kunak cloud

Multipurpose air quality software for professionals



Preliminary version

kunak®
SENSING ANYWHERE

Multipurpose air quality software for professionals

REAL-TIME DATA | ALWAYS UPDATED

Our web-based air quality monitoring software helps environmental professionals to use and understand air quality data and delivers operational environmental intelligence to make informed decisions.

Thanks to our bidirectional software, Kunak Cloud offers professionals a new way to handle remote settings configuration, alarms management, calibration and field operations, as well as a complete suite for air quality data analysis.

Kunak Cloud is a flexible modular software designed for easy user account management, simple network operation, intuitive data validation, and simple analysis and reporting.

The Kunak Cloud web platform is the powerful air quality software that completes the comprehensive Kunak AIR solution.



Secure & Confidential

HTTPS/SSL protocols. Confidentiality and ownership of data guaranteed by EULA.

Free continuous updates

Be always updated. Enjoy any new tool or functionality immediately without additional cost.

Air Quality reports

Create custom reports to show AQ data in required formats to share with your clients or external agencies.

Automatic supervision

Monitor the health of your stations & sensors remotely and troubleshoot with automatic tips.

Reliable data guaranteed

Advanced algorithms for automatic data flagging. High quality and validated data.

Pollution sources & Hotspots

Powerful air quality tools and advanced data visualization over the map.

Remote troubleshooting

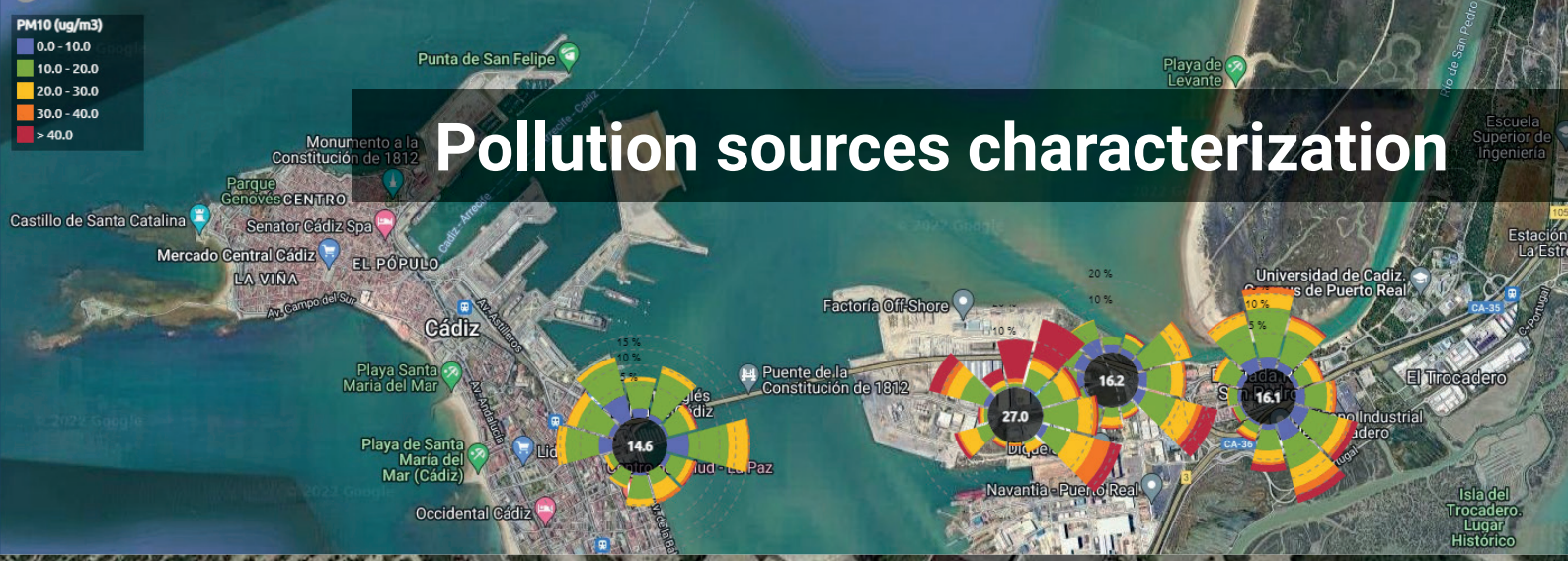
Service, diagnose and troubleshoot your stations remotely. Get remote support from our team.

Data sharing & Integration

Share the collected data via API or export in different formats. Insert data from 3rd party devices.

Public Air Quality Data

Create public web portals and widgets to share air quality data with stakeholders.



