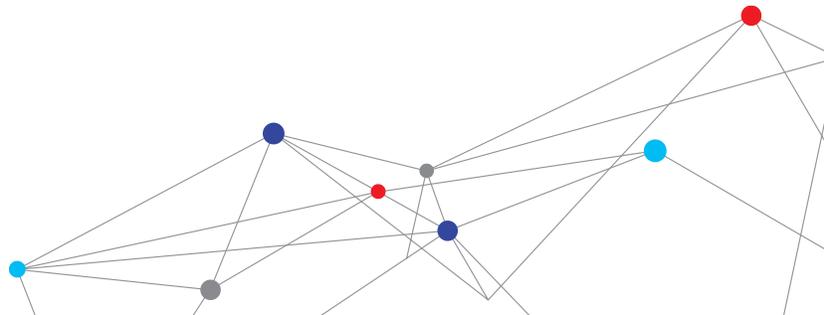# THE EDGE
PERSONAL NOISE DOSIMETER

The TSI Quest™ Edge Personal Noise Dosimeter is a comfortable, compact dosimeter that easily mounts to your shoulder. The Edge 5 model offers three independent dosimeters that can simultaneously measure against separate industry standards, all in one compact unit.
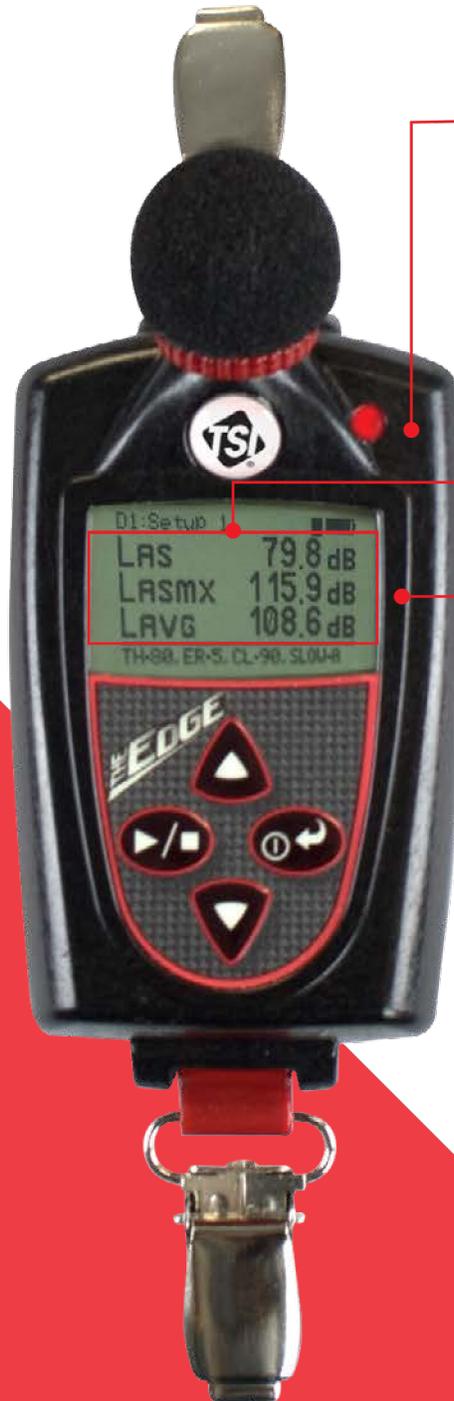
Features and Benefits

+ Compact, 3-ounce (85 grams) unit mounts easily to the shoulder
+ Large display with easy-to-use interface provides crucial information at a glance
+ Choose from three independent dosimeters that can simultaneously measure against separate industry standards, all in one compact unit
+ MSHA, SIRA (ATEX), CSA (US/Canada) and Simtars (iECEx) Intrinsic Safety Approvals

TSI | QUEST™

DESIGNED FOR EXCEPTIONAL
EASE OF USE

LED Dose Indicator

+ LED indicator can be programmed to flash when dose level has been exceeded

+ Helps safety manager and employees easily identify who has reached their daily maximum noise dose exposure

Three Independent Dosimeters

+ Edge eg5 enables simultaneous measurement against as many as three industry standards (ex: OSHA PEL, OSHA HC, ACGIH)

+ Saves time and cost by reducing the need for multiple sampling surveys

Display with Lockout Ability

+ Easy-to-read design enables workers to monitor their own noise exposure. If desired, unit can be set to inhibit display, for easier testing and verification

+ Provides safety professionals the options needed to achieve compliance with hearing protection standards

OTHER FEATURES

Efficient Setup

+ Infrared communication port to EdgeDock provides quick USB connection to the Detection Management Software

