



Pile Dynamics, Inc.

Quality Assurance for Deep Foundations

Thermal Integrity Profiler (TIP) Specifications

October 2019

Main Unit

Physical

Size: 272 mm X 212 mm X 60 mm (10.7 in x 8.3 in x 2.4 in)

Weight: 2.04 Kg (4.5 lbs.)

Sunlight readable VGA color display for any lighting conditions, resolution 640 pixels x 480 pixels

Screen size: 21.3 cm (8.4 in)

Temperature Range: Operating: -20 ° C to 40° C (4 ° F to 104 ° F); Storage: -30 ° C to 65° C (-22 ° F to 149 ° F)

Powered by Internal Battery (10-hour duration)

Data Storage: Built in 32 GB drive minimum

Data Retrieval: USB port or WiFi

Microsoft Windows® 10 Operating System

Thermal Acquisition Port for Wires (TAP)

Size: 133 mm X 102 mm X 57 mm (5.2 in x 4 in x 2.2 in)

Weight: 766 g (1.7 lbs.)

Temperature Range: Operating: -20 ° C to 65 ° C (4 ° F to 149 ° F); Storage -40 ° C to 85 ° C (-40 ° F to 185 ° F)

Contains 1 installed Li-Ion battery or 0.64 grams ELC

Internal Battery (28-day duration)

Sampling frequency: user programmable, defaulted to once every 15 minutes

Hangs from reinforcement cage; may be bolted to cage for security

Water Resistant

Thermal Acquisition Port with cloud access for Wires (TAP-Edge)

Size: 114 mm X 65 mm X 41 mm (4.5 in x 2.6in x 1.6 in)

Weight: 400 g (0.9 lbs.)

Temperature Range: Operating: -20 ° C to 65 ° C (4 ° F to 149 ° F); Storage -40 ° C to 85 ° C (-40 ° F to 185 ° F)

Contains 2 installed Li-Ion battery (14.8 W Hrs.)

Internal Battery (20-day duration)

Sampling frequency: user programmable, defaulted to once every 15 minutes

Hangs from reinforcement cage; may be bolted to cage for security

Water Resistant

Thermal Aggregator for Wires (TAG)

Size: 160 mm X 80 mm X 57 mm (6.3 in x 3.2 in x 2.2 in)

Weight: 540 g (1.2 lbs.)

Temperature Range: Operating: -20 ° C to 65 ° C (4 ° F to 149 ° F); Storage -40 ° C to 85 ° C (-40 ° F to 185 ° F)



Pile Dynamics, Inc.

Contains 2 installed Li-Ion battery (22.2 W Hrs.)
Internal Battery (10-day duration)
Sampling frequency: user programmable, defaulted to once every 15 minutes
Hangs from reinforcement cage; may be bolted to cage for security
Water Resistant

Thermal Wire Tester Box for Wires

Size: 133 mm X 102 mm X 57 mm (5.2 in x 4 in x 2.2 in)
Weight: 766 g (1.7 lbs.)
Temperature Range: Operating: -20 ° C to 65 ° C (4 ° F to 149 ° F); Storage -40 ° C to 85 ° C (-40 ° F to 185 ° F)
Contains 1 installed Li-Ion battery or 0.64 grams ELC
Internal Battery (28-day duration)
LCD Display Screen
Adapter cable included for splice cables; ADAPTOR CABLE REQUIRED FOR SPLICE CABLES
DOES NOT STORE DATA

Thermal Wire® cables

Sensor type: digital
Furnished in rolls of length starting at 6 m (20 ft) with length increments of 1.5 m (5 ft).
Sensor spacing: 305 mm (12 in)
Sensor operating temperature: up to 105°C
Sensor Accuracy: ± 0.5°C (± 0.9°F)
Splicing: multi segment cables available upon request – featuring quick-connect

Thermal Acquisition Port for Probes (TAPP)

Size: 114 mm x 133 mm x 57 mm (4.5 in x 5.2 in x 2.2 in)
Weight: 822 g (1.8 lbs)
Temperature Range: Operating: -20 ° C to 65 ° C (4 ° F to 149 ° F); Storage -40 ° C to 85 ° C (-40 ° F to 185 ° F)
Internal Battery (8-hour duration)
Contains 2 installed Li-Ion batteries (1.28 grams ELC)
Sampling frequency: once per second, or as a function of depth (user input)
Water Resistant

Probe

Sensor type: infrared (four orthogonal sensors)
Size: 130 mm x 30 mm (5.1 in x 1.2 in)
Weight (Probe): 5.2 kg (11.5 lbs.)
Cable length: 60 m or 100 m (200 ft or 332 ft)
Weight (60 m Cable): 3.3 kg (7.4 lbs.)



Quality Assurance for Deep Foundations

Pile Dynamics, Inc.

Weight (100 m Cable): 8 kg (17.6 lbs.)
Sensor operating temperature: up to 105 ° C (221 ° F)
Removable sensor head
Water resistant

Depth Measurement Unit

Type: Rotary Encoder
Resolution: 2.5 mm (0.1 in)

Other

Soft carrying case
Full one-year warranty
Operates in English or Metric units
Technical manual provided in PDF form on a USB drive