



Pile Dynamics, Inc.  
www.pile.com • 1.216.831.6131

## Technical Specifications

# Shaft Area Profile Evaluator II (SHAPE®) Specifications

## SHAPE Sensor Unit

### Size

254 x 660 mm (10 x 24.5 in); without Kelly bar adapter

### Weight

34 Kg (65 lbs.); without Kelly bar adapter

### Material

Stainless Steel, Aluminum, and PVC

### Universal Kelly Bar Adapter

101.6 mm (4 in), 203.2 mm (8 in)

### Temperature Range

Operating -20° to 55°C (-4° to 131° F); Storage: -40° to 85°C (-40° to 185° F)

### Power

6-hour continuous usage with external 12V battery

### Sampling Rate

1 MHz Sampling Frequency

2 Pressure Transducers for continuous real time fluid density and depth measurement

2 - 85 kHz Ultrasonic Transducers for continuous real time wave-speed measurement

8 - 85 kHz Ultrasonic Transducers for continuous Shaft Radial measurement

Radial Measurement Accuracy down to 1.58 mm (0.0625 in)





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## SHAPE Main Unit

### Size

320 X 250 X 68 mm (12.6 x 9.8 x 2.7 in)

### Weight

5 Kg (11 lbs.)

### Temperature range

Operating 0° to 40°C (32° to 104° F); Storage: -20° to 65°C (-4° to 149° F)

### Display

26.4cm (10.4 in), sunlight readable, resolution 1024 X 768; capacitive touch screen

### Video Outputs

HDMI

### Battery Power

4-hour continuous data collection 12V battery + back-up battery standard

### Charging time

6-hour max; 120/240 charger input voltage

### Operating System

Microsoft Windows® 10 or higher IoT Enterprise LTSC

### Data storage and ports

256 GB or larger SSD internal drive; Ethernet port; 4 USB ports

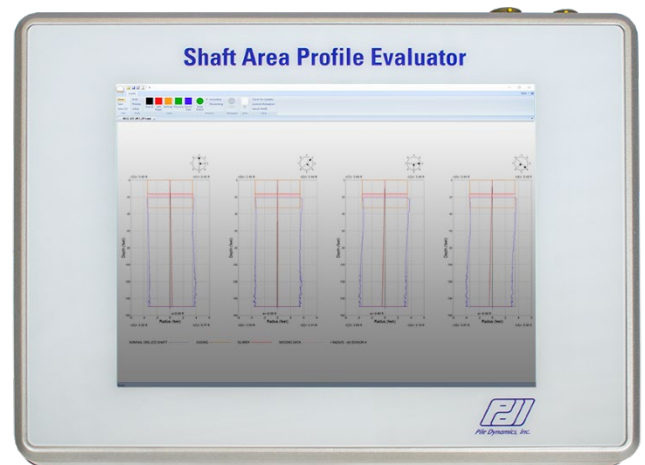
## Shaft Criteria

### Minimum Shaft Diameter

66 cm (26 in)

### Maximum Shaft Diameter

6.3 m (20.7 ft)





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## **Maximum Shaft Length**

150 m (492 ft)

Data Collection in Water, Polymer Slurry, and Bentonite Slurry

## **Maximum sand content during data collection**

10%

## **Other**

### **Optional external accessories**

USB keyboard and mouse

### **Remote Operation**

SHAPE Main Unit is equipped for high-speed internet access and remote operation

### **Technical support**

SHAPE Main Unit is equipped for remote error checking and updating

### **Units of operation**

English, SI, or Metric

Full one-year warranty on parts and labor

Technical manual provided in PDF form on a USB