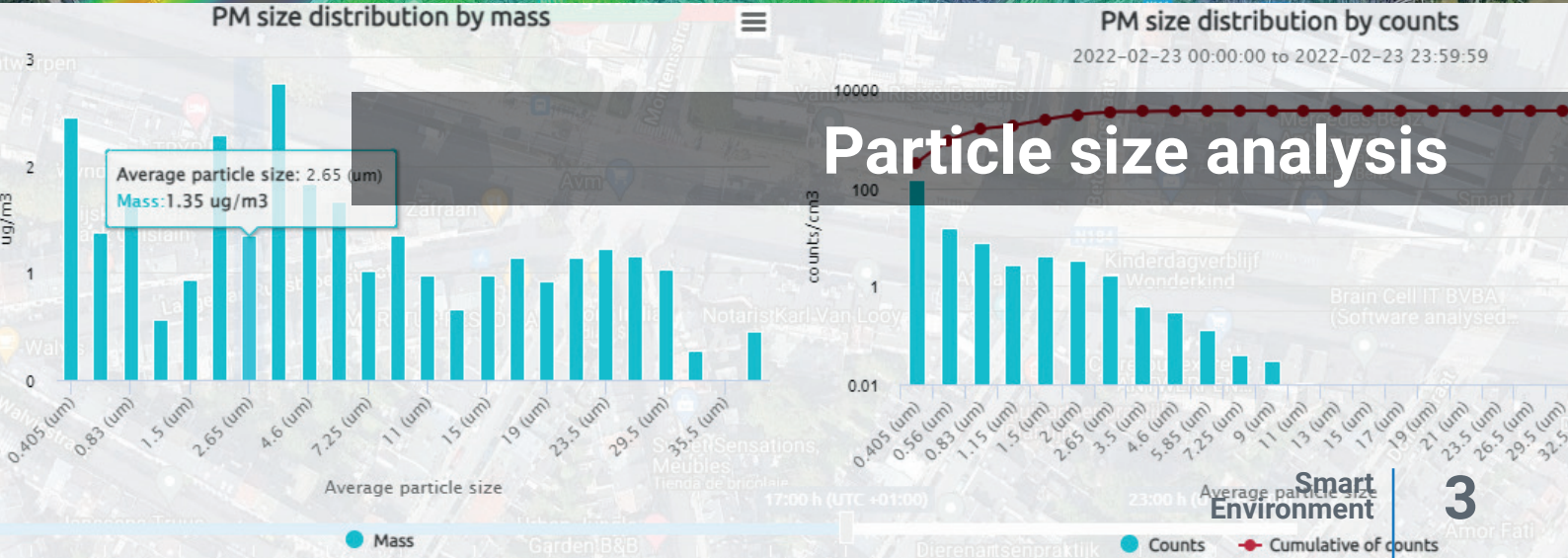
Pollution sources characterization



Leakage detection



Hotspots identification

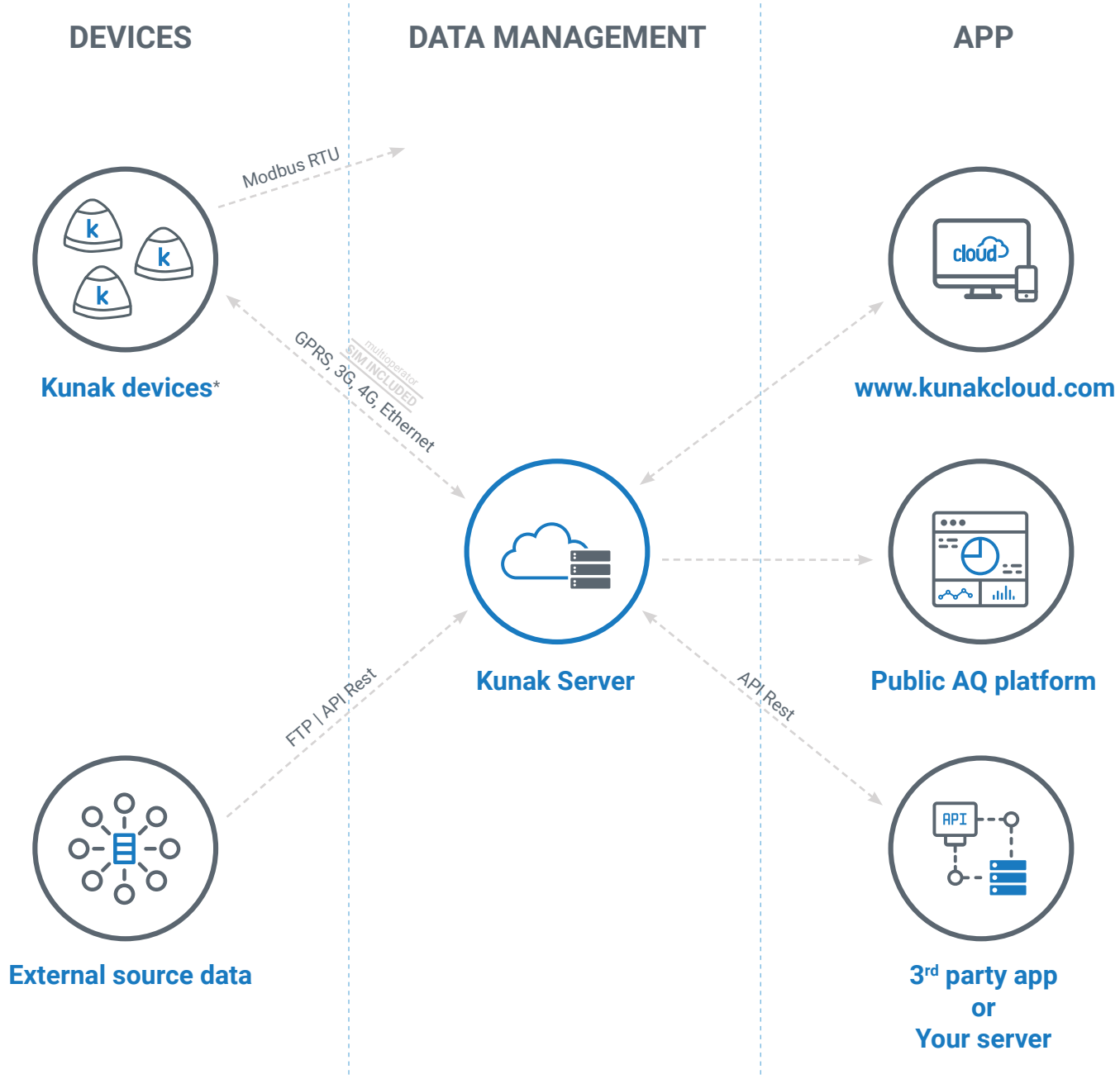


Particle size analysis

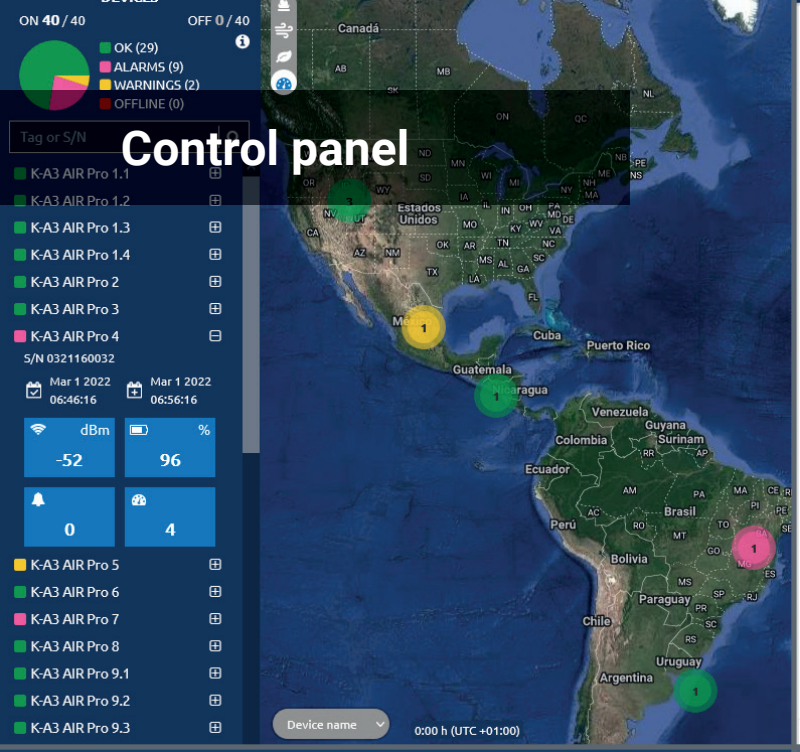
Data

ARCHITECTURE

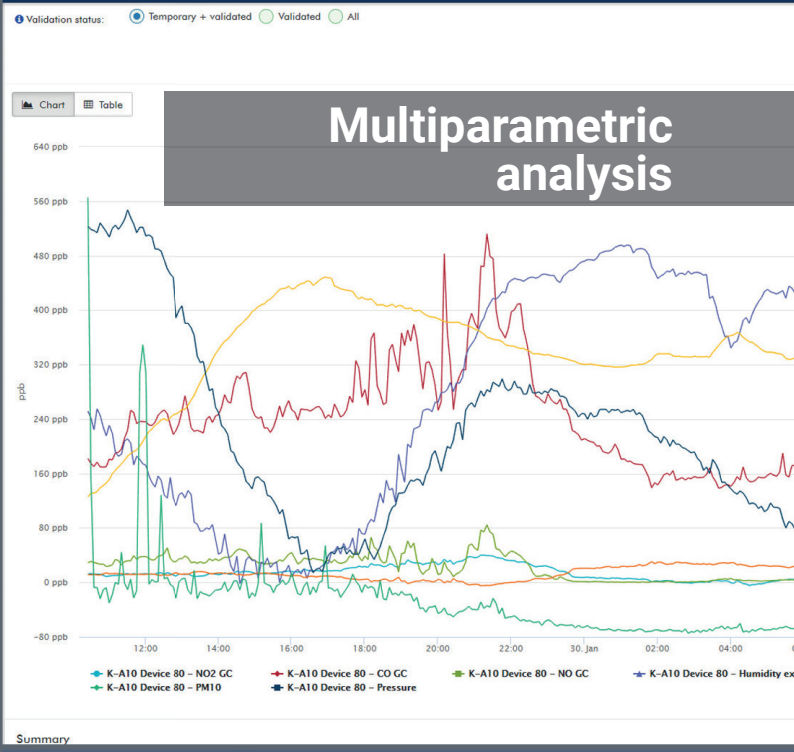
Thanks to the secure **encryption** and direct communication protocols it allows **bi-directional** communications, and facilitates **remote configuration, firmware updates and sensor calibration** of the devices.
The communication protocols are designed for **low power and low data consumption**.



