munisense

Realtime online
noise monitoring

munisense

Sounds play a big role in our society. Sound is often enjoyable such as at a concert or in a café. Yet regularly it is a nuisance and measures need to be taken to reduce the noise.

Modelling noise fails to produce a representative picture in all cases. Unpredictable sources of noise often lead to annoyance and complaints. Our INSIGHTNOW™ platform supplies accurate and objective information on noise, so immediate action can be taken. The INSIGHTNOW ™ network is optimized for remote measurements and making the data accessible over the internet.

INSIGHTNOW™

INSIGHTNOW™ consists of our INSIGHTNOW™ network and INSIGHTNOW™ cloud platform.

The INSIGHTNOW ™ network consists of small, rapidly deployable, wireless, energy efficient and weatherproof sound meters. These meters communicate with our INSIGHTNOW™ platform where their measurement data is stored.
This INSIGHTNOW™ network may consist of a single sound meter, or a group of meters. The meters create a reliable wireless network that can span a large area, such as a city center or an event area.
In addition, the meters can be combined with meteorological stations.

Our INSIGHTNOW ™ platform provides powerful management and analysis and reporting capabilities. After identification of the meter, filtering of background noise and, if desired, validation and correlation with meteorological and traffic data, the measured data is available for analysis, visualization and reporting. All information is available on a smartphone, tablet or via a web browser, tailored to the role/function of the user.
Alarms can be set that automatically warn authorized personnel (for instance authorities or DJ) at (imminent) excessive noise levels.

Insight in current noise levels

Wireless, energy-saving, self supporting meters

Online analysis and reporting

Gain control of noise emission

Noise enforcement and licensing policy support

Dynamic noise mapping

Automatic source recoginition

Gain control of noise emissions

The sound emission is continuously transparent in our INSIGHTNOW™ platform. A warning of imminent excess of a predetermined noise quota can be announced, to allow timely adjustments. Thus the licensed sound levels can be utilized optimally and fines and operating restrictions are prevented. The measurement data is available for analysis, visualization and reporting.

Munisense offers affordable solutions include:

Hospitality sector

Events

Motorcross

Construction

Noise enforcement

Assessing noise complaints and enforcing standards is a labour-intensive and very expensive task, especially when using handheld meters. In the Netherlands tens of millions of euros are spent without solving the problems. Munisense can reduce these costs significantly as one measurement of a complaint is sufficient. Before the measurements are stored in our INSIGHTNOW™ platform the background noise is automatically stripped from the measured values. Then the data is validated and tested according to the stipulated standards. The platform provides automatic analysis and accurate reporting for legal use according to, for instance, the Dutch regulations for measuring and calculating industrial noise (HRMI).

Harbour, ports

Loading & unloading

Policy for noise emissions in inner cities

Noise emissions in towns and cities is often higher than the state legal frameworks. This is due to the lack of understanding of the noise and the distribution thereof in the long run over the inner cities. Continuously measuring important places in an inner city environment creates good understanding of the noise so licensing can be adjusted.

Detection of fireworks

The nuisance of loud bangs of illegal fireworks is effectively controlled by rapid detection of the location of the explosion: law enforcement can be present just moments later. We integrally incorporated the proven detection method developed by TNO, in our productrange.

City centers

Railways

Fireworks

Automatic Source Recognition

What is the contribution of a sound source at a measuring point? Does this result in an overrun? What is the source of the sound?
The INSIGHTNOW™ platform provides this real-time insight based on advanced correlation and dynamic transfer calculations.

Dynamic sound mapping

Thorough insight into sound sources provides effective measures against noise and noise nuisance. Using real-time data of noise measurements as input for computational models, the INSIGHTNOW™ platform continuously generates actual noise maps.

Noise infrastructure

Based on models, the 'swung' legislation determines, noise emission ceilings on highways and freeways.
For municipalities and organizations, it is useful to review these ceilings to actual measurements. The INSIGHTNOW™ network is configured for long-term measurements using our small, low-power, wireless meters that are self-sufficient.

A selection of our customers

Our services are used by a large number of municipalities, environmental services, consultancy programs, companies and events organisers, both nationally and internationally.
Our website provides an overview.

About Munisense
Munisense develops, sells and manages highly innovative real-time and online measurement and control solutions for business and government. Solutions that provide immediate insight in noise, vibrations, water levels, energy use, lighting, water and air quality and that allow effective control over lighting levels, ventilation, and pump activity. Our INSIGHTNOW™ meters are connected to our INSIGHTNOW™ cloud platform where the data is stored in real-time for analysis, visualisation and reporting. The information from the platform can be viewed in a range of specific visualisations any time, any where through a web browser or using our phone or tablet apps. Our applications are developed in close cooperation with universities, governments, partners and customers.

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INSIGHTNOW

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