

CEL-320/360 Series Dosimeters & Sound Level Meters

The CEL-320 and CEL-360 series of dosimeters and sound level meters have a wide range of applications from general noise surveys, through the measurement of overall levels of risk in the workplace, to the analysis of environmental noise levels. These instruments are lightweight, rugged and easy to use. All instruments can be connected directly to printers or to PCs for further data processing. They have been designed so that after switching the instrument on and calibrating the instrument, only two key presses are required to begin a measurement, it could not be simpler!

FEATURES

The CEL-300 series of dosimeters are primarily designed for workplace noise applications. Simply perform a field calibration, fit the unit to the operator and start the run. The dosimeter keypad can be locked to prevent tampering during the measurement and once fitted over a belt or in a pocket the unit will collect the noise data automatically. If an employee wears the dosimeter for a working day, the relevant noise exposure values can be read off the instrument at the end of the shift or downloaded as required. The values can then be compared directly to the action levels without any calculations, making noise surveys quick and simple. The CEL-320 personal noise dosimeter is the ideal instrument for compliant dosimetry

measurements. Seven pre-programmed measurement setups are provided to suit measurement standards in use around the world. The CEL-360 gives extra functionality such as timer facilities and logging time history of the noise, ideal for analysing the source of an employee's exposure throughout the day.

INTRINSICALLY SAFE (I.S.) MODELS

Intrinsically Safe versions of the instruments are available meeting the requirements of ATEX EEx ia I M1, EEx ia IIC T4 II 1 G, certificate number 05ATEX2027X. This makes Casella CEL I.S. dosimeters and sound level meters particularly suitable for use in hazardous areas such as mines, printing works, petrochemical plants and other areas that require safe monitoring instruments. To order I.S. versions simply add /IS to the part number of the instrument you require.



CEL-300 Series

Specification

IEC 61252, ANSI S1.25 Noise dosimeter
IEC 60651 - 1979 Type 2*
IEC 60804 - 2000 Type 2*
ANSI S1.4 - 1983 Type S(1)
ANSI S1.43 - 1997

* temperature range 0° to 40 °C

Measured Parameters

Dosimeter mode: L, Lmax, Lmin, Lpeak, Leq, Le, Lavg, Dose%, Projected dose%, LEP,d, 5x LN%, Pa2hr, TWA, Duration
Sound Level Meter mode: L, Leq, Lavg, Le, Lmax, Lmin, Lpeak, Duration

Total measurement range: 30 to 140 (dB) in 3 ranges, 30 to 100, 50 to 120, 70 to 140
Frequency weightings rms: A & C
Frequency weightings Peak: C & Lin (Z)
Time weightings: Slow, Fast & Impulse
Amplitude weightings: Q3, 3+4, 3+5 & 3+6
Thresholds: 70 to 90 (dB 2 settable in 1 dB steps)
Criterion: 80 to 90 (dB) 1 settable in 1 dB steps
Runs stored: 50
Default setups: 7 predefined from OSHA, MSHA, DoD, ACGIH, ISO85, ISO90, METER
User defined setups: 13 available using dB10 or dB12 software
Calibration information: Stores pre and post run calibration date, time and level
Pause during run: Yes
Security: Lockout via keypad or software
Output (Printer): Preformatted report direct to printer via adaptor
Output (P.C.): Control, Setup, Download, from CEL-320 and CEL-360 to dB10 or dB12 software package
Power supply: Battery 9V (PP3), I.S. models require Duracell MN1604 (PP3) or Duracell 'Procell'
Battery life: Typically >35 Hours (>30 Hours on I.S. models)
Size mm (in): 120 x 65 x 30 (4.8 x 2.6 x 1.2)
Weight gm (oz): 280 (9), I.S. models: 380 (12)
Operating temperature range*: 0 - 40°C for an accuracy of <+/-0.5dB

Extra features for CEL-360 models only

Profiles available: At least 220,000
Parameters per profile: Up to 10 maximum
Fixed elapsed timers: 5, 10, 15, 30, 60 min, 2, 4, 8, 10, 12, 16, 24 hours
Delay timers: 16 pairs of start and stop times up to 31 days in advance

Ordering Information

CEL-320 Noise dosimeter with cable microphone c/w dB10 control & download software and PC cable
CEL-320X Noise dosimeter with cable microphone
CEL-320S Sound Level Meter with stalk microphone c/w dB10 control & download software and PC cable
CEL-320SX Sound Level Meter with stalk microphone

CEL-360 Logging Noise dosimeter with cable microphone c/w dB12 control & download software and PC cable
CEL-360X Logging Noise dosimeter with cable microphone
CEL-360S Logging Sound Level Meter with stalk microphone c/w dB12 control & download software and PC cable
CEL-360SX Logging Sound Level Meter with stalk microphone

Intrinsically Safe Models For Intrinsically Safe (I.S.) models, add /IS to the part number. E.g. CEL-360X/IS

Instrument kits Complete kits are available with acoustic calibrator (CEL-110/2), kit case (CEL-6682), windshield (CEL-6625) and instruction manuals. For a complete instrument kit add /K1 to the part number. E.g. CEL-360X/IS/K1.

Other Accesories

CEL-6648 Dosimeter belt pouch
CEL-425 Stalk microphone for use as a sound level meter
CEL-90336 USB adaptor and driver software
CEL-425/IS Intrinsically safe stalk microphone for use as an I.S. sound level meter
C6672/0.5 Printer adaptor for hard copy output
CEL-6681 Cable microphone for use as a dosimeter
CEL-6679 Kit case for 10 dosimeters
CEL-6681/IS Intrinsically safe cable microphone for use as an I.S. dosimeter

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