Unattended Noise Monitoring

Residential South
LAF 72.0 dB

Residential West
LAF 64.2 dB

NOISESCOUT WEB PORTAL
XL2 SOUND LEVEL METER
WEATHERPROOF OUTDOOR STATION
NETBOX COMMUNICATIONS HUB
DATA EXPLORER PC SOFTWARE

Made in Switzerland
Typical Applications

Long-term noise monitoring is typically found on construction sites, traffic routes, residential areas, wind farms, etc. In order to be able to implement the right application for your situation, we provide different monitoring solutions. The choice largely depends on how you prefer to access your measurement data. It is also restricted by the remoteness of the location, i.e. the availability of a data connection (e.g. mobile phone network).

- Data stored at the location
- Data stored in the cloud with a rules engine – NoiseScout Managed Mode
- Data available via FTP connection – NoiseScout Gateway Mode

**NoiseScout Managed Mode**

The NoiseScout web portal displays the noise levels live in your web browser. Via the Managed Mode automatic emails can be triggered before a non-compliance condition arises. A first classification of the audio file is already provided using artificial intelligence (AI) and is mentioned in each alert.

**NoiseScout Gateway Mode**

In the Gateway Mode, you are able to start and stop any monitoring from your office or mobile device providing total flexibility in meeting your project requirements.

**Key features at a Glance:**

- Easy commissioning and operation
- Data automatically managed
- Automatic alarm emails with audio classification via AI allocation
- Remote access via PC or mobile devices
Data stored at the location

Unattended Noise Monitoring without Data Connection

At locations where there is no data network, the monitoring station logs data only to itself. Therefore, sufficient storage and power supply should be provided for long measurement periods.

To collect and analyze the data, the SD card, holding all measurement data can easily be removed from the XL2.

Required Components

- XL2 Sound Level Meter
- Outdoor Microphone
- Power Supply
- Weather protection for device
Remote Monitoring in Managed Mode

In this solution, emails are automatically sent by the system, notifying when noise level limits are exceeded. The measurement data is stored in the cloud, including location details, weather data and audio snippets of when limits are exceeded.

Required Components

- NoiseScout web portal access (able to manage multiple noise monitoring terminals)
- XL2 Sound Level Meter with Outdoor Microphone
- NetBox for data connection and communication (access through www.noisescout.com)
- Weather protection case or enclosure and power supply

Optional Components

- Weather station
Remote Monitoring in Gateway Mode

Remote monitoring via secure FTP connection is of particular interest to those users who want to manage their measurement from anywhere. The XL2 controls are remotely accessible, via a mobile phone for example, as if you were standing in front of the actual monitoring station. This offers the freedom to start and stop any function from your office or your mobile device – a useful tool for complete control.

Required Components
- NoiseScout Gateway access
- XL2 Sound Level Meter with Outdoor Microphone
- NetBox for data connection with an SFTP-Client
- Weatherproof enclosure and power supply

Optional Components
- Weather station

Interior of a weatherproof Enclosure

NoiseScout Web Portal for Gateway Mode
Accessories for Noise Monitoring Terminal

**NetBox**

The NetBox is the station’s data communications hub. It synchronizes measurement and audio data from the XL2 to the hard disk, cloud or FTP client. It also handles weather and GPS data.

**Weather Protection**

The outdoor equipment protects the sensitive electronics from harmful environmental influences. There are two types:

- Heavy Duty Outdoor Case (IP43 or IP65)
- Weatherproof Enclosure (IP66)

**Power Supply**

There are three alternatives for the long-term power supply to an outdoor Noise Monitoring Terminal:

- Fixed connection to the power grid
- Rechargeable battery
- Solar panel

The variants b and c are often combined together, i.e. the solar panel serves as an energy source and the battery as an intermediate store. These configurations can be implemented on a project to project basis if needed.
The Data Explorer PC software is ideal for post-processing and analysis of sound level measurement data. After importing the data, it is clearly displayed and can be filtered, grouped, weighted and mathematically linked from a variety of perspectives.

Features

- Data visualization
- Audio playback synchronized to graph
- Automated tonal and impulsive marker generation
- Percentile and rateup calculation
- Rating level Lr calculation
- Customized reporting