

# CR:250

# Sound Level Meters

**Cirrus**  
Research plc  
dedicated to noise measurement

- **Type 1 CR:251B & Type 2 CR:252B**
- **'A' & 'C' Frequency Weighting**
- **Fast, Slow & Impulse Time Weightings**
- **Sound Level,  $L_{max}$  & Display Hold**
- **AC & DC Signal Outputs**

## Introduction

The CR:250 Series of Sound Level Meters is a range of robust, easy to use instruments that have been designed to meet the needs of the user who demand performance in a simple package.

The range consists of the Type 2 CR:252B and the Type 1 CR:251B instruments, both of which meet the specifications of IEC 60651:1979. Designed for field use, these Sound Level Meters have robust metal cases, with clear, simple controls and an easy to read display.

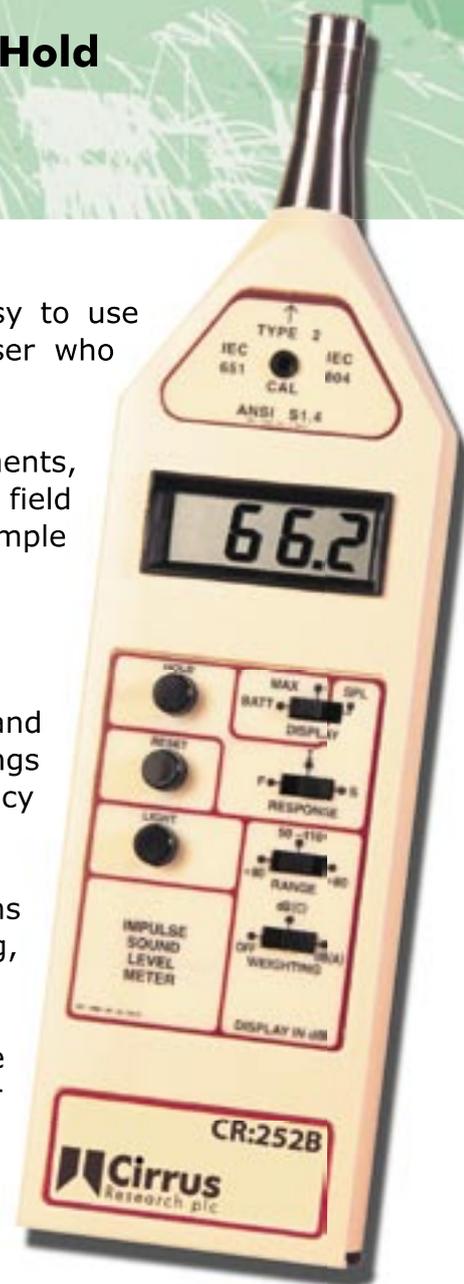
## Features & Applications

The instruments provide the measurement of Sound Level (SPL) and Maximum Sound Level ( $L_{max}$ ). Fast, Slow or Impulse Time Weightings can be applied to these functions, as well as dB(A) or dB(C) Frequency Weightings.

The CR:250 Series can be used in many industrial hygiene applications as well as for general noise measurements such as vehicle noise testing, fire alarm installation and product development.

In addition to these measurement functions, the units also allow the battery level to be shown and the display to be illuminated, useful for measurements in low light conditions.

The AC and DC outputs allows these instruments to be used as a front end for additional measurement systems. The outputs also allow the instruments to be used in simple remote measurement systems.



**CR:252B & CR:251B Sound Level Meters**

# CR:250

## Ordering Information

The CR:25B & CR:251B Sound Level Meters are supplied with an operating manual, a certificate of calibration, batteries and a calibration screwdriver.

The instruments can be ordered as complete measurement kits which includes all of the accessories needed to carry out a noise measurement.

The measurement kits are the CK:252B and CK:251B for the CR:252B and CR:251B respectively. The measurement kits contain the Sound Level Meter (CR:252B or CR:251B), a CR:511E Acoustic Calibrator, a UA:237 Windshield and a CK:250 Carrying Case along with the standard accessories included with the Sound Level Meter.

The measurement kits also includes certificates of calibration and operating manuals along with batteries for both the Sound Level Meter and the Acoustic Calibrator.

If the measurement kit is not required, a carrying pouch, the CP:65, is also available which protects the instrument from damage during transit.

## Specification

**Applicable Standards** CR:252B - IEC 60651:1979 Type 2  
CR:251B - IEC 60651:1979 Type 1

**Microphone** Class+ 1/2" Prepolarised Free Field Electret Condenser

**Time Weightings** 'F' (Fast), 'S' (Slow) & 'I' (Impulse) to IEC 60651:1979

**Frequency Weightings** dB(A) & dB(C)

**Measurement Range**  
CR:252B 32dB(A) to 140dB(A)  
43dB(C) to 140dB(C)  
CR:251B 25dB(A) to 140dB(A)  
43dB(C) to 140dB(C)

**Measurement Functions** Sound Level, Maximum Sound Level (L<sub>AFmax</sub>), Display Hold

**Display type** 3½ digit reflective LCD

**Display flags** Overload, Maximum Hold

**Batteries** 2 x 9V battery (6F22)

**Battery Life** 40 Hours

**Environmental**  
Operating -10°C to +50°C  
Storage -20°C to +60°C

**Dimensions**  
Length CR:252B 255mm, CR:251B 325mm  
Width 75mm  
Depth 36mm

**Weight** CR:252B 440gms  
CR:251B 480gms

**Outputs** AC - 2.2v for FSD  
Log DC - 25mV/dB

**Measurement Kits** CK:252B Type 2 or CK:251B Type 1 containing  
Sound Level Meter  
CR:511E Acoustic Calibrator  
UA:237 Windshield  
CK:250 Carrying Case



dedicated to noise measurement

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**Your Cirrus Distributor:**

**CR:252B & CR:251B Sound Level Meters**