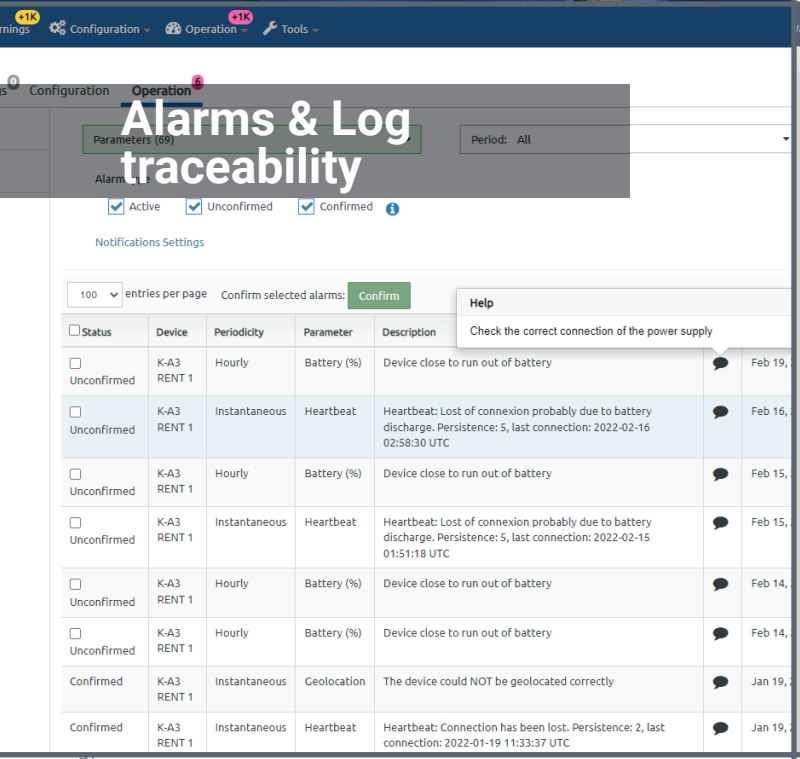
**Data is calculated in each node independently, transparently and in real-time. Post-processing is not done in the cloud.*



