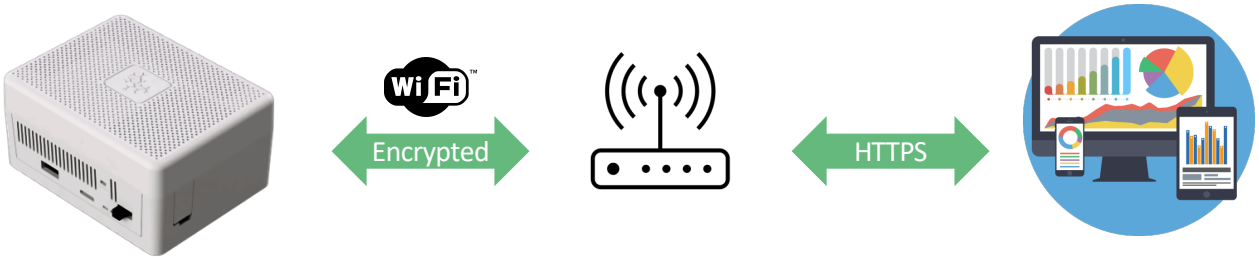
LOW POWER

IAQM - Indoor AQ Pro Station

DASHBOARDS



DATA MANAGEMENT



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eLICHENS

Founded at the end of 2014, eLichens is pioneering IoT Solutions for gas sensing through a complete offering in which Data Fusion, Models & Analytics are powered by our patented NDIR Smart Gas Sensors.

Born in France, our 30 persons team is spread over our headquarter in Grenoble (France) , and our sales team in Paris and San Francisco.

Patented Technology

eLichens holds a wide portfolio of 50 families of patents and relies on a proven expertise in photonics, artificial intelligence and gas sensing to address both consumer electronics and industrial markets.

Our gas sensors

Cranberry, Foxberry & Mulberry

Based on our patented optical NDIR Technology, we provide 3 unique designs so as to comply with our clients' requirements and be embedded into any device. We're able to satisfy both consumer electronics and industrial markets.

KEY FEATURES

- Several gas : CO2, CH4, R32
- Several form factor including 4R standard
- Power consumption : <1.5 mW @ 2 measures/s
- Lifetime : more than 10 years
- Response time : T90 < 30 seconds
- High Accuracy
- No drift : temperature and ageing compensated
- Autocalibration : double beam with reference channel
- Compact design from 400 mm^2
- Simple UART interface
- ATEX & IECEx certified

CO2 or CH4 versions

DIFFERENTIATORS

INCREASED RELIABILITY /NO DRIFT

ULTRA LOW POWER

COMPACT

AUTO-CALIBRATED