DS 300
DOSIMETER

Individual noise dosimeter

CE

PRESENTATION

DS300 instrument allows to determine sound exposure level on workstation in compliance with Statutory Instrument and effective standards : 2003/10/CE Directive and NF S 31-084.

KEY POINTS

- Only one extended dynamic range of 100 dB **: 40-140 dB**
- Conventional **integrating-averaging** hand sound level meter mode
- Frequency analysis by **octave bands from 63 Hz to 8 kHz,** which makes easier the selection of ear protections
- **Two-channel measurement*** allowing the optimal detection of exposure in the case of skewness of the sound environment (right ear/left ear).
- **Audio recording*** on threshold exceeding, peaks or short LAeq allows the identification and the recognition of sound sources.

MEASURED VALUES

- Noise pressure level : **LAF-LAS-Max-min**
- Equivalent continuous level : **LAeq-LCeq-LXeq**
- **Octave bands 63 Hz/8 kHz**
- Sound exposure / Exposure points : **EA,T : in Pa²h**

- Daily sound exposure level (weekly) : **Lex,d**
- Detection and peaks counting : **135 dB, 137 dB, 140 dB**
- **DOSE**

RESULTS & ADDITIONAL INFORMATION

- Maximum, minimum, peak values
- Presence and percentage of first stages overload, measurement duration
- Residual autonomy of battery, remaining measurement capacity
- Instrument supplied with magnetical plate kit and a reliable windshield in order to minimize uncertainties linked to microphone (unstable fixing, cloth friction...).
- Visual alarm according to levels to help wearing individual protections
- Locking of screen, keypad and dosimeter stop

* optional

DATA VISUALIZATION

DS300 dosimeter is supplied with LDS23 software allowing data visualization and printing of measurement report.

SPECIFICITIES FOR INVESTIGATION

➢ Frequency analysis by octave bands from 63 Hz to 8 kHz
➢ Two-channel measurement thanks to two microphonic sensors (optional)
➢ Audio recording : identification, control of noise sources (optional)

STANDARDS

Meet the following standards :
Dosimeter : CEI 61252 (2002) – NF EN 61260 (1996) – NF EN 61672-1 (2003) – CEI 61260-1995/A1 (2001)
Electromagnetical compatibility : Directive 89/336/CEE - EN 61000-6-1 – NF EN 61000-6-2 – NF EN 61000-6-3 – NF EN 61000-6-4 (2001)

TECHNICAL FEATURES

Features	Lq and Lp channels	Peak channel
Accuracy	Class 2	Class 2
Dynamic range V1 only	40-140 dB	93-143 dB
Dynamic range V1and V2	40-120 or 60-140 dB	73-123 or 93-143 dB
Frequency weightings	A and C	C or Z
Filters	8 filters by octave bands from 63 Hz to 8 kHz	
Values	LAF, LAS, max, min, LAeq, LCeq, LXeq, max, min, Lex, d, EAT, DOSE, exposure points	LCpk, LZpk
Simultaneous measurement mode	LAeq – LCeq - LXeq (X : from 63 Hz to 8 kHz)	LCpk or LZpk
Duration of Leq integration	From 1s to 60 s (step of 1s)	
Sound pressure sampling	48 kHz	48 kHz
Detection and peaks counting		135 dB – 137 dB – 140 dB
Microphone	Type electret – diameter 9.5 mm (3/8") – 15 mV/Pa	
Memory module	Integrated type Micro SD 2 Go – Data download by USB cable	
Storage capacity	99 event timers (work station)	
Clock accuracy	Better than 0.01%	
Audio recording (optional)	On micro SD card 2 GO – Maximum duration : 00H50 – Format : 12 kHz/16 bits	
Power supply – Battery life	Internal Li-Ion battery rechargeable Battery life : >28 h and according to configuration	
Operation	From -10 to +50 °C / from 650 to 1080 hPa / from 0 to 95%HR	
Storage	From 0 to 50°C	
Dimensions	117 x 32 x 58 mm	

SOFTWARES

DS300 dosimeter is supplied **with the LDS23 software allowing** :
• files transfer, process and data save
• simplified evaluation of exposure to workstation
• custom prints
• predefined reports

A processing software is also available **as option** : **LDS300**. It allows :
• metrological configuration of measurement
• temporal configuration of measurement (start-stop-event timers...)
• events/tasks coding and written informations during station study
• file visualization
• files transfer, process and data save and management of the equipment pool
• HEG creation
• simulation of partial exposures linked to events (tasks with wearing of PICB, SNR and HML method)
• data calculation suitable with NF S 31-084 / ISO 9612 standards
• custom prints
• predefined reports

D-MB

CAL 200

D-S1

D-S5

SUPPLIED WITH

• Calibration certificate
• Windshield
• LDS23 software
• Microphone fixing kit
• Battery adapter/charger USB type
• Carrying case

Fixing kit

OPTIONAL

• Microphone for channel n° 2
• **CAL200 :** acoustic calibrator
• **LDS300 :** processing software
• **D-MB :** direct microphone
• **D-V5 :** carrying case for 5 instruments
• **D-S1 :** charger and transfer station for 1 instrument
• **D-S5 :** charger and transfer station for 5 instrument