



Shaft Quantitative Inspection Device[†](SQUID) Specifications

21-121

*Patent Pending

SQUID Sensor Unit

Size (height x largest diagonal): 629 x 647 mm (24.75 x 25.5 in)

Weight (including penetrometers and contact plates): 188 kg (415 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)

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

Penetrometer tip: area 10 cm² (1.55 in²) standard, larger tips optional; replaceable

Maximum penetrometer pressure: 100 MPa (14 ksi/2000 ksf)

Penetrometer pressure measurement resolution: 0.01 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 mm (6 in)

Wireless Transmitter

Transmission Range: 100 m

Frequency: 2.4 GHz

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.)



Pile Dynamics, Inc.

Quality Assurance for Deep Foundations

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

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