

Based on a multiple-point metrologic approach, the technical solution consists in deploying a set of dosimeters in the work place, which are operated using a wireless remote control.

This **simple** and **non-invasive** device is a valuable tool when implementing new regulations.

Dosimeter exposimeter WED

WED consists of a portable, ergonomic and miniaturised housing, hosting the acquisition unit, signal processing, storage and data transfer.

- · Measurement of sound levels in dB(A) and dB(C)
- · Calculation of daily exposure Lex,8h
- · Measurement dynamic range from 40 to 140 dB(A)
- · Counting of 135, 137 and 140 dB(C) peaks
- · Operating life: 50h

dBLEXD, processing software

dBLEXD is used for transfer, process, report and archive data.

- · Compliant with NF S 31-084 and ISO 9612 standards
- Transfer or importation of data
- · Calculation of Lex,8h, coming from HEG
- Taking into account of incertainties
- · Automatic reports

Wireless remote control dBWED

From a PC tablet, the dBWED control software is the interface between the operator and dosimeter WED.

- · Simultaneous control
- configurations
- · Collection of measurement files
- · Real-time display of measured data on a colour screen
- · Programming of start modes
- · Voice comments,



| Standards | CEI IEC 61252 (2002) / ANSI 1.25 (1991) / CEI IEC 61672-1 (2002) CEM Radio ETSI EN 300 328 V1.5.1 (2004) / Emission CEI IEC 61000-6-3 / CEI IEC 61000-6-4 / Reception CEI IEC 61000-6-1 / CEI IEC 61000-6-2 | |
|---|---|---------------------------|
| Metrology | Leq / Lp channel | Peak channel |
| Linearity domain | Class 2 | |
| Linearity domain | 80 dB(A) | 50 dB(C) |
| Dynamic range | 2 40-120 dB(A) / 60-140 dB(A) 45-120 dB(C) / 65-140 dB(C) | 1 (fixed) 93-143 dB(C) |
| Frequency weightings | A and C in // | C or Z |
| Measured magnitudes | LAeq, LCeq, LASp, LAFp LASpmax, LAFpmax, LASeq, LAFeq | LCpk, LZpk |
| Configuration | Tc, Lc, LCutoff, Q (3, 4, 5 and programmable) | 135, 137 and 140 dB |
| Peak counting | | Yes |
| Calculated magnitudes | Lex,d, EAT, Dose, SEL, LAvg, TWA, Lex,8h, projected dose, Lxx | |
| Intégration time | From 1s to 60s | |
| Microphone Operating temperature Dimensions Total weight | Type MCE321 class 2, 10 mV/Pa, 9mm, weight < 10g 0°C /+ 40°C (0-95% HR) 105 x 60 x 25 mm 145 g | |
| Memory module | Integrated flash memory, type Micro SD 2 Go Storage capacity: LAeq (1s) + LCpk > 100 days | |
| General performances | Typical operating life: 50h (standard mode) / 10 Parallel measurement and time history of all indi Pilot light indicating status Integrated self-test Keayboard locking | |

Control software dBWED Control using Tablet PC: configuration management / real-time display / data collection Wireless Bluetooth communication Programmable start modes: immediate / delayed / by periods / by periods Visual display and coding of data on colour screen of Tablet PC Pre-programmed configurations (type ISO85, OSHA,...) Leq mode (Start/Stop) Written comments (synchronised with measurement file) PC-compatible software Languages: English, French Compliant with NF S 31-084 (2002) and ISO 9612 (2009) standards **Processing sofware** Transfer of measurement files **dBLEXD** Import of 01dB measurement sessions (compatible with SIE95/CLS95/*.cmg and *.sip files) Start in simplified mode Visual display of time histories Coding of periods **HEG** management (tasks or operations)

Calculation of noise exposure parameters according to standards

Simulation of ear protection wearing Printing of results as standardised sheets Automatic reports Storage of projects Dosimeter WED including a MCE321 Standard package -type microphone with integrated preamplifier, tie clip and soulder 1m extension cable

Tablet PC

Options

Table charger with main power supply (1 unit or 5 units depending on version) Carrying case dBWED sofware Processing software dBLEXD User manual Vibration calibrator

