

DB 300/2
Sound level meter

CE

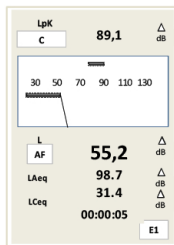
Integrating-averaging with storage function



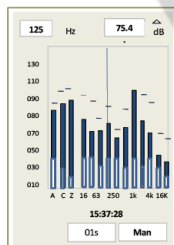
Class 2

The **DB300/2** sound level meter extends the range of classical and integrator sound level meters. It respects the most recent international standards and brings to the user a high comfort in use. From the simple sound level measurement to the frequency analysis in real time, **DB300/2** covers the most applications in the finding of solutions to get better the noise environment. **DB300/2** stores the measurement datasets that can be then transferred in a computer with the LDB23 software.

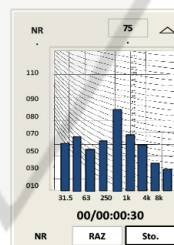
Main measured values



- Weighted noise level : **LXY**
- Equivalent continuous level : **LXeq**
- Peak pressure level : **LUpk**
- Noise exposure level : **LXE**



Real time analyser by octave bands – **31.5 Hz to 8 kHz**



Values and graphic representation of the **NR** comfort criteria

I/O interface

- Detection of sensitive levels for alarm activation
- DC analogue output : 0-10 V : 0 -137 dB
- Ordered measurement start

Audio recordings on threshold

- Audio recording of audio files on detection of LXeq or LUpk levels

Other information

- Maximum and minimum values, peak values
- Statistical distribution of the measured values : L01 – L10 – L50 – L90 – L95



Business application

- Environment
- Monitoring and emergencies
- Industry
- Noise spectrum 1/1 octave – optional : 1/3 octave
- Noise of machines and NR evaluation curves
- Process monitoring, conformity check
- Noise at workstation

Data visualization

DB300/2 is supplied with the **LDB23** software allowing data visualization and measurement report printing.



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+982144584619

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Technical features

Standards

Sound level meter : NF EN 61672-1 (2002) – NF EN 60651 (1979) – NF EN 60804 (2000) – CEI 61260
CE conformity : EN 61010 – EN 61000 generic and as per product standard

Metrology

Accuracy : Class 2 - NF EN 61672-1
Microphone type : Electret – ½" - Sensibility : 45 mV/Pa
Measuring type : Free field
Measurement dynamic : Lp / Leq : 107 dB - Lpk : 57 dB
Single dynamic range Lp and Leq / Lpk : 30-137 dBA / 35-137 dBC (Z) / 83-140 dBC (Z) – Leq : 25-137dB (filters by octave bands 31.5 Hz-8 kHz)
X frequency weightings : A – C – Z
Multi-spectrum frequency analysis : Real time filters by octave bands : 31.5 Hz // 8 kHz – 1/3 octave optional bands : 25 Hz // 10 kHz
Y frequency weightings : F (fast) – S (slow) – I (impulse) – U (peak)
Logging time for short Leq (DI) : 1/16s – 1/8s – 1/4s – 1/2s – 1s to 60 s (step of 1 s)

Measured values : LX_Y – LX_Ymax – LX_Ymin - LX_{eq,T} – LX_{eq,DI} – LX_E – LX_{eq,DI}max – LX_{eq,DI}min
Statistic indices LXN on LA_{eq} and LC_{eq} samples : L01 – L10 – L50 – L90 – L95 – resolution 1 dB. Others on LDB23 software.
Simultaneous measured values : All according to LX_Y conventional mode or LX_{eq} integrator mode.
Detection and percentage of overload : Graphic alarm and calculation of percentage during the storage.

Sound level meter

Preamplifier	removable – extensions of 3 – 5 – 10 m on request
Screen	graphical display 240 x 160 pixels – LCD monochrome 16 levels – digital and analogue display – 3D effect on display
Keypad	8 sensitive keys
Clock	permanent, saved by internal battery – accuracy better than 0.005%
Memory module	removable Micro SD card 2Go
Environment	from -10 °C to +50 °C
Humidity	from 0 to 90% RH
Size (L x l x e)	270 x 70 x 40 mm
Weight (batteries included)	355 gr
Fixing	Insert at rear for fixing on tripod

Operating

Measurement modes : conventional and start/stop integrator – integrating analyser with storage – NR comfort criteria – S1 + S2 calculator
Storage and measurement capacity :
- Lp-Leq start/stop mode : unlimited
- Leq with storage mode : according to the elementary logging time (from 1/16e s to 60s)
- Memory capacity with frequency analysis by full octave bands :
• Base Leq 1 s : 135 days to share from 1 to 999 periods.
• Base Leq 1/16° s : 8 days to share from 1 to 999 periods.
Audi recordings on threshold
Recording on detection of LX_{eq} or LC_{pk} programmable levels – Sampling : 12 kHz – 16 bits : total duration of recording : 45 mn – file format : *.wav

I/O interface :
DC output : 0-10 V / 0-137 dB
Output for alarm activation : TTL level 3.3 V
Measurement start by electrical order : 0-5 V DC max



Measurement launching
By keypad or I/O mode

Power supply – Autonomy
Rechargeable Li-Ion battery : minimum autonomy : 24 hours at 20 °C – 3 AA alkaline batteries can be also used (the autonomy is reduced) – mains adapter.

Guarantee : 2 years

Supplied with...

- Li-Ion battery – 3 x AA batteries coupling device – Windscreen
- Transport case
- USB charger - adapter
- Calibration certificate
- USB transfer cable
- User manual
- LDB23 software

Optional accessories

- Extensions for preamplifier : 3 – 5 – 10 m
- Tripod
- Acoustic calibrator class 1 (NF EN 60942:2003) type : **CAL300**
- Jack cables for I/O interface
- **LDB300** : specific software for the industry, environment for elaborated data processing



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