

Cirrus Environmental

# ENVIRONMENTAL NOISE MONITORING SYSTEMS



## About CIRRUS ENVIRONMENTAL

Cirrus Environmental provides a range of noise measurement instruments, software and support packages that enable our customers to effectively monitor, manage and control their environmental noise.

Using products from the Cirrus Research range we can advise you on suitable equipment, software and measurement techniques.

We can also offer advice and support on all aspects of monitoring, evaluating and managing noise, including downloading data and report preparation if required. Our managed noise monitoring solutions can even remove the need for customers to install any software themselves, instead accessing their data via a simple web interface.

Our solutions are built from a combination of noise measurement instruments that are suitable for either short, medium or long term installation with measurement data either downloaded locally, remotely over the latest in communications technology or via a Noise-Hub web server.

In addition to these systems, Cirrus Environmental can also offer a range of noise measurement instruments that can be integrated alongside other sensors and monitoring equipment. Whether the need is for a comprehensive data set or a simple 4-20mA signal, Cirrus Environmental can offer a solution for systems integrators and OEM suppliers.

Backed by over 40 years experience in the design, manufacture and installation of noise monitoring instruments, Cirrus Environmental is ideally placed to offer a solution that is both cost effective and practical.

Initial  
consultation  
& planning

Installation  
of suitable  
hardware and  
software

Full training  
on the  
correct use  
of the system

Technical  
support and  
backup

Help with  
generating  
reports &  
results

Maintenance  
& recalibration  
of system



## Applications for ENVIRONMENTAL NOISE MONITORING

Cirrus Environmental has supplied systems across a wide range of applications, with each system built around the Noise-Hub software. By adding a suitable noise monitor or noise monitors and a range of options, a system can be tailored to each individual application and location.

Examples of some of our more recent installations include:

- Construction & Demolition Noise Monitoring
- Industrial Noise Monitoring
- Airport Noise Monitoring
- Transport Noise Monitoring
- Motorsport Noise Monitoring

Each of these systems has been built around different versions of the Noise-Hub software package and portable, semi-permanent or permanent noise monitors. The Airport and Industrial installation also include weather measurement capabilities.

The Construction noise monitoring system uses the Noise-Hub web interface to give the operators a quick and simple way to access live noise levels. The Noise-Hub software is hosted on a server in a secure data centre with communications between the software and the noise monitors made over a robust 3G/GPRS connection.

The Motorsport noise monitoring system uses the networking functions in Noise-Hub to allow data to be shared across a LAN/WAN to give a number of users access to both live and historical noise data.

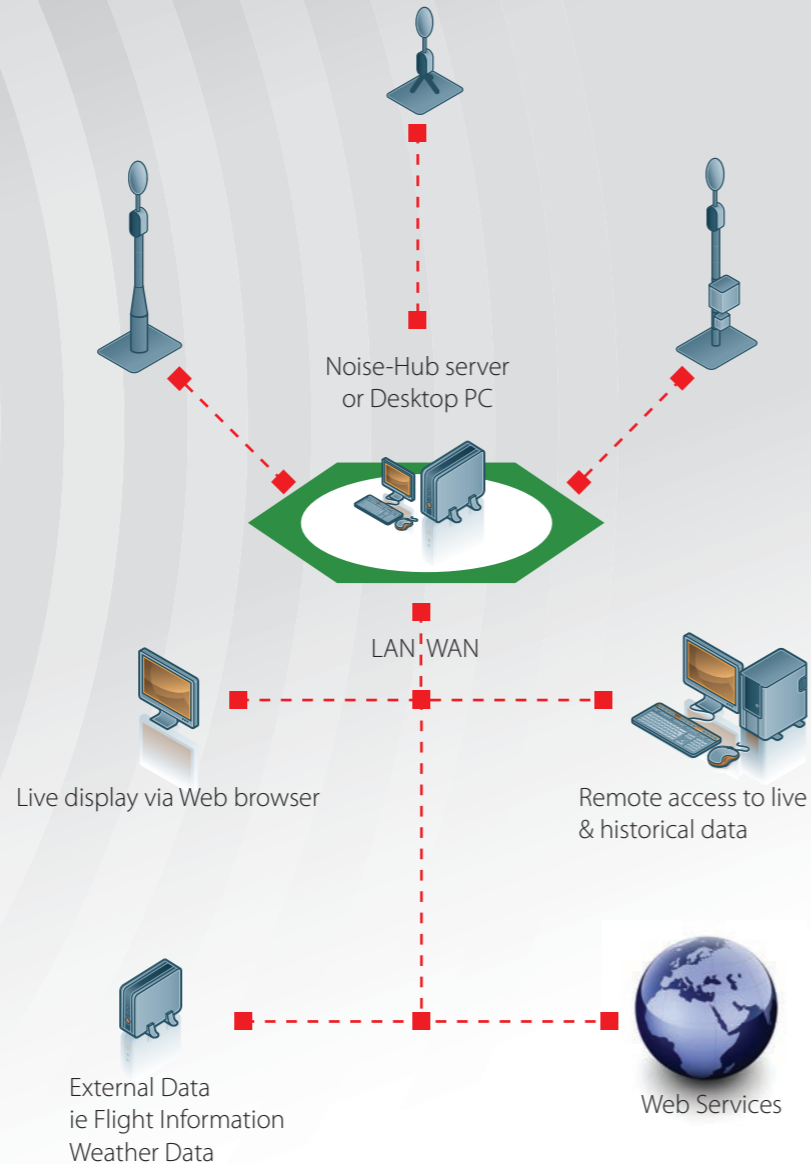
Whatever the application, Cirrus Environmental can tailor a system to meet the exact needs of all stakeholders and interested parties.



