Thermal Conductivity Testing Equipment



Meet the New GC3 Series - GeoCube™

The GeoCube[™] from Precision Geothermal is a portable, lightweight conductivity unit ideal for testing soils and bedrock of all varieties as well as for determining the Borehole Thermal Resistance (BTR). Even with its compact size, the GeoCube[™] is capable of delivering up to 17,500W* of heating power. This powerful unit is available in models that can test borings up to 1,100 ft / 335 m deep. Increased flow or pressure available with the new GeoCube Flow Booster Option.

Features and Benefits

Applications



- Vertical Heat Exchanger depth to 1,100 ft/335m*
- Horizontal Exchangers (one way) 1,100 ft/335m*
- Heat Transfer Capacity Testing
- Borehole Thermal Resistance Testing

Operator Adjustable Heat Settings



- Adjust energy to proper heat rate
 Models range from base unit Sha
- Models range from base unit Shallow 7,500W to Extended Depth 17,500W
- 50/60 Hz; 220/230/240 VAC models available

Rugged Aluminum Case; Built for Safety

- Safety sensors for fluid temp. and electrical
- No exposed wiring, fluid resistant controls
- Tamper resistant locking lid

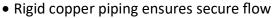


- **(** € Marking for EEA International usage
- Sturdy protection for your investment





Rigid, Secure Fluid Path





• Stainless manifold in all capacity models

Compact Size

- ~150 lbs / 68 kg (base unit shipping weight)
- Easily Transportable

Data Collection and Analysis Software

- System designed to meet ASHRAE standards
- Utilizes Line Source Analysis methodology as recommended by ASHRAE 111-8 TRP
- Highly accurate sensors: flow, temp, power
- Calculate conductivity immediately
- Generates professional TC/TRT reports

Inside of the GeoCube™

The outer casing of the GeoCube™ is constructed of high grade aluminum which protects the unit and ensures that the GeoCube™ will maintain its appearance for years to come. The piping system is comprised of a stainless steel heat exchanger, soldered, rigid copper piping, with an HDPE standing column which now features user accessible/replaceable heating elements. An optional flow booster system is available for high flow/pressure testing. A cleanable stainless steel fluid filter keeps your pumping free of sediment. The heating unit is insulated with 2″ Foamular® 250 extruded polystyrene insulation on the interior divider and the exterior walls of the unit. This level of insulation provides high performance in all climates / seasons and reduces external influences.



 $\mathsf{GeoCube}^{\mathsf{TM}}\,\mathsf{shown}\,\,\mathsf{with}\,\,\mathsf{Advanced}\,\,\mathsf{Datalogger}\,\,\mathsf{and}\,\,\mathsf{optional}\,\,\mathsf{``H''}\,\,\mathsf{valve}\,\,\mathsf{assembly}$

To purchase or for more information contact:

Specifications / Features:

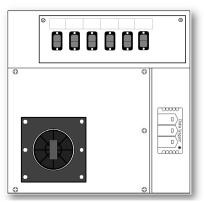
- Exterior dimensions: 24x24x24 in / 61x61x61 cm
- 1/6 HP circulation pump standard*
- (€ Marking for EEA International usage
- Locking lid
- Lightweight, rugged aluminum case
- Highly insulated from external sources
- Data Collection & Analysis Software
- Stainless steel fluid filter system
- Stainless steel heat exchanger with accessible heating elements

Available Options:

- 500 ft / 150 m; 850 ft / 260 m; 1,100 ft / 335 m; borehole depth capacity
- H-Valve assembly for purging efficiency
- Sensor redundancy four temperature sensors in fluid path
- Multiple pipe connection sizes/types
- Flow Booster Pump Option
- Conductivity test tool kit
- Removable Extension Cord (500 ft /150 m only)
- Quick Connector Kit (C-Kit)
- TC Test Toolkit
- Durable Anodized Chassis Finish



(Base Model: Top View, Lid Closed)



(Base Model: Top View, Lid Open) Appearance varies

Ordering Information:

To order, complete the code number below with the information and call Precision Geothermal at (763) 479-3638 email: sales@precisiongeothermal.com

GC3 **Base Unit Includes:**

Aluminum case

Multi-Channel data logger

Depth Capacity:*-

500 = 500 ft/150 m depth(7,500 W) 850 = 850 ft/260 m depth (13,000 W) 999 = 1,100 ft/335 m depth (17,500 W)

Piping Connection:

- 1 = 1" Female Cam-Lock Adaptor
- 2 = (Option 1) with ¾" Barbed connection 3 = (Option 1) with 1" Barbed connection 4 = (Option 1) with 1¼" Barbed connection

Power Requirement: -

- **1 = 240VAC / 60Hz*** 3 = 230VAC / 60Hz 5 = 220VAC / 60Hz 2 = 240VAC / 50Hz 4 = 230VAC / 50Hz
 - 6 = 220VAC / 50Hz

Removable Extension Cord:

1 = Yes (available on 500 ft model only)

0 = No

Number of RTD's: -

- 2 = Standard Logger two sensors
- 4 = Standard Logger four sensors (redundancy)
- 5 = Advanced Logger four sensors (redundancy)

Conductivity Test Tool Kit:

1 = Yes; 0 = No

H-Valve Purging Assembly:

1 = Yes; 0 = No

Data Logger Configuration:

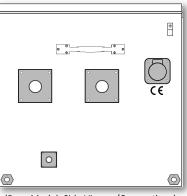
- 1 = Standard Data Logger (Base Configuration)
- 2 = Advanced Waterproof Data Logger

Chassis Finish:

- 1 = Standard Aluminum Finish
- 2 = Durable Anodized Aluminum Finish

Booster Pump Option:

- 1 = Yes; 0 = No
- Standard power ratings stated for 60Hz@240 VAC. Heating Elements adjusted for regional power standard values. Please specify your local power standards.
- ** C-Kit includes adapters for ¾", 1" and 1¼" pipe with quick coupling connectors for easy use.



(Base Model: Side View w/Connections) Appearance varies

Manufactured by:

Precision Geothermal, Inc.

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(763) 479-3638 (PHONE) (763) 479-2183 (FAX)

www.precisiongeothermal.com



