# NoiseMeters

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# **Optimus Red - Occupational Noise Sound Level Meter**



#### **Features**

- Meets noise regulations and guidelines
- Measures Leq, Lavg and LPeak
- Quick and easy to use
- Bluetooth and mobile app
- Single range 20 to 140 dB

#### **Applications**

- Occupational noise surveys
- Hearing protection
- Noise exposure assessments

#### Overview

The Optimus Red sound level meter is for measuring sound levels in factories and other work environments in line with the occupational noise regulations.

Let the meter take the strain - The Optimus Red has been designed specifically for occupational noise measurements. Rather than being a general purpose meter that leaves you trying to select the correct measurement range and parameters, the Optimus Red does it all for you, measuring all the measurements that you might need now and in the future.

**Lower cost** meters are available (even within our range), but they may not meet the standards demanded by the regulations and will not be Integrating as required for some occupational noise measurements. They will certainly not be so powerful or easy to use.

#### **Buying the Right Meter**

Most occupational noise regulations state that you should use at least a Class 2 Integrating Sound Level Meter that provides you with measurements of LAeq and LPeak. The meter should be verified by a suitably equipped laboratory when new and every year or two years. You also need a Calibrator to check the meter's function before making measurements.

#### Our Recommendation

For basic occupational noise measurements, we recommend the standard Optimus Red Class 2 (order code CR162A) with Calibrator (order code CR514). These parts can be ordered together as Noise Measurement Kit CK162A

If you prefer to have data logging with download to a computer and reporting, please see the Optimus Red with Data Logging. For more detailed analysis and hearing protector selection see the Optimus Red with Octave Band Filters.

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## **Specifications**

Standards IEC 61672-1:2013 Class 1 or Class

IEC 61672-1:2002 Class 1 or Class

2 Group X

IEC 60651:2001 Type 1 I or Type 2 I IEC 60804:2000 Type 1 or Type 2 IEC 61252:1993 personal sound

exposure meters

ANSI S1.4 -1983 (R2006), ANSI S1.43 - 1997 (R2007), ANSI

20dB to 140dB RMS single range

<18dB(A) Class 1, <21dB(A) Class

S1.25:1991

IEC 61260:1996 & ANSI

S1.11-2004

DIN 45657:2005-03

Measurement

Noise floor

Range

RMS & peak : A, C, & Z measured Frequency weightings

simultaneously

Time weightings Fast, Slow & Impulse measured

simultaneously

Three simultaneous "virtual" noise Integrators

EC, Custom

meters. Integrator 1 is preset to Q3 for Leg functions. Integrators 2 & 3

can be configured with the following

1 to 12 hours in 1 hour steps

Exchange rate 3. 4 or 5 dB

70dB to 120dB (1 dB steps) Threshold

Time weighting None or Slow 70dB to 120dB (1 dB steps)

Criterion level Criterion time Integrator quick

EU, OSHA HC & OSHA NC, OSHA HC & ACGIH, MSHA HC & MSHA

settings

Size 283mm x 65mm x 30mm Weight

300gms/10oz

Power 4 x AA alkaline

> Typically 12 hours with alkaline AA Typically 20 hours with lithium AA

non-rechargeable

External power: 5v-15v via MultilO socket via ZL:171 cable (2.1mm

socket)

Outputs AC & DC output via ZL:174 (2 x

Phono, 1m)

Multi-pin IO for external power via ZL:171 cable (2.1mm socket) Bluetooth BLE compatible with Anrdoid and iOS devices

Material: high impact ABS-PC with Case

soft touch back and keypad

1/4" Whitworth socket Tripod mount

Environmental Temperature: Operating -10°C to +50°C, storage -20°C to +60°C

Humidity: Up to 95% RH non-

condensing

Electromagnetic IEC 61672-1:2002, IEC

61672-2:2003, IEC 61672-1:2013 & performance

IEC 61672-2:2013

Except where modified by EN

61000-6-1:2007 & EN 61000-6-1:2007

Language English, French, German, Spanish,

Options Italian

Display functions LXY, LXYMax, LXYMin, LXeq,

> LCPeak, LZPeak, LCeq-LAeq, LXE Graph of short LAeq, LCPeak, TWA, dose%, est dose%

Measurement run time

where x=A, C, Z; y=F, S, I

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Main site:

https://www.noisemeters.ca

Product shortcut:

https://www.noisemeters.ca/p/cr162a/

Tech Support:

https://support.noisemeters.com