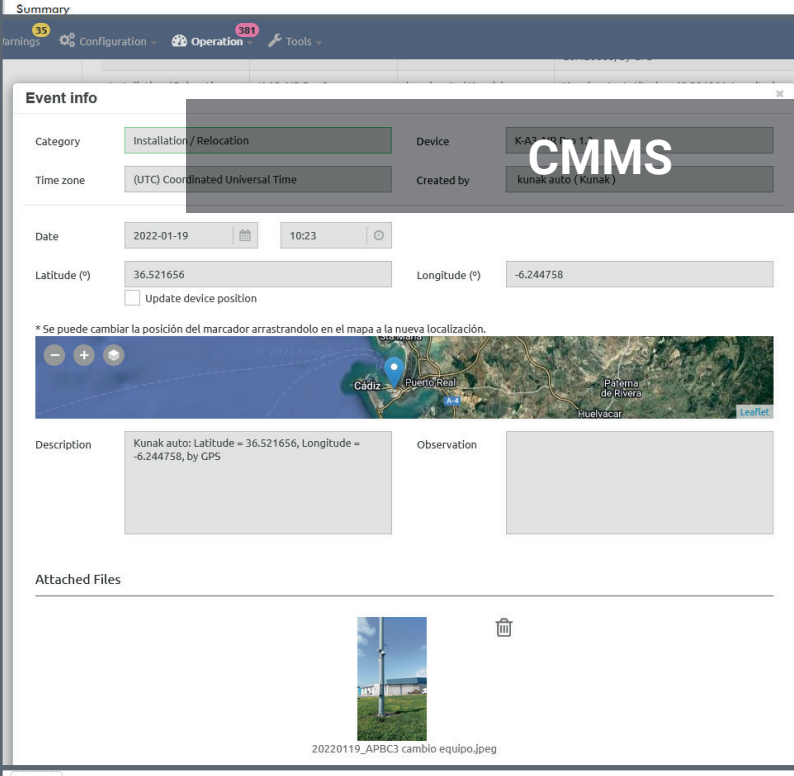
Control panel



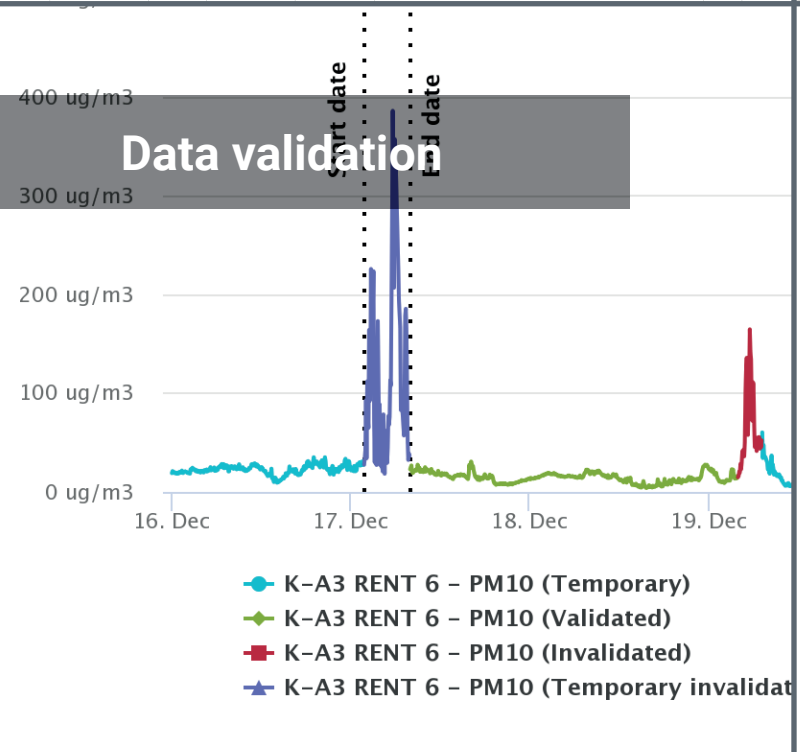
Multiparametric analysis



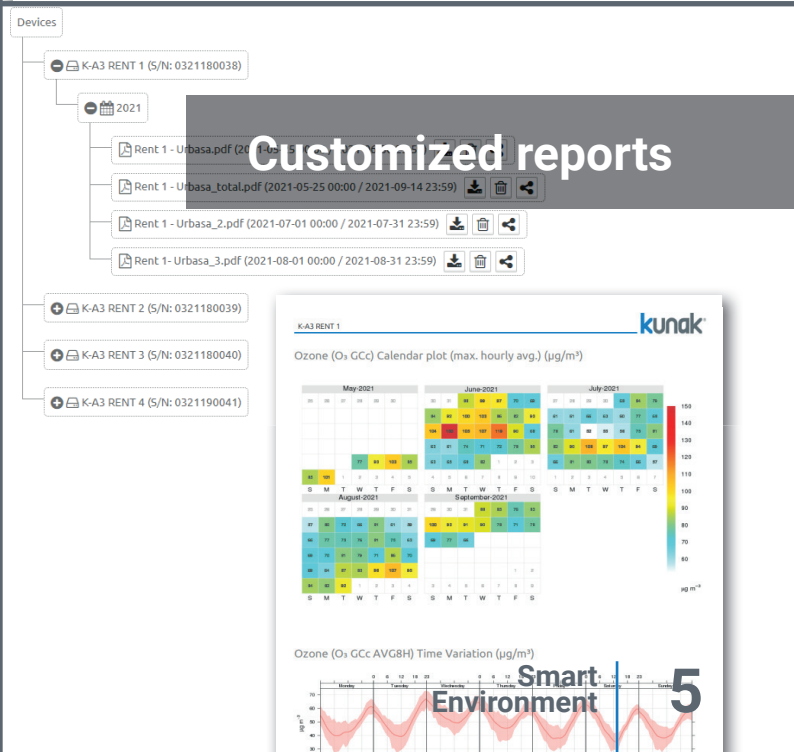
Alarms & Log traceability



CMMS



Data validation



Customized reports

Software Packages

PER DEVICE

STARTER

The best option for just visualize your data, AQI, and configure your devices, while our team help you operate them*.

STARTER + OPERATION

To keep track of the devices, an operator is needed and these tools will facilitate its work. You will operate and maintain your network.

STARTER + ANALYTICS

Just visualize data is not enough? Have access to the most advanced data analysis tools. Our team will operate and maintain your network for you*.

