

## 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 Type 1 or Type 2 - the most common for environmental noise measurement and more accurate being Type 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 Type 1 Sound Level Meter that can make repeating measurements, such as the 5 minute LAeq and L90 (background noise).

We recommend the Type 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

## Optimus Green - Environmental Noise Meter

### Specifications

|                           |  |                     |  |
|---------------------------|--|---------------------|--|
| Standards                 | IEC 61672-1:2013 Class 1 or Class 2<br>IEC 61672-1:2002 Class 1 or Class 2 Group<br>XIEC<br>IEC 60651:2001 Type 1 I or Type 2 I<br>IEC 60804:2000 Type 1 or Type 2<br>IEC 61252:1993 Personal Sound Exposure Meters<br>ANSI S1.4 -1983 (R2006), ANSI S1.43 - 1997 (R2007)<br>ANSI S1.25:1991 | Dimensions          | Size: 283mm x 65mm x 30mm<br>Weight: 300gms/10oz   |
| Measurement Range         | 20dB to 140dB RMS Single Range   | Power               | Battery: 4 x AA Alkaline<br>Typically 12 hours with Alkaline AA<br>Typically 20 hours with Lithium AA Non-Rechargeable   |
| Noise Floor               | <18dB(A) Type 1, <21dB(A) Type 2   | Connections         | USB Type B to PC<br>AC & DC Output via ZL:174 (2 x Phono, 1m)  |
| Frequency Weightings      | RMS & Peak : A, C, & Z Measured Simultaneously   |                     | Multi-pin IO for external power via ZL:171 cable (2.1mm socket)<br>External Power: 5v-15v via MultiIO socket via ZL:171 cable (2.1mm socket)   |
| Time Weightings           | Fast, Slow & Impulse Measured Simultaneously   | Case                | Material: High Impact ABS-PC with soft touch back & keypad<br>1/4" Whitworth socket  |
| Memory                    | 4GB with 32GB factory fit option   | Tripod Mount        |  |
| Time History              | 10ms, 62.5ms, 125ms, 250ms, 1/2 sec, 1 sec, 2 sec  | Environmental       | Temperature: Operating -10°C to +50°C, Storage -20°C to +60°C<br>Humidity: Up to 95% RH Non Condensing   |
| VoiceTag Audio            | Up to 30 seconds of audio notes with each measurement  | Electromagnetic     | IEC 61672-1:2002 & IEC 61672-2:2003<br>IEC 61672-1:2013 & IEC 61672-2:2013<br>Except where modified by EN 61000-6-1:2007 & EN 61000-6-1:2007   |
| Bluetooth                 | BLE compatible with Android and iOS devices.<br>Mobile applications available from Google Play and the App Store   | Language options    | English, French, German, Spanish.  |
| Audio Recording           | Off, Manual, Threshold Triggered, Advanced Trigger<br>Studio Quality - 96kHz/32bit WAV format<br>High quality - 48kHz/24bit WAV format<br>Standard quality - 16kHz/16bit WAV format<br>Pre-Trigger function  | Displayed Functions | LXY, LXYMax, LXYMin, LXeq, LCPeak, LAPeak, LZPeak, LCeq-LAeq, LXE, LAeq<br>Graph of Short LAeq, LCPeak<br>Integrators 2 & 3: TWA, Dose%, Est Dose%   |
| Integrator Quick settings | EU, OSHA HC & OSHA NC, OSHA HC & ACGIH, MSHA HC & MSHA EC  |                     | Measurement Run Time<br>14 Statistical Ln values   |
| Ln Statistical Values     | 14 independent statistical Ln values calculated from 1/16th LAF<br>7 preset to L1.0, L5.0, L10.0, L50.0, L90.0, L95.0 & L99.0  | Stored Functions    | LXYMax & Time History of LXYMax<br>LAeq, LCeq, LZeq, LCPeak, LZPeak, LAPeak, LAeq<br>Time History of LAeq, LCeq, LZeq, LCPeak, LZPeak, LAPeak, LAeq<br>Integrators 2 & 3: Lavg, TWA, %Dose<br>Time History of Lavg<br>Ln Values: 14 independent statistical values<br>Audio recording during measurement |
| Measurement control       | Manual, 1 min, 5 min, 10 min, 15 min, 30 mins, 1 hour, Lden<br>Automatic Synchronization & Repeat<br>Pause & Back Erase with user selectable duration  |                     | where x=A, C, Z; y= F, S, I  |

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#### Web Sites

Main site:

<https://www.noisemeters.com>

Product shortcut:

<https://www.noisemeters.com/product/cr/optimus/green/cr1700/>

Tech Support:

<https://support.noisemeters.com>