Cadence™ & ACT-400

NOISE MONITORING AND MANAGEMENT SOLUTION

![acoem logo] acoem

CREATING ENVIRONMENTS OF POSSIBILITY

The importance of monitoring noise pollution

Noise affects the way we work, live and play. As a society, we are continuously evolving and facing environmental challenges, including growing noise pollution caused by leisure activities, transport, aviation, construction sites and industrial activity. The ability to maintain an ambient soundscape by controlling noise pollution is crucial to our wellbeing and health.

Acoem is committed to be at the forefront of noise monitoring and management. We understand the importance of accurate, real-time data is necessary to make informed decisions and take preventative action — whether that is to alter traffic movement around schools, reduce the number of hours spent driving pilings into the ground at a building site, make changes to flight paths to limit disturbances to residential neighbourhoods or ensure that wind turbine speeds are correctly adjusted.
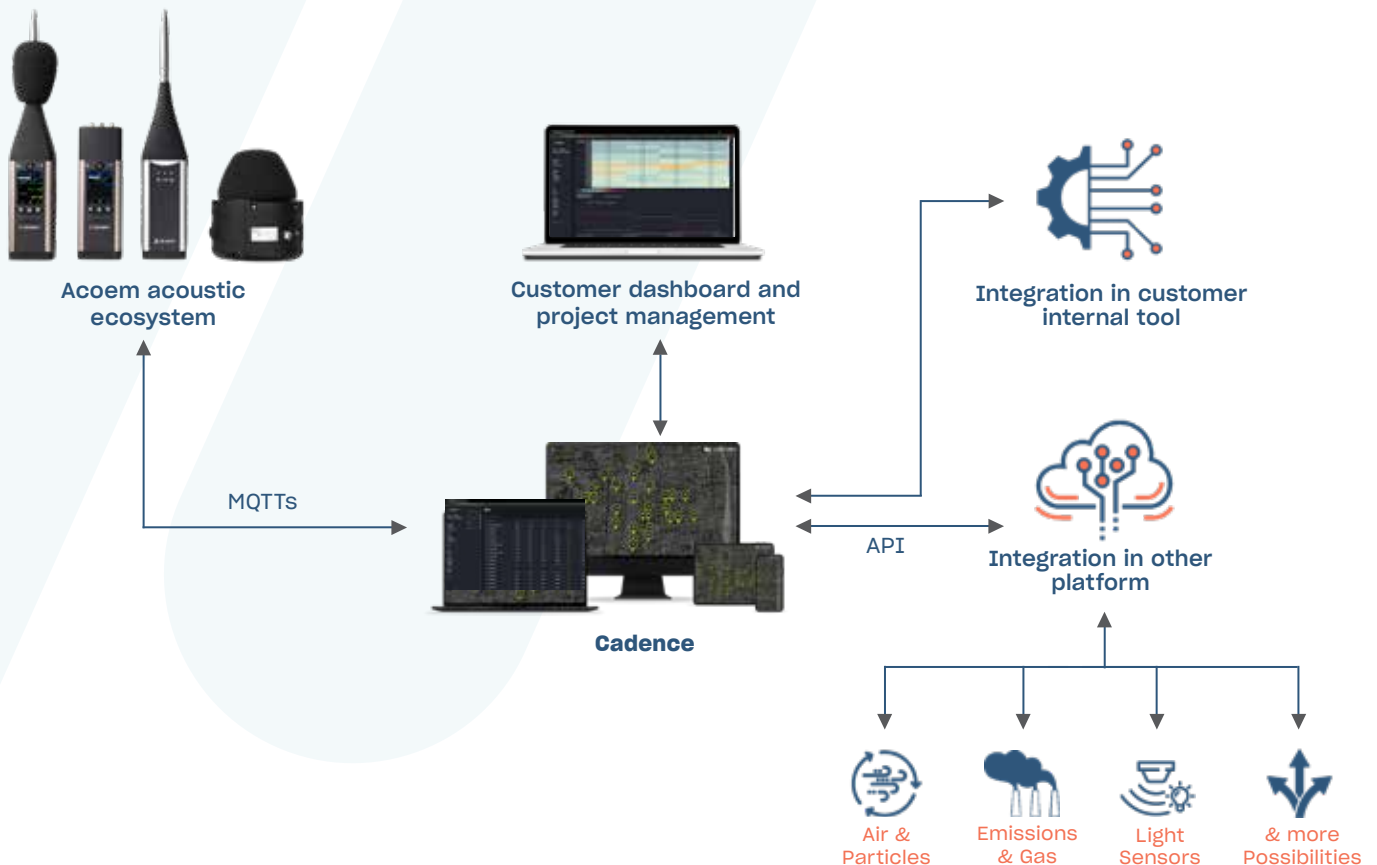
A single operating ecosystem to simplify monitoring

Our Acoem Fusion™ and Cube™ noise measurement devices have become the instruments of choice for environmental consultants around the world, used individually or in large networks to protect businesses, ensure regulatory compliance and safeguard populations who would otherwise be adversely affected by excessive noise pollution. Designing our instruments to operate within a single ecosystem, allows for greater inter-connectivity between devices, components and data solution software. This translates to ease of operation and the ability to quickly adapt between features and models across the Acoem range.

