



*Pile Dynamics, Inc.*

**Quality Assurance for Deep Foundations**

## **E-Saximeter (ESAX) Specifications**

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### Main Unit

Size: 100mm X 190mm X 50mm

Weight: 0.54kg

Temperature range: 10 to 40°C operating -10 to 65°C storage

Power: Built-in rechargeable battery with 16-hour minimum duration

Display: LCD, 4 lines X 16 characters, viewing area 62mm X 26mm

Keypad: Large Key (1.27mm<sup>2</sup>), non-tactile

### Electronic

32-bit CICS Micro CPU up to 50MHz

10-bit 2 channel analog to digital converter; 8-bit 2 channel digital to analog converter

Internal microphone 70 to 115 dB

Standard Type A USB drive for data transfer

8 MB internal Magneto-resistive RAM

### Functional and Other

Maximum blow detection rate: 68 bpm for open end diesel hammers; 300 bpm for all others

Operating units: English or SI

Full one-year warranty

Technical manual provided in PDF form on a USB drive

### Optional Depth Measurement Unit

Installation: mounts on crane, cable attaches to hammer

Size: 305mm X 910mm X 910mm

Weight: 73kg

Resolution: 0.6mm

Max range: 49m



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Optional Energy Switches (pair of proximity switches, available in 3 types)

Installation: mounts on hammer

Functionality	Normally open	Normally open	Normally closed (for special applications)
Size (diameter x length)	18mm x 50mm	30mm x 50mm	30mm x 30mm
Weight:	114 g	205 g	182 g
Switching Frequency	200 Hz	650 Hz	200 Hz
Sensing Range	10 mm	10 mm	15 mm
Repeatability	.01 mm	.01 mm	.01 mm

Transmitters

	<b>For Optional Energy Switches:</b>	<b>For Optional Depth Measurement Unit:</b>
Installation	mounts on hammer	mounts on depth sensor
Size	90mm X 125mm X 32mm	64mm X 98mm X 34mm
Weight	.54kg	.46kg
Data Transmission	via a standard radio protocol	
Frequency Range	2.402 ~ 2.480 GHz	
Max Range	100m	
Electronic	Low power 16-bit processor with 12-bit analog to digital converter and 12 bit digital to analog converter	
Power	Built-in rechargeable battery w/8-hour min duration	supplied by +12V to +24V crane battery
Temperature range	0 to 40°C operating; -10 to 65°C storage	