Pile Dynamics, Inc.
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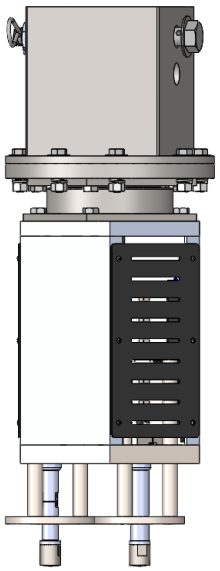
Technical Specifications

Shaft Quantitative Inspection Device* (SQUID36™)

SQUID36 Data Collector



Size (height x largest diagonal):

- 775 x 360 mm (30.5 x 14 in)

Weight (including penetrometers and contact plates):

- 136 kg (300 lbs.)

Material:

- Stainless Steel and Aluminum

Standard Kelly bar connection sizes*

- 101.6 mm (4 in), 152.4 mm (6 in), 203.2 mm (8 in)

*PDI can offer design assistance or consultation for proprietary systems

Cable Length:

- Standard 61 m (200 ft) standard; Optional Cable Length 152m (500 ft)

Temperature Range:

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

Applied Force Limit:

- 135 kN (30 kips)

SQUID Penetrometers

Material:

- Stainless Steel

Number of Penetrometers:

- 3-standard

*Patent Pending

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Penetrometer Tip:

- Area 10 cm^2 (1.55 in^2) standard, larger tips optional; replaceable

Maximum Penetrometer Pressure:

- 100 MPa (14 ksi/2000 ksf)

Penetrometer Pressure Measurement Resolution:

- MPa/1N (1 psi/0.01 ksf)

Maximum Depth of Penetration:

- 150 mm (6 in)

SQUID Contact Plates

Size:

- OD 152 mm (6 in); ID 46 mm (1.8 inch); thickness 25.4 mm (1 in)

Weight per Contact Plate Assembly:

- In air 6.75 kg (14.9 lbs.); in water: 5.85 kg (12.9 lbs.)

Contact Plate Pressure (free to move):

- In air 4 kPa (0.58 psi/0.083 ksf); in water 3.5 kPa (0.50 psi/0.072 ksf)

Contact Plate Displacement Measurement Resolution:

- 0.005 mm (0.0002 in)

Maximum Contact Plate Movement:

- 150 mmm (6 in)

Wireless Transmitter

Transmission Range:

- 100 m

Frequency:

- 2.4 GHz

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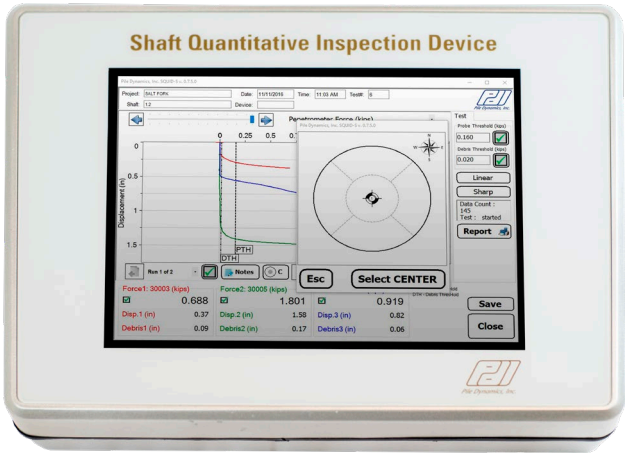
Output Power:
- 18 dBm

Mounting:
- On cable reel

Temperature Range:
- Operating -10° to 55°C (14° to 131° F); Storage -20° to 70°C (-4° to 158° F)

SQUID 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 (0° 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, VGA

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

Charging Time:
4.5-hour maximum; 120/240 charger input voltage

Operating System:
Microsoft Windows® 10

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Technical Specifications

Other

Data Storage and Ports:

- A minimum of 128 GB SSD internal drive; Ethernet port; 4 USB ports

Optional External Accessories

- USB keyboard and mouse

Remote Operation:

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

Technical Support:

- SQUID Main Unit is equipped for remote error checking and updating

Units of Operation:

- Traditional US or SI
- Full one-year warranty on parts and labor
- Technical manual provided in PDF form on a USB drive

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