For over a decade, we have integrated all Acoem noise monitoring devices with our WebMonitoring™ software platform to create a seamless user experience and allow you to accurately capture and store data efficiently to generate required reports for both internal and compliance purposes.

We continue to manufacture our range with changing technology in mind, with the understanding that as a noise monitoring professional, you want the best monitoring technology available today, but also a clear upgrade path — and the ability to ensure the longevity of your investment in our noise monitoring systems. For most Acoem customers, that can mean 10-15 years of productive, income generating, equipment life — maximising return on investment (ROI).

With the introduction of the Cadence software platform and management system, we are cementing our position as leaders in innovative noise monitoring solutions and providing future-proof connectivity that integrates with new product offerings as well as existing models.

Acoem acoustic ecosystem

Customer dashboard and project management

Integration in customer internal tool

MQTTs

Cadence

API

Integration in other platform

Air & Particles

Emissions & Gas

Light Sensors

& more Possibilities

Cadence™

A total noise monitoring & controlling management system

Cadence™ is the result of our desire to do more with less, continually improve noise monitoring technology, breakdown barriers to entry and shorten the path between monitoring and informed action. Designed as a simple, efficient and cost-effective platform, it effortlessly and seamlessly acts as a conduit to connect all your Acoem noise monitoring devices in one user-friendly ecosystem.

Its Internet of Things (IoT) platform has been built on a foundation of Acoem's 45+ years of extensive expertise in noise and vibration monitoring technology, together with a future-proof, Cloud-based delivery system, ensuring greater security of data and ability to share with authorised individuals. Cadence™ also allows for compatibility with existing systems like security cameras and the exporting of data for the creation of reports or publishing on public-facing websites as required.

Unleash your potential with Cadence™

Cadence™ is a 100% responsive, ready-to-use monitoring platform that seamlessly integrates with all Acoem noise measuring devices. Available 24 x 7 x 365, access your data on an intuitive interface via any connected device — smartphone, tablet, laptop or desktop (Windows, iOS or Android).

The perfect project management tool, it provides real-time results for heatmaps, overall levels and multiple indicators. Capable of managing an unlimited number of projects, devices and users as well as exporting data and receive triggered alarms no matter your location, it is the simplest solution for all your noise monitoring needs.

> *Cadence™ has a dual musical & acoustic meaning — a sequence of notes or chords comprising the close of a musical phrase & a rhythmic modulation. It brings acoustic components together & offers homogeneity."*

Cadence™ was created to:

- Help you control your soundscape and have a better understanding of it
- Enable you to easily interact with your devices and to make more efficient decisions
- Give you greater choice & freedom when it comes to establishing a sustainable noise monitoring system
- Remove reliance on extensive hardware or infrastructure — such as secure IT architecture, sensors and servers — to get the highest quality data.
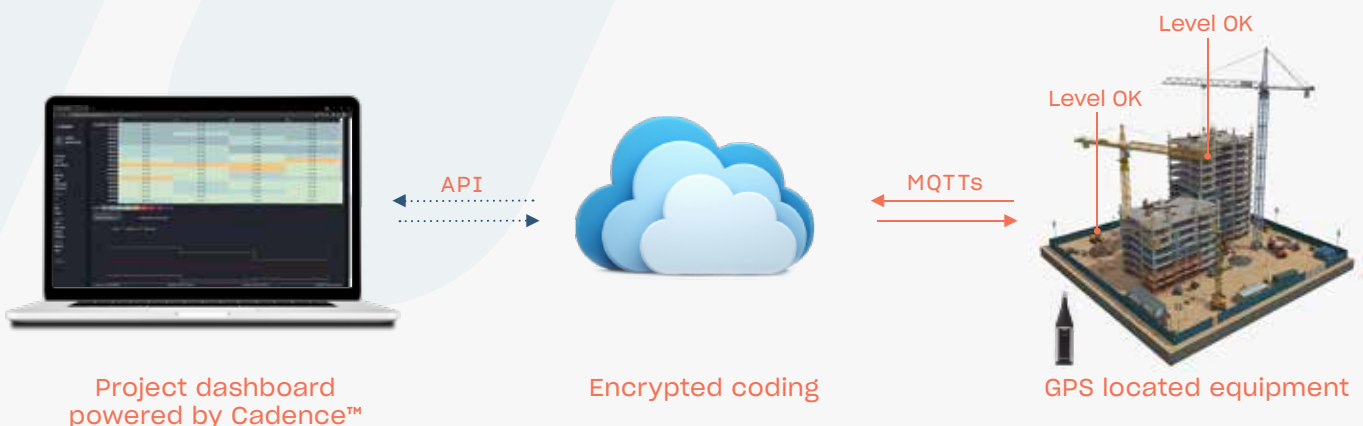
Advantages of the Cadence™ platform

- Store & organise all your data with a single solution in the Cloud
- Never lose connection with your sensors
- Connect & configure your devices automatically at the touch of a button
- No technical expertise required
- Connect a single device or an entire network
- Get an added layer of security for sensitive data with individual commissioning keys
- See all your projects at a glance
- Have an instant overview of all your measurement points
- Observe the status & performance of each device you own
- Pay an annual service fee rather than invest in costly infrastructure.

