

TECHNICAL DATA



- A, C and Z frequency weighting
- Fast, Slow and Impulse time weighting
- Compact design with flexible armband and belt clip for long-term monitoring
- Designed to meet noise survey requirements for OSHA, MSHA, DoD, ACGIH, ISO85, and ISO90 standards
- USB interface for PC software
- Real-time clock with date and time stamping
- Selectable sampling interval (1 second to 23:59:59)
- Low battery indicator and auto shut-off
- Includes dosimeter, microphone with clip, windshield ball, flexible armband, fastener for armband with screw, belt clip with screws, USB cable, carrying case and battery

Applications

- Personal accumulated noise exposure
- Construction sites
- Ensuring safe working conditions
- Code enforcement
- Traffic
- Recording of acoustic levels for environmental impact studies

This personal Noise Dosimeter is designed for occupational and environmental noise monitoring. It measures and calculates key exposure metrics including Time-Weighted Average (TWA) and Noise Dose [%], with configurable exchange rate, criterion level, and threshold level settings. The instrument also captures peak sound pressure levels and provides comprehensive data logging to support regulatory compliance and workplace safety assessments.

Features

- Noise dosimeter, sound level meter and data logger
- Measures SPL, Dose%, LPMAX, LPMIN, PKMAX, LEQ, SEL, LEP8, TWA8, LVAG, LN5%, LN10%, LN50%, LN90%, and LN95%
- Calculates Noise Dose [%] for personal sound exposure monitoring



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Specifications

Measurement Type: Sound Pressure Level: dB (SLM)
 Personal Noise Exposure: Dose % (NDM)
 Measurement Mode (NDM): SPL, Dose%, LPMAX, LPMIN, PKMAX, LEQ, SEL, LEP8, TWA8, LVAG, LN5%, LN10%, LN50%, LN90%, LN95%

Measurement Mode (SLM): SPL, LEQ, SEL, PKMAX

Measuring Range(s): 30-140dB (A)
 35-140dB (C)
 0-140dB (Z)

Dynamic Range: 60dB

Accuracy: ± 1.5 dB (94dB 1kHz)

Resolution: 0.1 dB/%

Response Time: 1sec

Frequency Range: 20Hz to 8kHz

Frequency Weighting: A, C, Z

Time Weighting: Fast/Slow/Impulse

Microphone: 0.5" (12.7mm)
 electret condenser

General Specifications

Display: 999999-Count LCD

Display Refresh Rate: 1 Time/sec

Datalogging Capabilities: Yes

Real-Time Clock and Date Stamp: Yes

Selectable Sampling Rate: Yes (1 second to 23 hours, 59 minutes and 59 seconds)

Internal Memory: 1,000,000 records (SLM) / 10,000 records (NDM)

Auto Shut-off: Yes (after 15 mins/off)

Belt and Armband Clip: Yes

Tripod Mountable: Yes

Low Battery Indicator: Yes

Power Supply: 9V battery

PC Connectivity: USB Cable (USB-C)

Software: PC Software

Software OS Compatibility: Windows 7/8/10/11

Dose Standard Modes: Occupational Safety and Health Administration (OSHA, USA), Mine Safety and Health Administration (MSHA, USA), Department of Defense (DoD, USA), American Conference of Governmental Industrial Hygienists (ACGIH, USA), ISO85/ISO90 (Europe), User Defined

Product Certifications: CE, IEC 61252-1993, IEC 61672-1-2002, ANSI S1, 25-1992, ANSI S1,4-1983, ANSI S1,43-1997

Operating Temperature: 41 to 104°F (5 to 40°C)

Storage Temperature: 14 to 140°F (-10 to 60°C)

Operating Humidity Range: <80%

Dimensions: 4.4 x 2.6 x 1.3" (113 x 65 x 34mm)

Weight: 5.6oz (245g)

Model	Description
R8086	Noise Dosimeter
REED-WB2	Windshield Ball for Noise Dosimeters
CA-05A	Small Soft Carrying Case
R8888	Medium Hard Carrying Case
R8090	Sound Level Calibrator
R8086-NIST	Noise Dosimeter w/Calibration Certificate