

Shaft Quantitative Inspection Device* (SQUID36) Specifications

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

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

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

Output power

18 dBm

Mounting



On cable reel

Temperature Range

Operating -10 $^{\circ}$ to 55 $^{\circ}$ C (14 $^{\circ}$ to 131 $^{\circ}$ F); Storage -20 $^{\circ}$ to 70 $^{\circ}$ C (-4 $^{\circ}$ to 158 $^{\circ}$ 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)

Shaft Quantitative Inspection Device | Total State | Tota

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