

# **\* NOISE POLLUTION MONITORING \***

## **Noise Pollution Monitoring:**

Noise or sound level monitoring or measurement is a process to measure the magnitude of Noise in industries and residential area. Data collected from Noise level monitoring & Testing helps us to understand trends and action can be taken to reduce noise pollution. Noise pollution is Low or High-frequency sound that can cause/harm the activity of human life. It can be caused by various industrial Machines, Motor Vehicles and Craft etc

**Noise Pollution Monitoring** process is a part of Environmental Monitoring & Testing as noise pollution is also increasing exponentially in recent years.

## **Types of Noise Pollution:**

There are multiple way from which noise pollution can occur. Major reasons for noise pollution are deforestation, Construction, Air traffic, Road traffic, Population, etc.

Noise Pollution can be divided into 2 types:

- 1) Man-made Noise
- 2) Environmental Noise

## **Measurement of Noise Level Using Noise Testing Equipment:**

Sound/Noise level meter equipment measures noise pollution. It consists of several parts, mainly Microphone, Pre-amplifier, frequency weighting, Processor, Display System, communication System and Power Supply. dB(A) Leq denotes the time-weighted average of the level of sound in decibel on scale A which is relatable to human hearing.

A “**decibel**” is a unit in noise measurement. “A”, in **dB (A) Leq**, denotes the frequency weighting in the **measurement of noise** and corresponds to frequency response characteristics of the human ear.

## **Monitoring & Testing:**

- 1) Industrial Noise Measurement
- 2) Non-Industrial Noise Measurement

### **Noise Level Testing Standards:**

- Ambient Noise level Monitoring
- In-plant Noise level Monitoring

#### **A) Ambient Noise Level Testing Standards**

Ambient Noise level Monitoring or Noise pollution Measurement within the industrial zone at ambient conditions. (e.g. Near Main Gate, Near Canteen, Near Manufacturing plant etc.) As per Central Pollution Control Board (as per Factory act 1948):

Limits or acceptable noise level during Day time for Ambient Noise < 75 dB and Limits during Night time for Ambient Noise < 70 dB.

#### **B) In-plant Noise level Testing Standards**

In-plant Noise level means Sound level measurement allocated in the plant. As per Central Pollution Control Board (as per Factory act 1948) Limits for In-plant Noise level < 90 dB.

[Learn more about Workplace or Office Environment Monitoring for employee health and safety](#)

### **Noise Monitoring & Testing Company:**

Perfect Pollucon Services is a leading **Noise Level Testing Company** in India. We have highly trained and highly experienced professionals who can take care of Noise level Monitoring or testing.

### **Noise level Monitoring Procedure:**

Noise level measurement procedure are processes which record sound level or acoustic energy level in the specified area. Sound or Noise level meter measures noise in Unit decibel (dB). We will see what are important factors to keep in mind while measuring noise level.

## **Noise Level Monitoring Instruments:**

Below are some of the popular Noise Level Meter Instruments available in market:

1. **Brüel & Kjær 2250 Handheld Sound Level Meter:** Known for its precision and versatility, it offers advanced functionalities and is widely used in professional applications.
2. **SVANTEK SV 971 Sound Level Meter:** Highly regarded for its compact design, ease of use, and robust features, suitable for various noise measurement tasks.
3. **RION NA-28 Sound Level Meter:** Renowned for its accuracy and user-friendly interface, it is ideal for professional noise measurements.
4. **Extech 407730 Digital Sound Level Meter:** A budget-friendly option with good accuracy and user-friendly features for general noise measurements.
5. **TES-1358 Sound Level Meter:** Known for its affordability and portability, making it a suitable choice for basic noise level measurements.
6. **Cirrus Optimus+ Sound Level Meters:** Offers a range of models with advanced features for different applications, known for their reliability and precision.
7. **3M Quest EDGE Personal Noise Dosimeter:** Designed for personal noise exposure monitoring, providing accurate data for compliance assessments.
8. **Casella CEL-633A1 Sound Level Meter:** Offers a wide dynamic range and real-time octave band analysis, suitable for detailed noise studies.
9. **Testo 815 Sound Level Meter:** A compact and reliable option for general noise level measurements.
10. **Norsonic Nor131 Sound Level Meter:** Known for its ruggedness and high-quality measurements, suitable for various industrial applications.

## **Noise Pollution Monitoring System using IoT:**

A noise pollution monitoring system utilizing IoT technology represents a cutting-edge approach to addressing the challenges posed by excessive noise in urban environments. By deploying a network of smart sensors equipped with noise detectors, this system continuously gathers real-time acoustic data from various locations.

This data is then transmitted to a centralized platform via the Internet, where it is processed, analyzed, and visualized in user-friendly interfaces accessible to

relevant stakeholders, such as local authorities, environmental agencies, and the general public.

By harnessing the power of IoT, this monitoring system empowers cities to identify noise pollution hotspots, enact timely interventions, enforce noise regulations, and engage in evidence-based urban planning to create healthier and more liveable urban spaces.

### **Noise Monitoring / Testing Services:**

We offer Noise monitoring services to measurement noise pollution for D.G. stacks, traffic, machines etc. Our professionals use technically advanced monitoring and analysis tools. We offer Noise Quality monitoring services as per national standards and regulations backed up by timely execution, efficient professionals and cost-effectiveness.

We offer Noise testing services in customized options for 24 hours and multiple sites as per demands of our clients, environmental agencies, furnace units, chemical plants and conveying units.

### **Our Special Features for Noise Testing Services:**

- Cost competitiveness
- Eco friendly
- Time adherence
- Legal compliance