Benchmark Monitoring

Noise Hound

Real Time Noise Monitoring System

The Noise Hound is an omni noise monitoring system designed specifically for mining and heavy industry applications.

Equipped with a class 1 sound meter and the latest wireless technology Noise Hound enables noise metrics and live audio streaming reliably and securely to users providing insight into operations and their potential impacts on the surrounding noise receptors. Coupled with a web based portal and reporting package the Noise hound can be accessed from a PC or hand held smart device anywhere, anytime, doubling as both a noise compliance and noise management tool for operations.

Compliance

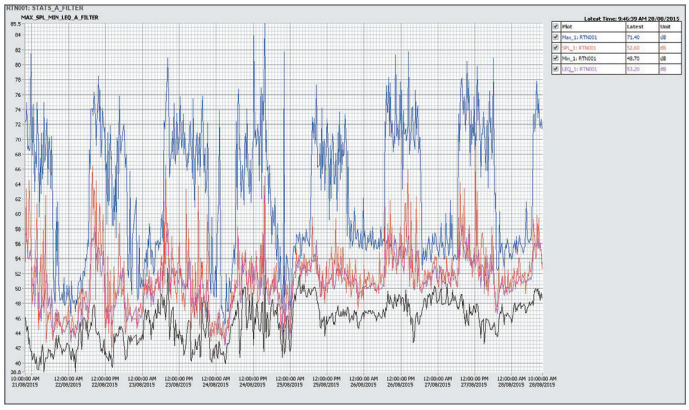
- Noise hound provides continuous noise metrics and audio exceedance recording for compliance 365 days a year. Robust hardware and software specifically developed to for compliance applications.
- Equipped with data compression technology to enable live streaming of audio data over standard cellular network.
- Noise metrics and audio data transferred to Benchmark's central repository for client access via the internet.
- Data backfill capability to optimise data capture.
- Web based reporting package can be configured to generate scheduled daily, weekly and monthly summaries for review.
- Event based option recording noise metric, audio and visual , including night visual, triggered by external sensor triggering including motion, overpressure and vibration available.

Alarming Notification with audio

- Custom trigger limits based upon noise metrics are used to create email alarm notifications.
- Each email alarm provide the trigger limit, the actual exceedance value and an attached audio file for the measurement period in question
- Audio file allows managers to review the exceedence to determine if it was caused by operations or other factors

Adjustable Low Pass filter

- Noise hound offers a adjustable low pass acoustic filter for separation of industrial noise . The frequency range 1-5000 Hz filter is accompanied by noise metrics and audio data
- 1/3 Octave and FFT data
- Noise hound provides as standard 1/3 octave A weighted data set on a selected measurement sampling interval. There is also a optional feature of FFT spectra data for noise characterization appropriate for noise investigations



Design

- Noise hound is designed to withstand the harsh operational conditions on industrial sites. With the use of industrial grade equipment, IP rated enclosures and dedicated solar system providing 5 automatous no sun days operations.
- Noise hound is temperature rated to 55oC ambient conditions and utilizes convection to achieve temperature control of instrument enclosures with out air conditioning making it a low power solution.
- Solar powered enabling portable configuration
- Easily integrated into client SCADA systems

Noise Hound Portal Features

- Stream live audio to your PC or hand held device
- Real-time metric data feed to your handheld device providing current instrument status refreshed every 2 seconds
- Portal configuration of graphical trend lines, statistic and google map and many more features available.
- Integration Wind and rain data for analysis and alarming purposes
- Alarm handling, for exceedance, stale data on from monitoring site
- Maintenance notes, automated reporting schedules
- Web based audio file storage for download and playback from secure login

Meter Specification	➔ Parallel measurement of noise metrics and L1-L99 for low pass and all pass metrics ➔ Frequency analysis with 1/1 - or 1/3-octave bands in the 0.4 Hz - 20 kHz range. ➔ Complies to IEC A,C, Z weighting for measurement ➔ Measurement sample 48kHz ➔ Complies to all relevant IEC and ANSI Class 1 specifications ➔ Adjustable low pass filter for audio and noise metrics (1-20Khz) ➔ Simultaneous audio streaming ,noise metrics and recording ➔ Low pass and all pass audio recording in 24 bit WAV and MP3 16 bit format. ➔ Customized trigger threshold for exceedance notification ➔ SMTP service for exceedance reporting to recipient list from field device ➔ Real-time station status via web browser ➔ Live audio stream from device accessible over the web
Processing Engine	➔ Processor CPU Intel i5 , i7 ➔ OS windows 7 32 and 64bit options ➔ System Memory 8GB -16GB ➔ Hard Drive SSHD 256GB ➔ Operating Temperature-20°C ~ 70°C ➔ Approval - MIL-STD-810F 514.5C-2
Solar System	➔ Solar Array 600 – 1000W, Operating temperature-40°C to +85°C, Maximum system voltage: 1000V DC ➔ Battery Array (4.8 Days autonomous no sun days) ➔ Solar Management system with high and low battery voltage alarm notification ➔ Protection: Short circuits, reverse current flow, Low battery load disconnect, and Current limit for over heat or over current
Optional Features	➔ High Speed image capture based upon movement of acoustic trigger limit, with integrated audio and noise metrics ➔ External analogue and digital sensors, GPS, motion sensors, vibration and meteorological ➔ FFT measurement available with 1024 frequency breaks between 1 - 20KHz

Contact Benchmark Monitoring for more information:

M: +(614) 0166 6077
F: +(612) 4938 2076
P: +(612) 4016 8589

E: sales@benchmarkmonitoring.com.au
W: www.benchmarkmonitoring.com.au

A: U5 / 17 Enterprise Crescent, McDougalls Hill NSW 2330 Australia