The Noise-Hub software is at the centre of all of our noise monitoring systems giving you a simple yet powerful way to access and view your noise measurement data.



- Real time online noise monitoring
- Live noise data over the web
- Integrates with fixed portable & semi-permanent noise monitors
- Comprehensive suite of reporting & configuration tools
- Automatic download of measurements from noise monitors
- Configure a system to meet your exact needs – reduces cost & complexity
- Automatic reporting by email direct to your inbox
- Noise event & measurement alerts by email, SMS & direct to your smartphone
- Full servicing , maintenance & calibration options
- Leasing & purchase options available



## A complete noise monitoring system NOISE-HUB

**N**oise-Hub provides you with a modern, sophisticated, clear and straight forward platform for communicating with single or multiple noise monitoring terminals.

With a modular structure, you can start with a basic system and add and expand as your needs grow.

Whether you need a single noise monitoring terminal, a portable solution or a complete, integrated modular management system with an unlimited number of noise monitoring terminals and different users, we can deliver, install and commission a total easy-to-use package.

The design of the Noise-Hub software allows Feature Packs to be added which expand the functions and features available to the user(s). Any of the Feature Packs can be added to any of the software Editions or can simply be added to the Basic Edition to create the ideal combination of function and performance.

Noise monitors can be added at any time and the Noise-Hub software has been written to communicate with both the current and future ranges of noise monitors from Cirrus Research plc. Future technology may add new capabilities to the noise monitors and Noise-Hub has been designed to be able to integrate these seamlessly.

- Initial consultation & planning
- Installation of suitable hardware and software
- Full training on the correct use of the system
- Technical support and backup
- Help with generating reports & results
- Maintenance & recalibration of system

## Portable & Semi-permanent NOISE MONITORING

### Portable noise monitors

There are many applications where noise monitoring is required over a short period or where the measurement location will change frequently. This type of application is often best served by a portable noise monitor that can be easily relocated as needed.

The CK:680 measurement kit has been designed to run for periods of typically 7-10 days at a single location and to provide a range of noise measurement parameters.

Data can be downloaded from the system via a 3G/GPRS connection and each measurement is stamped with the GPS coordinates allowing data to be shown on a map, a useful feature where the monitoring location changes frequently.

The optimus sound level meter that is part of the CK:680 kit can be removed and used handheld for short term and spot measurements.

### Semi-permanent noise monitors

There are applications where a hand-held sound level meter is not rugged or robust enough but where installing a permanent noise monitor is not practical. An example of this may be where the noise source that is being measured is moving slowly over a period of time or where a number of pre-determined locations must be monitored over the course of a project.

Cirrus has supplied semi-permanent noise monitors for a number of these types of project including:

- Large demolition sites
- Construction of transport links such as road & rail
- Test & Development sites
- Mining & quarrying





CR:243/4 "Noise Pole" installed as 1 of 7 monitors in an airport noise monitoring system



CR:243/1 Noise Monitor during installation as part of an environmental noise monitoring system

## Long-term & permanent NOISE MONITORING

Our range of permanent noise monitors are ideal for applications where accurate and reliable continuous monitoring of environmental noise metrics is required over long periods. Designed for permanent installation, these instruments are ideal for use in all weather and climate conditions and are field-proven over many years.

For applications where noise data needs to be gathered on a permanent basis, we offer two choices of permanent system; the CR:243/1 Noise Monitor and the CR:243/4 Noise Pole.

They both offer identical processing and monitoring capabilities but have different housings.

