

CLASS 2 INTEGRATING SOUND LEVEL METER WITH MEASUREMENT PROTOCOLS

- **Class 2 integrating sound level meter**
- **Step by step guide through the protocols, while carrying measurements.**
- **Measures all parameters simultaneously**
- **Single scale**
- **Large 3.2" high resolution screen**
- **Only 3 operating keys (Soft key) and 1 ON/OFF key**
- **Powered by USB (cable not included)**
- **APPLICATIONS: Motor vehicles, Leisure and community noise levels, Workers' exposure, Machine noise, Acoustic power level or Traditional integrating sound level meter**



SC-102 sound level meter general description

The **SC-102** is more than just a noise measuring instrument as it not only carries out the measurements, but also the checks and calculations required by the standards, to get the final result, in situ.

It is the first integrating sound level meter with measurement protocols which simplifies the process of obtaining results to the maximum. It guides the user, step by step through the measurement process.

The **SC-102** adapts to the needs of each user as it enables the measurement protocol to be chosen for the following applications: motor vehicles (correction by area and by points), leisure and community, risks at work, machinery (pressure), machinery (power) or sound level meter (traditional). The user simply follows the procedure indicated by the **SC-102**, to obtain the final result. Measuring noise has never been so easy!

Multiple measurement protocols

Motor vehicles

The **SC-102** guides the user through the measurement protocol, according to directives 70/157/CEE, 78/1015/CEE and 97/24/CE (automobiles, public transport vehicles, goods vehicles, motorcycles, mopeds, three-wheeled vehicles, and quads).

Leisure and Community

Application to assess the level of noise pollution produced by traffic, businesses (pubs, bars, shops, workshops, companies, etc.) and neighbours. The application tests, averages and corrects by area (background noise) the values measured in real time.

Risks at work application

This application is designed to assess the noise level to which a worker is exposed during the day. It enables the assessment to be based on working days, jobs or tasks, as recommended by the Technical Guide for the assessment and prevention of risks related to the exposure of workers to noise (ISO 9612). In addition, it will assess the PPI used by the workers in accordance with the HML and SNR methods.

Machinery: sound pressure level application

It is ideal for pre-certifying and certifying the machines by the manufacturer or a separate laboratory and incorporating the information into the machine's instruction manual. Measurement procedure described in directives 2005/88/CE and 2006/42/CE and the standard ISO 11202.

Machinery application: sound power level

It measures the sound power levels of noise sources (machines) in accordance with the standard ISO 3746. The manufacturer can obtain the measurement and thus be able to include it in the instruction manual (2006/42/CE) and to affix an indication of the guaranteed sound power level (2005/88/CE) on to the machine. The **SC-102** carries out the calculations and checks automatically.

Sound level meter application

This application is based on the typical operation of the traditional integrating sound level meter. It is ideal to comply with any sort of regulation which requires the assessment of overall sound pressure levels, as it measures instantaneous values, averages and maximum/minimum values over the measurement period.

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SPECIFICATIONS	SC-102 INTEGRATING SOUND LEVEL METER WITH MEASUREMENT PROTOCOLS
Certificates and standards	UNE-EN 61672-1:02 class 2, UNE-EN60651:96 (A1:97) (A2:03) class 2, UNE-EN 60804:02 type 2 EN 61672-1:02 class 2, IEC 60651:01 class 2, IEC 60804:00 type 2 ANSI S1.4:83 (R2001) type 2, ANSI S1.43:97 (R2002) type 2, ANSI S1.11:04 CE Mark. Complies with low voltage directive 73/23/CEE and directive CEM 89/336/CEE modified by 93/68/CEE
Measurement range For L_F , L_S , L_T and L_t Upper limit Lower limit For L_{peak}	137 (A weighting) // 137 (C weighting) 27.8 (A weighting) // 29.6 (C weighting) Linear margin of measurement: 66-140 dB
Noise Electrical noise Maximum Typical Total noise (electrical + thermal microphone) Maximum Typical	20.2 (A weighting) // 22.2 (C weighting) 14.5 (A weighting) // 16.7 (C weighting) 29.8 (A weighting) // 34.1 (C weighting) 25.7 (A weighting) // 29.7 (C weighting)
Peak detector L_{peak} Onset time constant	< 75 μ s
Microphone Equivalent impedance Nominal sensitivity	1/2" condenser microphone with preamplifier incorporated. 3000 Ω 16 mV/Pa in reference conditions
Frequency weighting	Complies with standard IEC 61672 class 2. A and C weightings
Time weighting	L_F , L_S , conforms to class 2 tolerances
Resolution	0.1 dB
Influence of vibrations	For frequencies from 20 to 1000 Hz and 1 m/s ² : <75 dB(A)
Power supply Typical duration	Two 1.5 V AA (LR6) batteries 24 h (with continuous use)
Mechanical features Dimensions Weight	82 mm (W.) x 291 mm (H.) x 20 mm (D.) 463 g (with batteries) / 413 g (without batteries)