INFRA S50 SOUND LEVEL METER
NOISE MONITORING

Applications

The INFRA S50 is a Class 1 precision sound monitor integrated within the INFRA field monitoring system.

The S50 Sound Level Meter features a high-sensitivity microphone specifically chosen for construction and environmental monitoring applications.

The S50 simultaneously measures:

(Leq) Equivalent sound pressure levels

(Lmax) Instantaneous, maximum and peak sound levels

Rugged design allows for the sensor to withstand harsh conditions meaning the S50 is ideally suited for long-term outdoor noise monitoring on construction and infrastructure projects.

The S50 contains a built-in digital processor which performs filtering and signal processing natively in the instrument.
Measurement data is collected by a connected INFRA datalogger and is transferred to GEO-Instruments' QuickView monitoring platform for visualisation and analysis.

Typical sound monitoring applications include:

- Construction and Infrastructure
- Demolition
- Environmental impact assessment

Installation & Operation

The S50 is designed for vertical mounting on a wall, pole or tripod.
It is easily and securely installed in just a few minutes using bolts fastened through the middle of the sensor.
A mounting wedge is available for installing on a wall to achieve the correct distance between the wall surface and the microphone.

The S50 must be connected to an external INFRA datalogger using industrial sensor cabling.
The system uses the same cable to transfer data and supply power, meaning only one connection to the S50 sensor. This simplifies installation and improves reliability.

The INFRA datalogger provides complete automation of measurement and data collection and is also compatible with INFRA vibration sensors.

Specifications

Sensor Type:

- Class 1 Sound Level Meter

Parameters:

- Leq, Lmax

Range:

- Sound levels from 20dB up to 130dB

Resolution:

- 0.1 dB

Measurement Interval:

- 1 second to 60 minutes

Power Requirements:

- Mains: 110 - 240 Vac
- Battery: 8-15 Vdc

Temp Rating:

- -20 to +50 °C

Sensor Dimensions:

- 80 x 300 x 50 mm
- Weight 750g

Typical Logger Dimensions:

- 130 x 250 x 270 mm
- Weight 3.3kg with internal battery

Key Advantages

Meeting Key Requirements:
Sensor meets all class 1 requirements of standard IEC 61672-1:2002

Versatile Power Options:
- Site mains power
- Bespoke solar panels
- Lithium-ion batteries

Rugged & Reliable:
Adapted for long-term automated outdoor measurement. Supplied with a windscreen and bird spike assembly.