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)
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)
Technical Specifications

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