# **Optimus Green - Environmental Noise Meter**



#### **Features**

- Audio recording
- VoiceTag notes
- Single measurement range 20 to 140 dB
- Weatherproof Outdoor Kit available

### **Applications**

- Environmental Noise Surveys
- Mixed industrial and residential areas
- Noise ordinance and community noise assessments

#### Measure All, Miss Nothing

The Optimus range of meters measure all parameters at the same time, so there is no need to spend time figuring out if you have the meter set up correctly before starting a measurement.

The Optimus Green sound level meter is available as either Class 1 or Class 2 - the most common for environmental noise measurement and more accurate being Class 1. This meter also has everything needed for occupational noise measurement in line with the Noise at Work regulations, making it ideal for anybody involved in both environmental (outside the factory) and occupational (inside the factory) noise.



#### **Outdoor Kit Option**

If the meter is to be left unattended in poor weather conditions then the optional Outdoor Kit should be used to offer protection against the elements.

The Outdoor Kit also includes a large rechargeable battery pack for at least seven days of monitoring.

#### Our Recommendation





Most environmental noise surveys demand the use of a Class 1 Sound Level Meter that can make repeating measurements, such as the 5 minute LAeq and L90 (background noise).

We recommend the Class 1 Optimus Green with Data Logging in a Noise Measurement Kit, order code **CK1710**). Most regulations demand the use of a suitable Calibrator, which is included with this kit.

#### Tonal Noise?

If there is any tonal content to the noise, or if you just need to make an analysis of the frequency content, please see:

- Optimus Green with 1/3 Octave Band Filters
- Optimus Green with Tonal Noise Detection

# **NoiseMeters**

## **Optimus Green - Environmental Noise Meter**

# **Specifications**

Standards IEC 61672-1:2013 Class 1 or Class 2

IEC 61672-1:2002 Class 1 or Class 2 Group

**XIEC** 

IEC 60651:2001 Type 1 I or Type 2 I IEC 60804:2000 Type 1 or Type 2 IEC 61252:1993 Personal Sound Exposure

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

20dB to 140dB RMS Single Range

1997 (R2007) ANSI \$1.25:1991

Measurement Range

Noise Floor

<18dB(A) Class 1, <21dB(A) Class 2 Frequency Weightings RMS & Peak : A, C, & Z Measured Simultaneously

Fast, Slow & Impulse Measured Time Weightings

Simultaneously

Memory Time History

4GB with 32GB factory fit option 10ms, 62.5ms, 125ms, 250ms, 1/2 sec, 1

VoiceTag Audio Up to 30 seconds of audio notes with each

measurement

Bluetooth

BLE compatible with Android and iOS

Mobile applications available from Google

Play and the App Store

Audio Recordina

Off, Manual, Threshold Triggered, Advanced

Studio Quality - 96kHz/32bit WAV format High quality - 48kHz/24bit WAV format Standard quality - 16kHz/16bit WAV format

Pre-Trigger function

Integrator Quick

settinas Ln Statistical Values EU, OSHA HC & OSHA NC, OSHA HC & ACGIH. MSHA HC & MSHA EC 14 independent statistical Ln values calculated from 1/16th LAF

7 preset to L1.0, L5.0, L10.0, L50.0, L90.0,

L95.0 & L99.0

Measurement control

Manual, 1 min, 5 min, 10 min, 15 min, 30

mins, 1 hour, Lden

Automatic Synchronisation & Repeat Pause & Back Erase with user selectable

duration

Size: 283mm x 65mm x 30mm **Dimensions** 

Weight: 300gms/10oz

Battery: 4 x AA Alkaline Power

Typically 12 hours with Alkaline AA Typically 20 hours with Lithium AA Non-

Rechargeable

Connections USB Type B to PC

AC & DC Output via ZL:174 (2 x Phono, 1m)

Multi-pin IO for external power via ZL:171

cable (2.1mm socket)

External Power: 5v-15v via MultilO socket

via ZL:171 cable (2.1mm socket)

Case Material: High Impact ABS-PC with soft

touch back & keypad Tripod Mount 1/4" Whitworth socket

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 & IEC 61672-2:2013

Except where modified by EN 61000-6-1:2007 & EN 61000-6-1:2007

English, French, German, Spanish. Language options

Displayed Functions LXY, LXYMax, LXYMin, LXeq, LCPeak,

LAPeak, LZPeak, LCeq-LAeq, LXE, LAleq Graph of Short LAeq, LCPeak

Integrators 2 & 3: TWA, Dose%, Est Dose%

Measurement Run Time

14 Statistical Ln values

Stored Functions LXYMax & Time History of LXYMax

LAeq, LCeq, LZeq, LCPeak, LZPeak,

LAPeak, LAleq

Time History of LAeq, LCeq, LZeq, LCPeak,

LZPeak, LAPeak, LAleq

Integrators 2 & 3: Lavg , TWA. %Dose

Time History of Lavg

Ln Values: 14 independent statistical values Audio recording during measurement

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

### **Head Office**

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### Web Sites

Main site:

https://www.noisemeters.asia

Product shortcut:

https://www.noisemeters.asia/product/cr/optimus/green/ cr1700/

Tech Support:

https://support.noisemeters.com