FULL

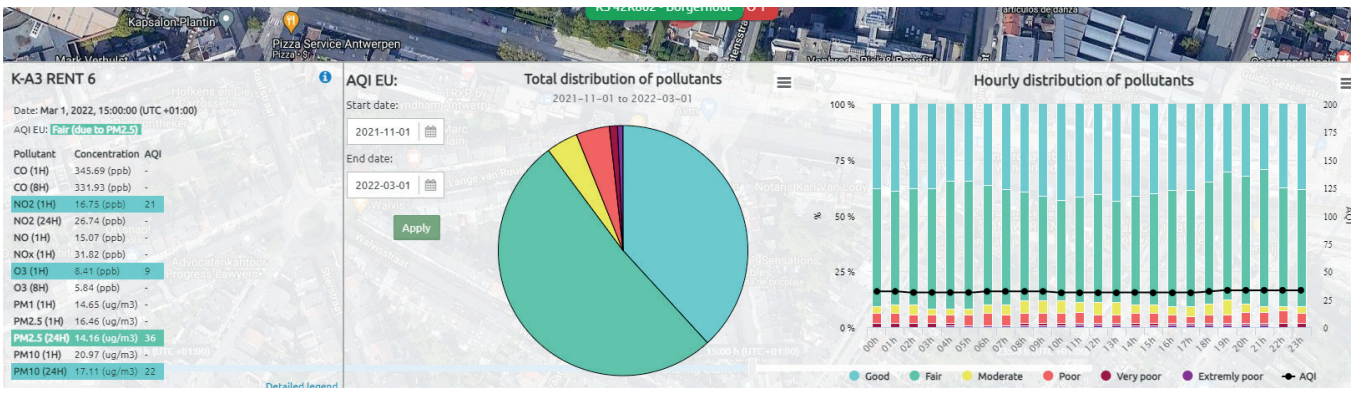
Oriented for those who want to perform all services that involve obtaining the highest quality of sensor data.

** See services on page 45.*

Starter

Dashboard to overview the health of your devices and sensors. Easily visualize your real-time data, check temporal graphs and get basic statistics. Obtain reliable data thanks to automatic data flagging.

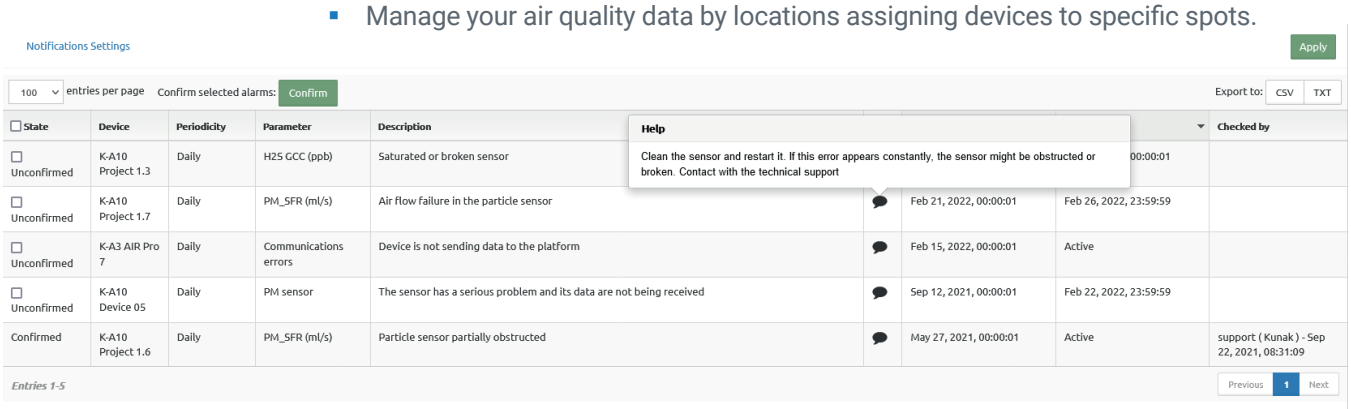
- Check your devices on a map, their operational status, and last measurements.
- Standard data visualisation, hourly/daily average calculations and basic statistics to show in a fast way all the data measured by your devices.
- Export your data into CSV or TXT files
- Air Quality Index (AQI) tool according to different scales: EU, US EPA, Spain, India, etc.
- Automatic pre-invalidation of the data under devices or sensors malfunctions.
- Remote configuration of warnings for exceeding thresholds.
- Bidirectional communication for remote configuration of the devices and remote firmware update.



Operation

Assure the well-functioning of your network and get the best data accuracy thanks to the embedded automatic supervision algorithms. Confirm operation alarms (sensor malfunctions, devices problems...) and consult the online suggestions to troubleshoot the detected issues while controlling all the actions carried out in your devices through the CMMS tool.