+ Helps safety professional easily setup one or more Edge dosimeters

Contoured shoulder mount

+ Ergonomically designed and comfortable; weighs just 3 oz

+ Lightweight and unobtrusive design assures comfort

Intrinsic safety approvals

+ The Edge eg5 carries intrinsic safety approvals from MSHA, SIRA (ATEX), CSA (US and Canada) and Simtars (IECEx)

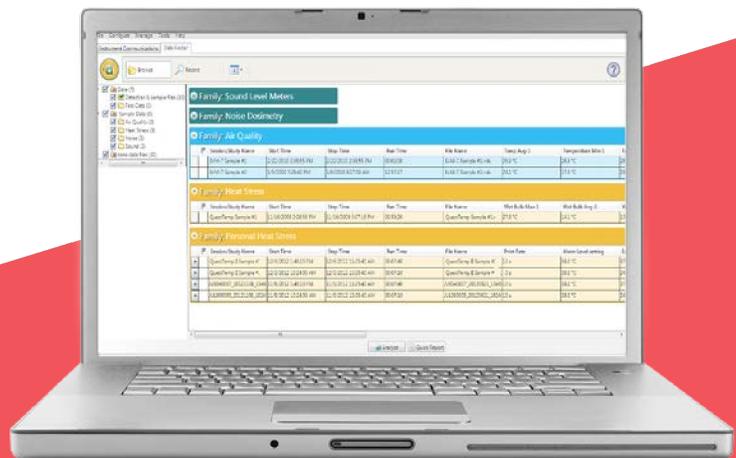+ Monitoring can be safely performed in potentially hazardous environments where devices must be certified

CHOOSE THE MODEL
THAT BEST MEETS
YOUR NEEDS

	Edge 4 Noise Dosimeter	Edge 5 Noise Dosimeter
Product No.	eg4-D	eg5-D
Data Logging	+	+
Battery Life	60+ hours	40 hours
Lock Out Security Function	+	+
LED Dose Indicator	+	+
No. of Independent Dosimeters	2	3 (third dosimeter enabled through DMS software)
IP Rating	IP-65	IP-65
MSHA Approval		+
Intrinsic Safety Approval		+

Detection Management Software

Designed for dosimetry, sound level measurements, heat stress assessments and environmental monitoring, this advanced software helps safety and occupational professionals:

+ Configure instrumentation and save pre-configured setups
+ Retrieve, download, share, and save instrument data
+ Create charts, tables, and reports to intuitively interpret your measurements
+ Export and share recorded results

The software integrates with TSI Quest Detection Solutions data logging instruments and will help you improve both operating efficiency

SPECIFICATIONS

THE EDGE PERSONAL NOISE DOSIMETER

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

eg4 has two independent dosimeters. eg5 has three independent dosimeters. Third dosimeter is enabled through Detection Management Software.

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
Frequency Weighting	A, C, Z

Peak Detector

Peak Range	110dB to 143dB
Peak Weighting	Selectable C or Z for eg4; Selectable A, C, or Z for the eg5 model (Peak is independent of the RMS dosimeter settings)

Displayed Data / Values

+ L_{AVG} or L_{EQ}
+ Exposure
+ SPL
+ Min Level
+ Dose
+ TWA
+ Upper Limit (UL)
+ Identity Field (assigns a custom name to The Edge)
+ Current Date
+ L_{C-A} (eg5)
+ Max Level
+ SEL (L_{EP})
+ Threshold (TR)
+ Peak Level
+ Run Time
+ Projected Dose (eg5)

Displayed Status Indicators

+ Battery
+ Run/Pause
+ Dose Exposure Indicator (Multicolored LED, user selectable)
+ Memory
+ Overload Indication

Docking Station: Single and Five Bay Versions

Communications	Via the EdgeDock and USB to PC
Typical recharge	2 to 4 hours
Complete instrument	Fits neatly into EdgeDock without removing mounting device

Power / Electrical Characteristics

Battery	Lithium Polymer (Flat cell)
Battery Life	eg4 model 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 xcertification 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
Keypad	4 keys – Up Arrow, Down Arrow, Run/Stop, On/Off, Enter
Display	128x64 LCD

RoHS Compliant
Lockable Windscreen
Alligator Clothing Clip / Suspender Clasp

Environmental Characteristics

Operating Temperature Range	14 °F to 122 °F (-10 °C to 50 °C)
Storage Temperature Range	-13 °F to 140 °F(-25 °C to 60 °C)
Humidity Range	0 to 95% Non-Condensing

Additional Features

Device Setup	Easy, quick setup via DMS software in Chinese, Czech, English, French, German, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, and Turkish
Data Logging	L_{AVG} or L_{EQ}, Max, Peak and Overload Indication at one minute intervals

Calibration times displayed
Lock out security function (multilevel)

TSI Incorporated - Visit our website **www.tsi.com** for more information.