### CR:243/1 Permanent Noise Monitor

- Ideal for permanent installation on buildings
- Suitable for long term monitoring in all weather conditions
- Proven technology & reliability
- Fully weather protected
- High physical security, ideal for urban locations
- Extensive communications options with support for direct line, GSM, Wireless or GPRS Modem
- Flexible installation options
- PTB Type Approval & IP65 Certification
- Optional weather measurement capabilities

### CR:243/4 "Noise Pole" Noise Monitor

- Ideal for permanent installation in urban environments
- Purpose designed and manufactured for permanent installation
- The noise monitor is housed within an industry standard lighting pole
- Simple installation & servicing
- Very high physical security, ideal for use in urban locations
- Support for weather sensors & remote communications
- Remote communication via direct line, GSM, Wireless or GPRS Modem
- Optional Integrated Weather Monitoring



**MK:427 Noise Sensor Outdoor Microphone**

- Robust, fully weather protected Class 1 outdoor microphone
- Straight forward integration with Industry standard 4-20mA current loop systems
- Eliminates the need for third party software
- 30 to 100dB(A) standard range ideal for most applications (other options available)
- Proven long term reliability in harsh outdoor environments
- Verification through regular scheduling for remote calibration using integrated 'auto-calibration' system
- Outdoor Windshield and bird spikes to protect the microphone
- Entire length of the MK:427 NoiseSensor is 1m
- Simple mounting and installation for quick deployment

**ZE:908 Preamplifier Power Supply**

- Power supply for microphone preamplifiers
- Ideal for interfacing noise level measurements into external data logging systems, signal analysers and data recorders
- Front panel indicators of unit configuration and output status
- 60dB(A) measurement range
- User selectable output options of AC, DC & 4-20mA Current Loop
- Low Power Consumption with external power from 18-30v DC



## Systems INTEGRATORS

Many industrial installations have a variety of process sensors strategically placed around their site so that safety, environmental impact and efficiency can be monitored and managed, in real time, from one or more control rooms. If you have an existing control or measurement system and you need to add noise measurement capability, Cirrus Environmental can provide a range of instruments that are ideal for integration.

**MK:427 4-20mA Outdoor Microphone**

The MK:427 has been designed to meet the demand for a fully weather protected outdoor noise measurement microphone that can be integrated quickly and easily using a 4-20mA signal. The MK:427 uses the same proven hardware that is part of the permanent noise monitors and can include an automatic calibration option. This unit has been successfully installed at a number of large industrial sites.

**ZE:908 Preamplifier Power Supply**

The ZE:908 allows noise measurement to be added to indoor industrial monitoring systems via a standard 4-20mA signal. The unit also has relays that can be triggered at preset levels as well as AC and DC signal outputs.

**Permanent Noise Monitors**

Where a simple sound level over a 4-20mA loop is not sufficient, measurement data from the Cirrus permanent noise monitors can be integrated into a range of external systems. Cirrus can advise upon the best communications methods and provide protocol data that can allow systems integrators to connect and control these instruments.





## A full range of support options for your noise monitoring system SERVICE, SUPPORT & CALIBRATION

At Cirrus Environmental we take great pride in our high standards of Service, Support & Calibration. Our in-depth knowledge of the Cirrus Noise Monitoring instruments, software and systems enables us to guide users through the operation of the equipment and rapidly solve any technical problems as well as allowing us to offer a wide range of Service, Support & Calibration options.

Our noise monitoring systems are typically supplied with some form of maintenance and support package and we can offer three standard packages, each of which can be tailored to meet the needs of each client or installation. Outside of the UK, we work with carefully selected local strategic partners to provide the highest level of backup and support.

Whether you need a simple annual calibration for your equipment or a comprehensive backing and support package, there is an option to suit your project.



ISO 9001:2008  
FS 562109

### Silver Basic Maintenance Package

- Full annual scheduled maintenance and recalibration
- Unlimited technical support by telephone and email during office hours
- Remedial maintenance on-site, with parts and labour provided at no extra cost
- Includes frequently-replaced parts such as microphones, windshields and batteries
- Back-to-base repairs for component failures

### Gold System Assurance & Basic Maintenance Package

- Scheduled contact with noise monitors
- Data integrity and diagnostics verified according to a comprehensive checklist
- Corrective actions are carried out immediately including on-site maintenance
- Includes Silver Basic Maintenance Package
- Full scheduled maintenance and recalibration

### Platinum Data Management, System Assurance & Basic Maintenance Package

- Scheduled data download
- Data sent securely via email, download, hardcopy or USB/CD
- Secure, encrypted data storage
- Includes all benefits of the Silver & Gold packages
- Full annual scheduled maintenance and recalibration

CIRRUS ENVIRONMENTAL

Unit 2 Bridlington Road Industrial Estate  
Hunmanby  
North Yorkshire  
YO14 0PH  
UNITED KINGDOM

T: +44 1723 891722

E: [sales@cirrus-environmental.com](mailto:sales@cirrus-environmental.com)

W: [www.cirrus-environmental.com](http://www.cirrus-environmental.com)