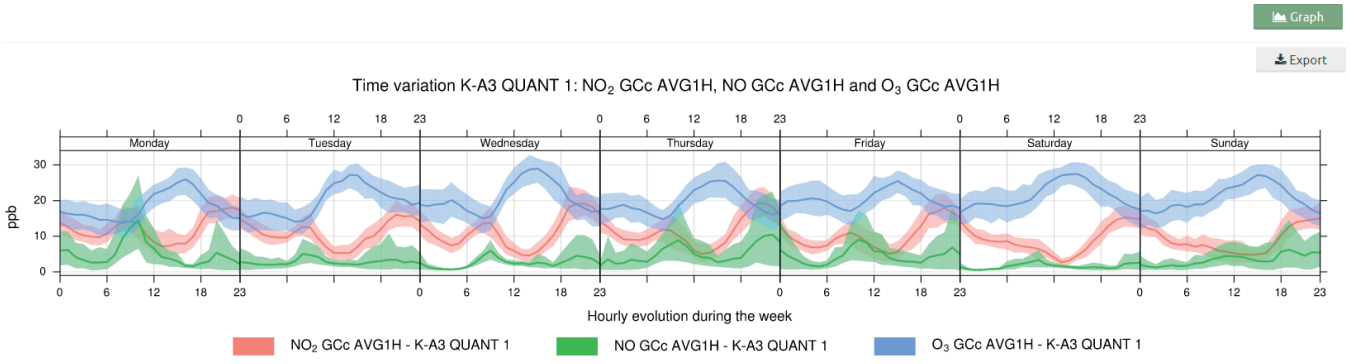
- Automatic errors and anomalies detection in the devices, sensors, and data immediately, notifying them and proposing tips to solve the issue.
- Detect gas and particulate sensors de-calibration. Calibrate your gas and particle sensors remotely thanks to the Calibration Tool.
- Computerized Maintenance Management System (CMMS) to facilitate the maintenance of the devices, register any maintenance work, upload photos and documents, configuration history, activity journal, etc.
- Manage your air quality data by locations assigning devices to specific spots.



Analytics

Get the most out of your data by validating your measurements and using the advanced analytics of the OpenAir suite. Detect source emissions and hotspots thanks to the tools which show advanced wind graphs and heatmaps on the map. Create customized reports and export or share them with your clients or stakeholders online.

- Simple manual data Validation Tool to clean data sets and perform advanced analysis with reliable data.
- Advanced Analytics Tool from Open Air suite to facilitate data analysis, including calculation of basic statistics, AQI calendar plots and pollutant concentration calendars, pollutant time plots, temporal variation, wind plots and many more.
- Integration of other data sources in real-time or by file insertion.
- Easy tool to create your AQ reports automatically of a device and/or an entire network.
- Heatmaps to identify hotspots over a zone.
- Time-varying heatmaps to know the evolution of hotspots over time.
- Pollution sources detection using pollution roses and polar plots directly on the map.
- Particle size analysis tool that includes size distribution graphs by mass and by counts.



Software Plans

HOW TO CONFIGURE YOUR SOFTWARE PACK

1

Get your Admin account (only required for the first time, billed annually)

Manage users and accounts, and easily manage the network; configure, operate, calibrate and maintain the stations, as well as validate and analyse data and create reports.

2

Choose the device's package (one package per device is required, billed annually)

Select the licence package that best suits your needs and allows you to get the most out of the data provided by the sensor network. Choose between:

STARTER | STARTER + OPERATION | STARTER + ANALYTICS | FULL

3

Add additional users according to your needs (optional, billed annually)

Viewer

Always keep on track with diagnosis, operation and maintenance works; and have access to consult validated data, custom analytics and reports.

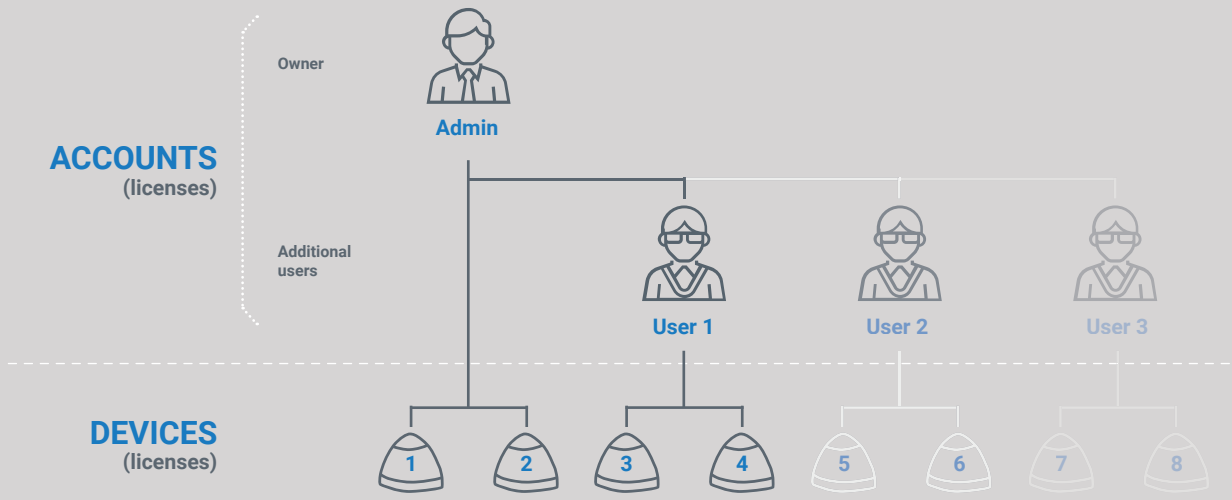
Expert

Easily manage the network; configure, operate, calibrate and maintain the stations as well as validate and analyse data and create reports.

