



Pile Dynamics, Inc.

Quality Assurance for Deep Foundations

Shaft Area Profile Evaluator for Dry Holes (SHAPE-AIR) Specifications

21-305

SHAPE-AIR Data Collector Assembly

Size: 723 x 254 mm (28.5 x 10 in)

Weight: 18 Kg (40 lbs.)

Material: Stainless Steel and Aluminum

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

Power: 4-hour continuous usage with external 12V battery

8 – LIDAR Stereo Depth Cameras

1 – Laser Distance Sensor

1 – Inertial Measurement Unit (IMU)

1 – High-precision Fluxgate Magnetometer

Radial Measurement Accuracy down to 1.58 mm (0.0625 in)

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”), sunlight readable, resolution 1024 X 768; capacitive touch screen

Video Outputs: HDMI, VGA

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

Charging time: 6-hour max; 120/240 charger input voltage

Operating System: Microsoft Windows® 10 IoT Enterprise LTSC

Data storage and ports: 128 GB or larger SSD internal drive; Ethernet port; 4 USB ports

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

Shaft Criteria

Minimum Shaft Diameter: 762 mm (30 in)

Maximum Shaft Diameter: 6200 mm (248 in)

Maximum Shaft Length: 150 m (492 ft)

Other

Data Collection in Dry Holes Only

Units of operation: Traditional US, SI, or Metric

Full one-year warranty on parts and labor

Technical manual provided in PDF form on a USB