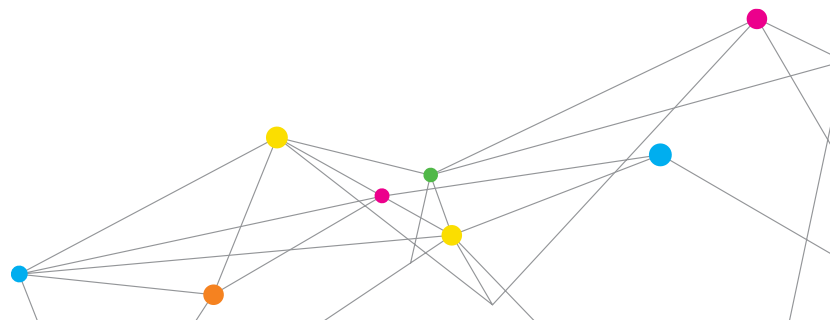# THE EDGE 5
PERSONAL NOISE DOSIMETER

The TSI Quest™ Edge 5 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 5 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 5 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

Acoustical AC-300 Calibrator

The Acoustical AC-300 Calibrator is specifically designed for field calibration of Quest sound level meters and noise dosimeters across a wide range of temperature, humidity and pressure conditions.
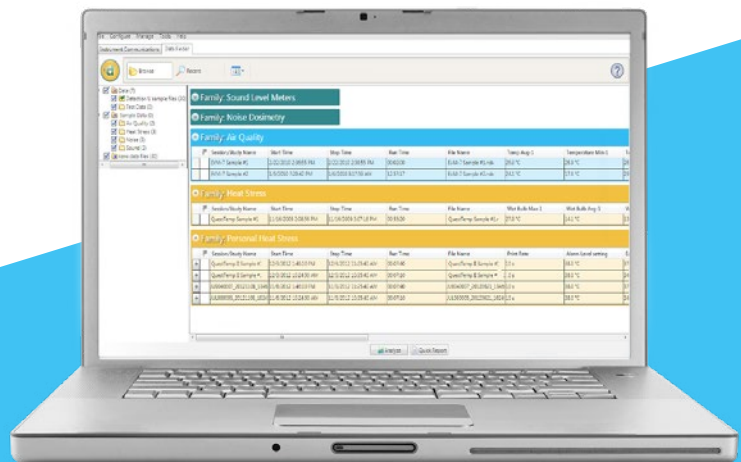
Features and Benefits

+ Produces two signals, 250 Hz or 1,000 Hz at a sound pressure level of 114 dB
+ Simply insert the microphone of your instrument, select the correct signal from the one-button keypad, and calibrate
+ Conforms to the requirements of IEC 60942 (2003-01) for sound calibrators and ANSI S1.40-2006 (R2011): Specifications and Verification Procedures for Sound Calibrators

Conforms to Standards

+ Enables confident use in a wide range of applications and conditions
+ Meets the requirements of IEC 60942 (2003) for sound calibrators and ANSI S1.40-2006 (R2011) for sound calibrators

One-Button Simplicity

+ Single On/Off/Function key assures ease of use
+ Makes calibrations fast and trouble-free

Designed for Efficient Operation

+ Low battery icon indicates when replacement is needed, to help prevent service interruption
+ Auto-OFF function powers down 4 minutes after last key press, reducing power drain and maximizing battery life (approximately 18 hours)

Detection Management Software

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

The Edge 5 has three independent dosimeters.

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
Peak Range	110dB to 143dB
RMS Time Response	Fast or Slow
RMS Weighting	A, C
Peak Weighting	A, C, Z

(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}
+ Max Level
+ SEL (L_{EP})
+ Threshold (TH)
+ Peak Level
+ Run Time
+ Projected Dose

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	40 hours nominal without LED activated
Battery Charge	Quick charge in EdgeDock in 2 to 4 hours. Daily data download with simultaneous battery charging recommended 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	+ EN 60079-0:2013, EN 60079-11:2012, EN 60079-26:2014
	+ IECEx certification number: SIM 08.0012
	+ ATEX Directive 2014/34/EU 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 .82" thick (88mm x 53mm x 21mm),
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)

Specifications are subject to change without notice.