4

Log in to Kunak Cloud (and start operating your network)

Got to **www.kunakcloud.com**



Software plans

FEATURES

	USER ACCOUNTS	ADMIN	EXPERT	VIEWER
	Choose your units, e.g. gas concentration in ppb or µg/m³	✔	✔	✔
	Confidentiality and Ownership of data guaranteed by EULA agreement (consult)	✔	✔	✔
	ISO 27001 approved cloud data centers (AWS)	✔	✔	✔
	Infrastructure monitored and protected 24/7	✔	✔	✔
	FAQs, knowledge base, e-mail support with replying asap.	✔	✔	✔
	Admin tools (manage users, billing, link devices...)	✔	✖	✖
	API call limit / month		10,000 calls	
DEVICES	**STARTER PACKAGE**			
	Check the status of your devices	✔	✔	✔
	Basic diagnostic information	✔	✔	✔
	Follow the actions taking place in your devices (O&M logbook)	✔	✔	✔
	Access to traceability info and receive notifications when the cartridges end the lifespan	✔	✔	✔
	Automatic data-flagging	✔	✔	✔
	Dashboard & Map View	✔	✔	✔
	Multiparametric and Multidevice Charts & Tables, and download the data (.csv, .txt)	✔	✔	✔
	Automatic averages calculations according to AQ standards	✔	✔	✔
	Access to interactive AQI tool (EU and EPA. Others under request)	✔	✔	✔
	Configure your devices (sampling and sendig periods, specific features...)	✔	✔	✖
	Set alerts, thresholds and receive notifications by email	✔	✔	✖
	Data Storage time limit		1 year	
	OPERATION PACKAGE			
	Gas & Particle Calibration Tool: calibrate your devices remotely	✔	✔	✖
	Automatic health supervision alarms (broken sensor, out of battery, lack of data...)	✔	✔	✖
	Register manually every intervention on the device (upload photos, pdf, documents)	✔	✔	✖
	Computerized Maintenance Management System (CMMS)	✔	✔	✖
	Activate the automatic invalidation of data during interventions & maintenance	✔	✔	✖
	Manage your AQ data by locations assigning devices to specific spots	✔	✔	✖
	ANALYTICS PACKAGE			
	Pollution roses and polar plots over the map	✔	✔	✔
	Heatmap to detect hotspots over an area	✔	✔	✔
	Time-varying heatmaps to know evolution of hotspots over time	✔	✔	✔
	Particulate size analysis tool (particle size distribution by counts and by mass)	✔	✔	✔
	OpenAir Suite for advanced analytics	✔	✔	✖
	Data Validation Tool for manual data flagging	✔	✔	✖
	Create automatic AQ reports	✔	✔	✖



kunak cloud

Advanced platform for air quality networks remote management and noise level analysis

Services

Network design

Study and design of a plan for the macroimplantation and microimplantation of the instrument in order to achieve a representative monitoring of the area of interest and meet the objectives set.



Training services

We provide a complete, competency-based training strategy for installers, integrators and final users of our products. Our training services include all the tools that are critical to create value for sustainable success: training and educational support, leading software, hardware and IT-solutions, technical support, as well as transfer of know-how and technology.



Remote maintenance

Our engineers team play a key role in the maintenance of the devices through our unique calibration service provided remotely and with the help of the Kunak Cloud software, preventing an operator from having to move to all the locations to perform the maintenance of the devices. Only this way we can offer you the excellence that we run by optimizing maintenance and reposition costs.



Data analysing & Reports

Analysis of the data obtained in air quality monitoring and generation of periodic reports with advanced statistical analysis graphics adapted to the needs of each project.



Renting

No matter whether your project is big or small, and no matter how many resources and activities are involved in it. We offer our device renting solution for those who are looking for a specific solution in a specific period of time. You can get the very best monitoring solution at the lowest price. Don't hesitate to contact our renting team to know more about this option.



Public air quality data

Possibility to generate your own public websites and customised widgets to share air quality data with stakeholders.



Large data is the goal
but accurate data is the key

kunak®
SENSING ANYWHERE

P.E. La Muga 9, 4º Oficina 1
31160 Orcoyen (Navarra) - Spain
+34 848 470 055
info@kunak.es
www.kunak.es/en

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