

# 3M Occupational Health & Environmental Safety Division

## The Edge Personal Noise Dosimeter



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# Lightweight, cable-free noise monitoring



### The Edge cable-free noise dosimeters

Now there's a new, more innovative family of personal noise dosimeters. Available in three models, The Edge offers advanced technology packaged in a cable-free, compact frame for a lighter, more ergonomic way to monitor noise levels.

With The Edge there's no cable to interfere with your employees' work, and no heavy instrument loading them down. This innovative dosimeter weighs a mere 3 ounces and features a thin, contoured shoulder mount. Users will barely notice it as they work; yet with easy downloading, simple recharging, long battery life and intrinsic safety approval (eg5), it's a powerful instrument your team can rely on.





## Powerful, smart, long-lasting

Even with The Edge's sleek size you can display SPL, Dose, Lavg or Leq, TWA, Max, Min, Peak, Exposure, Run Time and more. And when exposure limits have been exceeded, The Edge displays a visual warning.

The Edge is available with a 1- or 5-bay "Edge Dock" docking stations for quick and easy recharging. The EdgeDock also downloads data to QuestSuite™ Professional II for reporting, charting and analyzing exposures via the USB port to PC connection. Multiple EdgeDocks may be interfaced via the USB hub to the PC.

These advanced dosimeters feature a rechargeable lithium polymer battery that delivers superior run times. The Edge's three year battery life span can mean savings for you on replacement batteries compared to other dosimeters on the market.

## Key Features

- Convenient cable-free design eliminates the microphone cable and the potential to get in the way
- Thin, contoured mount hugs the shoulder; compact frame offers superior comfort
- Rechargeable lithium polymer battery gives The Edge its long battery life
- 1- or 5-bay "EdgeDock" docking stations offer quick, easy recharge and data download to PC
- Downloads to QuestSuite Professional II offer analysis, management and measurement of data
- eg5 model has Intrinsic Safety approvals from MSHA, SIRA (ATEX), CSA (US and Canada) and Simtars (IECEX)

## Three affordable models

### There are three different models to fit every need and budget.

- The eg3 basic model features summary data reports.
- The eg4 advanced model has dual dosimeters and data logging/time history.
- The eg5 also has dual dosimeters and data logging/time history. It stands apart as an intrinsically safe dosimeter that offers simultaneous C-weighted and A-weighted measurements.



# Specifications for The Edge

## FUNCTIONAL REQUIREMENTS INCLUDE:

**Microphone:** 1/4 inch prepolarized condenser (electret) field replaceable threaded microphone

**Measuring range:** 70dB -140dB

**Windscreen:** Rugged foam permanently attached to a threaded mount for maximum protection

## DOSIMETER:\*

Independent Thresholds selectable from 70dB to 90dB or none

Independent Exchange Rates 3dB, 4dB or 5dB for each dosimeter

Independent Criterion Levels from 70dB to 90dB in 1dB increments

## MEASUREMENT SETTINGS:

**RMS Range:** 70dB to 140dB

**RMS Weighting:** A or C

**RMS Time Response:** Fast or Slow

## PEAK DETECTOR:

**Peak Range:** 110dB to 143dB

**Peak Weighting:** Selectable C or Z for models eg3 and eg4; Selectable A, C, or Z for the eg5 model (Peak is independent of the RMS dosimeter settings)

## DISPLAYED DATA / VALUES:

- SPL
- Max Level
- Exposure
- Projected Dose (eg5)
- Threshold (TR)
- Identity Field (assign a custom name to The Edge)
- Lavg or Leq
- Min Level
- Run Time
- SEL (Leq)
- Current Date
- Frequency Weighting (A, C, Z)
- TWA
- Peak Level
- LC-A (eg5)
- Criterion Level (CL)
- Upper Limit (UL)

## DISPLAYED STATUS INDICATORS:

Battery

Memory

Run/Pause

Overload Indication

Dose Exposure Indicator (Multicolored LED, user selectable)

## ADDITIONAL FEATURES:

Calibration times displayed

Lock out security function (multilevel)

Device Setup: Easy quick setup via QSP-II software in English, French, Spanish, Italian and Portuguese

Data Logging: Lavg or Leq (1&2), Max, Peak and Overload Indication at one minute intervals (eg4 and eg5 models)

\*eg4 and eg5 have second independent dosimeters

All Specifications Subject to Change

# Specifications for The Edge

## POWER / ELECTRICAL CHARACTERISTICS:

**Battery:** Lithium Polymer (Flat cell)

**Battery Life:** eg3 and eg4 models 60+ hours, eg5 intrinsically safe 40 hours nominal without LED activated

**Battery Charge:** Quick charge in EdgeDock in 2 to 4 hours. Recommended daily download data with simultaneous battery charging for maximum efficiency

**Memory capacity:** 180 hours

**Communications:** Short haul serial Infrared (SIR) via the EdgeDock

## STANDARDS:

ANSI S1.25 Personal Noise Dosimeters

IEC61252 Personal Sound Exposure Meters

**Intrinsic safety:** (eg5)

- EN 60079-0:2006, EN 60079-11:2007, EN 60079-26:2007
- IECEx certification number: SIM 08.0012
- ATEX Directive 94/9/EC for use in Potentially Explosive Atmosphere certification number: Sira 09ATEX2269
- CSA International (US and Canada) certificate number: 2283414
- MSHA Approval number: 18-A100008-0

## PHYSICAL CHARACTERISTICS:

**Weight:** 3 ounces (85 grams)

**Size:** 3.5" long x 2.1" wide x .75" thick (88mm x 53mm x 19mm)\*  
\*eg5 is .82 (21mm) thick

**Case material:** Engineered Polymer

IP rated 65

RoHS compliant

Lockable windscreen

**Keypad:** 4 keys – Up Arrow, Down Arrow, Run/Stop, On/Off, Enter

**Display:** 128x64 LCD

Alligator Clothing Clip / Suspender Clasp

Variety of other mounting methods for hard hats, etc.

## DOCKING STATION: SINGLE AND FIVE BAY VERSIONS:

Communications via the EdgeDock and USB to PC

Typical recharge in 2 to 4 hours

Complete instrument fits neatly into EdgeDock without removing mounting devices

## ENVIRONMENTAL CHARACTERISTICS:

**Operating Temperature Range:** -10° C to 50° C (14° F to 122° F)

**Storage Temperature Range:** -25° C to 60° C (-13° F to 140° F)

**Humidity Range:** 0 to 95% Non-Condensing

*All Specifications Subject to Change*



### Occupational Health & Environmental Safety Division

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It's the ultimate "System Solution" for recording, reporting, charting and analyzing exposures to a variety of occupational and environmental hazards. With QuestSuite, there are no more headaches from learning different programs or switching among multiple software applications. QuestSuite Professional II offers users the ability to switch between English, French, Spanish, German, Italian, Portuguese, Korean and Chinese – Simplified, without reinstalling the software. This simple, yet robust system solution works with all Quest Technologies data logging instruments.