

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

Standard Kelly Bar Connection Sizes

101.6 mm (4 in), 152.4 mm (6 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)



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

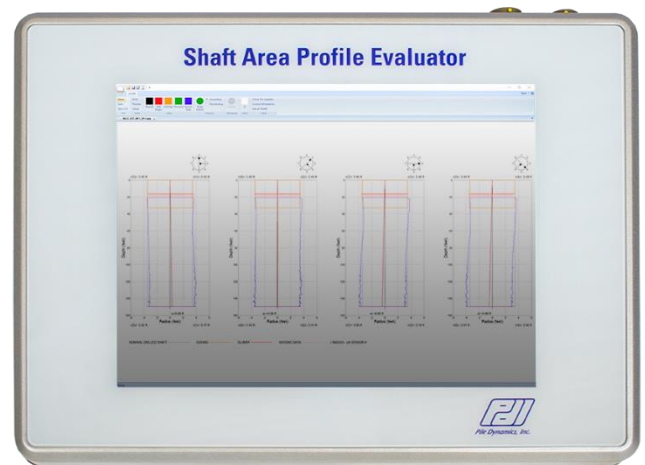
Shaft Criteria

Minimum Shaft Diameter

660 mm (26 in)

Maximum Shaft Diameter

6.3 mm (20.7 ft)



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