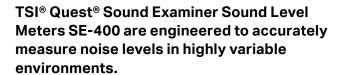


Sound Examiner Sound Level Meters

SE-400 Series



These meters compute average sound pressure level (L_{EQ}/L_{AVG}) over the run time, helping you to more accurately assess occupational and environmental noise levels. All models are ready to use with no set-up required.

Features and Benefits

- Intuitive interface allows for out-of-box use with little to no training
- User selectable data logging intervals for download and analysis with TSI® Quest® Detection Management Software (sold separately)
- Averaging functionality allows for easy measurement in variable environments
- Choose from models with Class/Type 1 or Class/Type 2 microphones, dependent on your application
- SE-401 and SE-402-R models include removable preamp
- Meets applicable industry standards
- Useful tool as part of a Hearing Conservation Program; be confident that data collected is accurate



Accurate and Intuitive Analysis

Models For Many Applications



Choice of Microphones

- User can specify microphone type (Class/Type I or Class/Type II) based on application.
- Select Type II for general duty; Type I accuracy for legal metrology

Removable preamp*

 Preamp can be easily removed to enable interference-free low-level monitoring, especially for remote use.

Aerodynamic shape

 Minimizes disturbance to sound fields being measured, assuring accurate readings.

Onboard data logging

- Allows user to capture maximum, minimum and peak values for thorough analysis.
- Can be used with TSI® Quest® Detection
 Management Software DMS to manage compliance with hearing conservation programs.

Conformance to standards

 Meets IEC 61672-1 (2002) and ANSI S1.43-1997 (R2007) standards and is CE certified.

Choose the Model That Best Meets Your Needs

	Sound Examiner SE-401	Sound Examiner SE-402	Sound Examiner SE-402-R
Product No.	SE-401	SE-402	SE-402-R
DMS Compatible	•	•	-
Data Logging	•	•	•
External AC/DC Output	•	•	-
Class/Type 2 Accuracy		•	•
Class/Type 1 Accuracy	•		
Remote Capability with Removable Preamp	•		•
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

Sound Examiner Sound Level Meters

Model SE-400

Measurements

Parameters SPL, L_{Max}, L_{Min}, L_{Pk} (peak), L_{EQ}/L_{AVG} , L_{E} , Elapsed Time

Peak and Frequency

Weighting A, C, Z Response Time Fast and Slow

Ranges 110 dBA total dynamic measurement range. Overall range 30 - 140 dBA

(single range)

Max Peak Level 143 dBA (sampled peak)

Exchange Rates 3, 4, 5 dBA

Status Indicators Run, Stop, Battery Status, OL (overload), UR (under-range),

Run-Time, Locked Status

Physical

Weight

Size 11.2" (L) x 2.8" (W) x 1.3" (D) / 28.4 cm (L) x 7.1 cm (W) x 3.3 cm (D)

> (with preamp and microphone) SE-401 model: 12.9 oz / 367.5 g (with preamp and microphone)

SE-402 model: 13.4 oz / 380.5 g (with preamp and microphone)

ABS Polycarbonate IP65. Housing

(Enclosure rated to IP65. Microphone and external connectors not IP rated.)

Standard photographic mount

Tripod Mount on backside accepts 1/4" - 20

screw threads

Drop Protection Minimum 2 meters onto concrete,

2 times on each face. Acceptable

microphone damage.

Environmental

Operating Temperature

Humidity

Storage Temperature Atmospheric Pressure

Response Time (t90)

14°F to 122°F (-10°C to 50°C) 0 to 90% RH, non-condensing -4°F to 140°F (-20°C to 60°C) Operating: 80 to 110 kPa

Storage: 50 to 150 kPa

< 40s @ 20°C ambient

Power / Electrical Characteristics

Lithium Polymer: 2500 mAHr for Battery standard models / 1500 mAHr for

IS models, rechargeable Run-Time: 18 hours minimum (excluding the backlight) for

standard models

Battery Life 3 years or 500 cycles

(service replaceable)

USB charger is provided **Battery Charge**

with instrument.

Battery charge time: 8 hours (approx.)

Internal Memory 2MB (34 days at 1-minute logging)

Communications USB Interface

Standard Microphones Class/Type 1 Precision

QE4936 microphone Class/Type 2 General QE7052 microphone

Preamplifier Preamp directly accepts 1/2"

(13.2 mm) microphone

Remote Cable Drives up to 50 ft (15 m) of cable

with negligible signal loss (not available on IS)

Ports and Connections

AC/DC Output 3.5 mm stereo

(tip - AC, center ring - DC, ring - Gnd); not applicable

to IS models

RS-232 (I/O connector not I/O Connector

applicable to IS models) Conforms to USB 2.0,

USB mini-USB connector

Conformance to Standards

IEC 61672-1 (2002) Flectroacoustics.

> Sound Level Meters, Part 1: Specifications

ANSI S1.43-1997 (R2007) 41 - 104° F (5 - 40° C)

ANSI S1.4-1983 (R2006) Specifications for Sound Level Meters

Self Certified CE Mark

Specifications are subject to change without notice.

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