



VIBRATION MONITORING

ACCURATE, RELIABLE, REAL-TIME, EASY



MATRIX HUB

Making Monitoring Easy

VIBRATION MONITORING SYSTEMS

RELIABLE AND ACCURATE

Reliable and accurate vibration monitoring is an essential requirement for environmental compliance. Matrix Hub is a system that integrates multiple sensors, real-time data, graphing and reporting, as well as alerting functionality. Sensors and measurement equipment comply with international and Australian standards, seamlessly transmit data to online servers and create live monitoring views and reports.

REAL-TIME LIVE DATA AND EASY MANAGEMENT

Ensuring that real-time data is available to your key people can significantly reduce project, schedule, and financial risks associated with community upset and legislative non-conformance.

Matrix Hub vibration monitoring systems provide immediate vision on the impacts of vibration. Real-time results, instant multiple-level alerting, and fully automated reporting make managing vibration impacts easy. Users can easily tag measurements as influenced by external sources and provide comments on the nature of the works during specific events. All tags and comments are automatically included in generated reports along with audit tracking of the reviewers.

UNLIMITED ACCESS

Users have access to live data anywhere in the world with an internet connection. Through the Hub, the live data from multiple projects, multiple sites, and multiple sensors are all immediately visible. Critical information is observable at a glance meaning you can keep your attention focused on where it needs to be.

AUTOMATIC REPORTING

The system automatically generates complete vibration reports that can be published and stored within the Hub and also exported as PDF documents. Reporting is compliant with the general requirements of BS7385-2 and automatically calculates the overall metrics of the measurement period including frequency dependent orthogonal axis criteria.

Matrix Hub is the premier option for accurate, real-time environmental monitoring and reporting.



SPECIFICATIONS

Vibration monitoring stations are available in mobile and permanent configurations and can be solar or mains powered for long term installations.

Two reporting levels are available. Compliance noise monitoring is designed to fulfill the requirements of basic project vibration monitoring. Advanced noise monitoring adds additional time and frequency weightings, as well as additional statistical measurements and 1 secondly data.



VIBRATION MONITORING STATION SPECIFICATIONS

OPTION	DETAILS	COMPLIANCE VIBRATION MONITORING	ADVANCE VIBRATION MONITORING
STANDARDS		ISO8041:2005	DIN 45669-1 Class 1 ISO 8041:2005 ISO8041-1:2017
MEASUREMENTS	Metrics	Velocity <ul style="list-style-type: none"> Instant, Max, Average (X, Y, Z, Vector sum) Dominant frequency 	Velocity <ul style="list-style-type: none"> Instant, Max, Average (X, Y, Z, Vector sum) Acceleration <ul style="list-style-type: none"> Instant, Max, Average (X, Y, Z) Displacement <ul style="list-style-type: none"> Instant, Max, Average (X, Y, Z) Dominant Frequency <ul style="list-style-type: none"> X, Y, Z MMTV <ul style="list-style-type: none"> X, Y, Z VDV <ul style="list-style-type: none"> X, Y, Z KB _{FT} or KB _{F^{veff}, max, 30}
	Measurement Intervals	1, 5, 10, 15, 30 sec 1, 5, 10, 15, 30 min 1 hr 24hr	1, 5, 10, 15, 30 sec 1, 5, 10, 15, 30 min 1 hr 24hr
SENSOR	Type	Accelerometer	Accelerometer
	Measurement Range	0.1-100mm/s	0.03-100 mm/s
	Frequency Range	0.63 - 80Hz (±1dB) 0.315 - 250Hz (±2dB)	0.5 - 315Hz
	Frequency Weightings	Flat, Wm, Wk	Flat, KB, Wb, Hv
	Dimensions	60 x 60 x 60 mmm (LWH)	100 x 100 x 60 mm (LWH cylindrical)
	Channels	3 (X, Y, Z)	3 (X, Y, Z)
	Temperature Range	-10 to 50°C	-20 to + 60°C
	Mounting Options	Flat Plate, Soil Spikes	DIN Plate, Flat Plate, Soil Spikes
	Protection Rating	IP65	IPX7
EXTERNAL CASE	Type	Injection moulded ABS	Injection moulded ABS
	Protection Rating	IP67	IP67
	Dimensions	546 x 400 x 200 mm (LWH)	546 x 400 x 200 mm (LWH)



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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