



Shaft Quantitative Inspection Device[†](SQUID) Specifications

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*Patent Pending

SQUID Body

Size (height x hexagon largest diagonal): 629 x 647 mm (24.75 x 25.5 inches)
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: 61 m (200 ft) standard; 152m (500ft) cable length optional
Temperature Range: -20 to 55°C operating; -40 to +85°C Storage
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 Plate(s)

Size: 152 mm (6 in) OD; 46 mm (1.8 inch) ID; thickness 25.4 mm (1 inch)
Weight each 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")
Maximum Contact Plate movement: 150 mm (6 in)

Wireless Transmitter

Transmission Range: 100m
Frequency: 2.4 GHz
Output power: 18 dBm
Mounting: On cable reel
Temperature Range: -10 to 55°C operating; -20 to 70°C storage

SQUID Tablet

Size: 320 X 250 X 68 mm (12.6 x 9.8 x 2.7 inches)
Weight: 5 Kg (11 lbs.)
Temperature range: 0 to 40°C operating; -20 to 65°C storage



Pile Dynamics, Inc.

Quality Assurance for Deep Foundations

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

Operating System: Microsoft Windows® 10

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

Optional external accessories: USB keyboard and mouse

Remote Operation: SQUID Tablet is equipped for high speed internet access and remote operation

Technical support: SQUID Tablet 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