Data security & communication protocols

To commission your Acoem noise monitoring instrument and ensure that it is successfully linked with Cadence™, we issue a one-off security key that connects it to the Acoem Cloud using secure password-protected credentials. Using an IoT protocol and standard internet connection, simply pair your device, input the model and serial number and within a few seconds the Cadence™ interface will instantly identify the connection with your device.

- Your data is stored safely using an encrypted code & only accessible by authorised users
- Your devices are secure - with GPS localisation in real time & displacement alarms
- Your communication is secure between your device and Cadence with MQTTs protocol, and between potential API and Cadence with https protocol
- State-of-the-art API technology.

Level OK

Level OK

API

MQTTs

Project dashboard powered by Cadence™
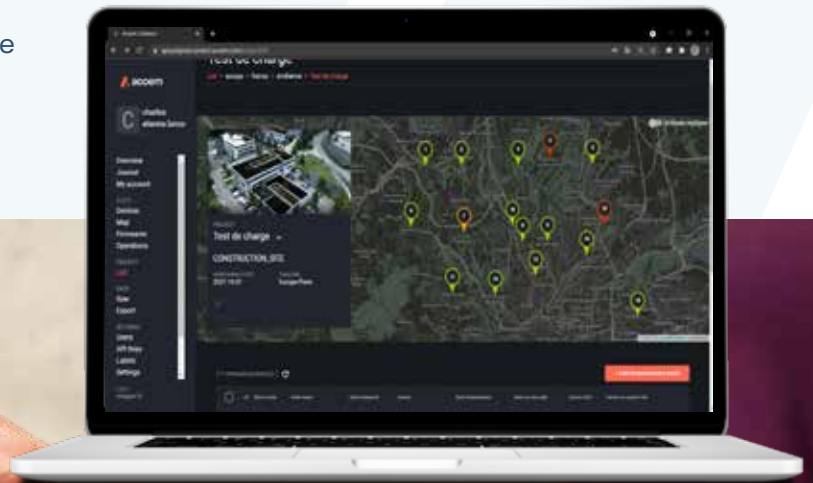
Encrypted coding

GPS located equipment

ACT-400

Our first device designed specifically around Cadence™

The Acoustic Connect Terminal (ACT-400) is the newest addition to Acoem's suite of noise monitoring terminals, sensors and meters. It combines the precision of a Class 1 microphone with the maximum protection of an outdoor kit and full connectivity via the Cadence™ noise management system as well as other open-source platforms.

ACT-400 is based on the same architecture as Acoem's trusted IEC 61672 Class 1 sound level meter Fusion™ 4G and Cube™ 4G. By removing the instruments' display screen and accessories, but retaining all the proven technology, plus the robust, waterproof casing, Acoem has been able to keep cost to an absolute minimum.

ACT-400 features & benefits:

- Class 1 microphone IEC 61672-1
- Weatherproof
- Large dynamic range 118 dB - 20-138
- Self-check system - CIC
- All-in-one with 4G modem & GPS
- Remote control access via Cadence™
- Communication by ethernet (RJ45) & 4G
- No public IP required
- Light weight, small & easy to operate.

Cadence™ & ACT-400 for every noise monitoring application

Smart cities

Environment monitoring

Construction & mining

Industrial noise

Cadence™ gives you complete monitoring autonomy

Focus on your core business, while Cadence™ takes care of your data needs

With Cadence™ you and your authorised team members have total control over every monitoring project, each device or an entire network of sensors at the touch of a button.

- Real-time overview of each measurement point

- Flexible & easy calibration, SOH, position, electrical checks

- Project management status overview

- Results in real time (heatmap, overall levels)

- Effortless data export & reporting

- Receive trigger & alarm notifications from any location

- Unlimited devices, measurement points, authorised users & projects

- Connect each device automatically & create new projects in less than 60 seconds

- Compatibility with all Acoem noise monitoring devices

- Use aggregate & applicative data instead of raw data

- Store data securely on Acoem's servers

- Affordable with no infrastructure costs

- Only pay for what you need, when you need it.

About **Acoem**
Creating environments of possibility

At Acoem, we create environments of possibility - helping organisations find the right balance between progress and preservation - safeguarding businesses and assets, and maximising opportunities while conserving the planet's resources. We deliver unrivalled, interoperable AI-powered sensors and ecosystems that empower our customers to make enlightened decisions based on accurate information.

Together with 150 distributors, our 800+ employees work across 27 offices, 5 manufacturing facilities and 3 R&D centres in 11 countries to provide trusted, holistic data solutions for customers worldwide.

Acoem links possibilities with protection.

For more information, please visit **acoem.com**

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