



MATRIX HUB
Making Monitoring Easy

THE BIG PICTURE

THE UNIQUE SELLING POINTS OF MATRIX HUB.

2021



WHAT IS **MATRIX HUB?**

Matrix Hub is an end to end environmental monitoring system that gives you complete vision on your project impacts with real-time data.

It is an integrated hardware and software platform that delivers accurate and reliable environmental measurements.

Integration of environmental sensors, remote data acquisition, online access and reporting, saves you time, money, and risk when managing your projects.

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**SAVES YOU TIME,
MONEY AND RISK**

WHEN MANAGING YOUR PROJECTS.





ONE PLATFORM

EASILY CONTROL YOUR SENSORS FROM THE ONE PLATFORM.

Matrix Hub has been engineered from the ground up to be a single, super-easy-to-use platform that saves countless hours of “the old way of doing things.” We are constantly developing the system further to save you more. Welcome to the future with Matrix Hub.

Not just a platform for getting measurements, Matrix Hub effortlessly provides management of multiple projects, with multiple sites, with multiple sensors, with multiple metrics, and gives you the critical information at your fingertips. Learning multiple software systems and switching between them for your different environmental parameters is now a thing of the past.

Matrix Hub currently provides noise, vibration, weather, and air quality measurements. As this is all in the one platform, your staff have only one

system to learn and become efficient with. This is a four-fold saving in time and effort. Additional environmental metrics are in the Matrix Hub development roadmap, so the future savings will be even greater.

Matrix Hub provides excellent visibility on the current status of all sensors. The critical information for each site and sensor is shown in the overview page so you can quickly drill down to the site that requires attention.



**ALL SENSORS ARE REMOTE CONTROLLED – FROM ANY INTERNET ENABLED DEVICE.
NO MORE SITE VISITS REQUIRED TO CHANGE THE ASSESSMENT PERIOD, OR ALERT SETTINGS.**

CONFIDENCE

Built as a platform on which you can rely, Matrix Hub gives you the confidence in your monitoring programs. What does confidence in your monitoring give you?

Matrix Hub systems can use multiple data transmission paths. We have 5G, 4G, and 3G systems that utilise private subnets ensuring privacy of data. We can also use Wifi systems and have also developed a customised 900MHz mesh network transmission system. All data is encrypted for additional security.

The interface system is built using the internationally reliable Azure platform which ensures global redundancy and unparalleled up-time.

CONFIDENCE FEATURES:

- All sensors live status is available on Sites page. You can see at a glance how everything is going
- All data is real-time - you know what is happening live
- All alerts are real-time - you will be alerted immediately on an exceedance
- Audio recordings can be reviewed directly within the platform so you can be confident about the nature of any interesting events or measurements.
- Weather integration across multiple sensors means you can immediately know if weather is affecting your measurements.
- Vibration measurements show orthogonal axis dominant frequency data against BS7385 so you know whether your vibration levels are compliant - real-time.
- All base stations include GPS systems which are able to be used for tracking if a system goes "wandering."
- Confidence in data security

EASY FIELD EQUIPMENT

Loggers are designed with ease of site work in mind. For most sensors, all that is required is to bring the logger to site, setup the sensor and turn it on. Equipment can be reconfigured through the management interface.

The sensors are remotely configurable so there is no need to attend site to change a setting. You can reconfigure your equipment on the fly from your office, or phone, or tablet. Any internet enable device can connect and manage the equipment.

Loggers are available in mobile, skid mount, trailer or permanent configurations. They can be powered by 240V mains, solar power, or battery. Each logger includes full battery monitoring and management options so you know exactly where you are at with your power consumption and long term battery life management.

EASY REPORTING & ANALYSIS

Extremely flexible criteria models can be set for each individual sensor and exceedances automatically highlighted in the graphical interface.

You can drill down into any specific measurement to get additional details where required, and even review audio recordings directly from the interface. Full datasets, or specific data regions can easily be downloaded in csv format for additional processing.

The graphing system also includes super easy exclusion management. Any point, or group of points can be easily tagged and excluded from the assessed levels. The system automatically tracks who reviewed the data and logs the exclusion comments which are then included into the reporting.

Multiple reporting criteria are automatically calculated and shown in the report tab. These include the average, maximum and minimum values of each metric, along with compliance and completion rates, and Rating Background Level for noise measurements.

Each sensor automatically generates real-time graphic results that you can review and navigate with exceptional ease.

Matrix Hub Sites overview page shows all your critical information at a glance and you can click on each sensor to drill down into the details.

Alerts are also extremely flexible, with multiple alert levels available. SMS and email messages can be assigned to different alert levels, and each user can have customised alert levels.

The audio recording option includes a data analysis feature that finds the highest noise peak so you can quickly get to the most important part of the logging period and determine the cause of the noise levels. The audio files can also be directly downloaded for additional processing.

Vibration data can automatically be compared against BS7385 with the dominant frequency of each orthogonal axis displayed against the criteria graph. This is an incredibly useful feature when assessing vibration levels against building damage criteria.



Matrix Hub is proudly designed, built, and coded in Australia. Our industry associations and connections have helped shape Matrix Hub into a globally leading environmental monitoring platform. **We greatly value these associations.**



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