

FIELD Environmental Instruments

Equipment Rental and Field Supplies

Casella

**CEL-320 Noise Dosimeter
and Sound Level Meter**

"Your Needs Are Our Business"

Toll-Free
800-393-4009



APPLICATIONS

- Work place noise assessments
- Mobile worker noise exposure monitoring
- Simple noise surveys
- Extended noise surveys
- Compliance with national regulations
- Community noise assessments

FEATURES

- Easy to use for quick start measurements
- Light weight and rugged
- 7 Pre configured set-ups and 13 user selectable configurations
- 50 separate run memories
- High, medium and low ranges for typical industrial and external noise levels
- Direct printing with pre formatted reports
- Lockable keypad for security against tampering
- Field replaceable microphone assembly and cable

The CEL-320 Convertible Noise Dosimeter and Sound Level Meter is based on the popular CEL-420 instrument. It is a compact instrument about the size of a packet of cigarettes, lightweight and rugged for serious use in harsh industrial or external environments.

It has an exceptionally intuitive keypad where the user is guided through a measurement with clear and concise icons using a custom designed liquid crystal display. A simple menu style method of operation ensures that even the novice user will quickly become accustomed to its layout. In fact it only takes a single keypad press to begin a new measurement once the instrument has been configured to suit the user's requirements.

The most popular international configurations are stored in 7 stored set-ups where all the necessary conditions for a measurement are retained even when the meter is switched off. This means that it is only necessary to switch on, calibrate and press the Run key to begin to make measurements straight away.

Standard set-ups are provided for measurements according to the requirements of the OSHA, MSHA, ACGIH and DOD regulations in the USA and the ISO regulations in Europe and other parts of the world. A general-purpose METER set-up for non health and safety applications is also provided. These set-ups can be modified or adapted by the user who needs to have a different set-up and up to 13 will be stored for future use without the need to alter the meter every time it is used.

Up to 50 separate measurement runs can be taken by the dosimeter and these will be saved for later download to a computer or to a printer for on the spot results in standard pre-formatted outputs.

It couldn't be simpler to find out whether your workers are being exposed to high noise levels. The CEL-320 is provided as standard with Windows software for control and download but may also be specified as the CEL-320X without software just using the pre configured set-ups for measurement as a simple dosimeter.

SPECIFICATIONS

Product specification

- Measurement ranges 70- 140 dB, 50-120dB, 30 – 100 dB
- Frequency weightings (RMS) - A & C
- Frequency weightings Peak - C & Lin
- Time weighting - Slow, Fast, Impulse, Peak
- Amplitude weightings (Q factor or exchange rate) choice of 3, 3&4, 3&5 or 3&6
- Two threshold levels – from 70 to 90 in 1 dB steps
- Single criterion level – from 80 to 90 in 1 dB steps

Physical

- Batteries - Single 9V alkaline battery
- Battery life - Approx. 50 hours logging
- Dimensions - 120 x 65 x 30 mm (4.8 x 2.6 x 1.2in)
- Weight - 220 g (8 oz) (with battery)
- Keypad - 10 function keys with easy to follow icons and security lockout

Measured parameters - as a personal noise dosimeter in DATA mode

- Measurement duration, Dur
- Set-up name and configuration
- Actual measured dose%, Dose% (above threshold 1)
- 8 hour projected dose%, Proj% (above threshold 1)
- Time Weighted Average for 8 hours. TWA (above threshold 1)
- Actual measured dose%, Dose% (above threshold 2)
- 8 hour projected dose%, Proj% (above threshold 2)
- Time Weighted Average for 8 hours. TWA (above threshold 2)
- Sound pressure level, SPL
- Daily personal exposure level, Lep,d
- Sound exposure Pa2hr
- Sound exposure level SEL
- RMS maximum level Lmx
- RMS minimum level Lmn
- Peak maximum level Lpk
- Average noise level, Leq (Q=3)
- Average noise level, Lavg (Q=4, 5 or 6)
- Impulse average noise level, LeqI (Q=3)
- 5 Percentile exceedance levels, LN% (N from 0.1 to 99.9%)

Measured parameters - as a sound level meter in SLM mode

- Sound pressure level, SPL
- Average noise level, Leq (Q=3)
- Average noise level, Lavg (Q=4, 5 or 6)
- Impulse average noise level, LeqI (Q=3)
- RMS maximum level, Lmx
- RMS minimum level, Lmn
- Peak maximum level, Lpk
- Measurement duration, Dur

Dosimeter application

- Real time clock showing Date and time
- Run memory containing overall answers for 50 separate runs
- Set-up memory - pre-configured with 7 set-ups available OSHA, MSHA, ACGIH, DOD, ISO85, ISO90, METER
- Set-up memory - user configured with 13 set-ups available configurable with CEL dB10 or dB12 software
- Two simultaneous Thresholds for dose calculation 70 - 90 in 1 dB steps or no threshold
- Criterion level for 100% dose calculation 80 - 90 in 1 dB steps
- Unwanted noise parameters can be de-selected from PC software programs if required for simplicity
- Chosen set-up can be locked from PC software to stop operator choosing the wrong settings by mistake

Display capability

- Noise Parameters selected in Dosimeter or Sound level meter mode
- Date and time
- Measurement duration
- Battery voltage
- Run in progress
- Pause activated
- Active keypad navigation buttons
- Current configuration when in a measurement run
- Display can be switched off without affecting the measurement for added security

Output options

- Output to parallel Centronics printer -
Preformatted report via an active cable C6672 single page depending on the selected set-up
- Direct printout can be by single run at a time or all stored runs with a single key press
- Communication with PC running MS Windows
Control, set-up, download and export using dB10 software (ver 2.0) provided as standard for CEL-320
- Output to computer using CEL-6704 dB12 (Ver 2.0) Windows software and C6671 communications cable as optional items

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