Technical Data Sheet

Pressure / Temperature / Humidity / Air Velocity / Airflow / Sound level

DS 300
DOSIMETER

Individual noise dosimeter

Kimo DS 300 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)

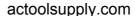⋟ Audio recording : identification, control of noise sources (optional)

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 V1 and 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