

Dry Block Calibrators

Calibration Monitoring Software Included

CL-700A



*The Most Comprehensive
Solution to Your Probe
Calibration Needs!*

- ✓ CE Marked
- ✓ Housed in a Rugged Metal Case for Field Use
- ✓ RS232 Computer Interface for Data and Program Transfer or Real-Time Control
- ✓ High Accuracy and Stability for Certifying Temperature Sensors and Hydraulic Thermostats
- ✓ Fast Settling Time for Rapid Testing
- ✓ Large Interchangeable Insert Format
- ✓ Fast Heat-Up and Cool-Down Times
- ✓ Improved Temperature Zone Uniformity and Control Stability
- ✓ 4-Line by 20-Character LCD and 8-Button Keypad for Entering Programs and Viewing Data
- ✓ Create, Use and Store Programs and Test Results Internally
- ✓ Program Set Temperature, Ramp Rate, Hold Time, "Pause on Switch Changeover" Operation and Hold Until Pause Pressed
- ✓ Switch Test Input for Monitoring Hydraulic Thermostats



CL-750A shown
smaller than
actual size.

Specifications

Inputs and Outputs

Serial Interface Port (RS232):

Bi-directional, 9600 Baud

Connector: 9-way, D-type

Hardware: No handshaking

Switch Test Sockets: 4 mm

Voltage: 120V (230V optional)

Hz: 50/60

Watts: 400

Measuring Zone: 0 to 50 mm

(0 to 1.97") from base of well

Display Resolution: 0.1°C or 0.1°F

Programmable Ramp Rate (°C/min):

0.18 to 77

Communication Port, 9-Way D-Type:

Full, bi-directional RS232

Environmental Specifications

Ambient Temperature:

10 to 30°C (50 to 86°F)

Humidity:

Up to 95% non-condensing



CL-760A shown smaller than actual size.

Software

Windows® program allows user to:

- ✓ Monitor the Temperature of the Calibrator from the PC
- ✓ Control the Calibrator in Real-Time
- ✓ Create/Store/Retrieve Programs on a PC for Transmission to a Calibrator
- ✓ Read Data from the Calibrator and Produce Certificates on the PC*
- ✓ Export Data to other Windows Programs
- ✓ Present Live or Stored Data on the PC in a Graphical and Tabular Format
- ✓ 10 Ramp/Soak Programs with 10 Segments Maximum

Fully Featured

Model No.	Program Storage	Switch Input	PC Software
CL-740A	✓	✓	✓
CL-760A	✓	✓	✓
CL-750A	✓	✓	✓

OA = Optional Accessories.

* CL-740A, CL-750-A, CL-760A only.



CL-740A Specifications

Minimum Temperature: -45°C* (-50°F) below ambient
Voltage: 120V (230V optional)
Hz: 50/60
Watts: 400
Maximum Temperature: 140°C (284°F)
Temperature Accuracy in Measuring Zone: ±0.3°C (±0.54°F)
Temperature Uniformity in Measuring Zone: ±0.2°C** (±0.36°F)
Measuring Zone: 0 to 50 mm from base of well (0 to 1.97")
Temperature Stability After 10 min: ±0.05°C (±0.09°F)
Display Resolution: 0.1°C or 0.1°F
Heating Rate: 20 to 100°C (68 to 212°F), 5 minutes
Cooling Rate: 100 to 0°C (212 to 32°F), 9 minutes
Programmable Ramp Rate (°C/min): 0.1 to 25, on CL-740A (0.18 to 77)
Switch Test: On CL-740A
Comms Port, 9 Way D Type: Full bi-directional RS232
Weight: 13.5 kg (29.76 lb)
Dimensions: 285 H x 190 W x 426 mm D (11 x 7 x 17")
** With 4°C water circulated through the unit.*
*** At 100°C.*



CL-760A Specifications

Minimum Temperature: 20°C (68°F) above ambient
Voltage: 120V (230V optional)
Hz: 50/60
Watts: 700
Maximum Temperature: 425°C (797°F)
Temperature Accuracy in Measuring Zone: ±0.3°C (±0.54°F)
Temperature Uniformity in Measuring Zone: ±0.2°C* (±0.36°F)
Measuring Zone: 0 to 50 mm from base of well (0 to 1.97")
Temperature Stability After 10 min: ±0.05°C (±0.09°F)
Display Resolution: 0.1°C or 0.1°F
Heating Rate: 20 to 400°C (68 to 752°F), 15 minutes
Cooling Rate: 400 to 100°C (752 to 212°F), 25 minutes
Programmable Ramp Rate (°C/min): 0.1 to 25, on CL-760A (0.18 to 77)
¼" Reference Hole in Block: Yes
Switch Test: On CL-760A
Fan Cooling: Automatic
Comms Port, 9 Way D Type: Full bi-directional RS232
Weight: 9.1 kg (20 lb)
Dimensions: 285 H x 190 W x 426 mm D (11 x 7 x 17")
** At 300°C (572°F).*



CL-750A Specifications

Minimum Temperature: 25°C (77°F) above ambient
Voltage: 120V (230V optional)
Hz: 50/60
Watts: 1100
Maximum Temperature: 650°C (1202°F)
Temperature Accuracy in Measuring Zone: ±0.2°C (±0.36°F)
Temperature Uniformity in Measuring Zone: ±0.1°C* (±0.18°F)
Measuring Zone: 0 to 50 mm from base of well (0 to 1.97")
Temperature Stability After 10 min: ±0.09°C (±0.16°F)
Display Resolution: 0.1°C or 0.1°F
Heating Rate: 20 to 600°C (68 to 1112°F), 35 minutes
Cooling Rate: 600 to 200°C (1112 to 392°F), 30 minutes
Programmable Ramp Rate (°C/min): 0.1 to 25, on CL-750A (0.18 to 77)
¼" Reference Hole in Block: Yes
Switch Test: On CL-750A
Comms Port, 9 Way D Type: Full bi-directional RS232
Weight: 11.8 kg (26 lb)
Dimensions: 285 H x 190 W x 426 mm D (11 x 7 x 17")
** At 400°C (752°F).*



CL-760A shown smaller than actual size.

Inserts for CL-740A and CL-760A (Insertion depth: 4.5")

Model No.	Description
CL701B	5 x 1/4"
CL702B	5 x 3/8", 5/16", 1/4", 3/16", 1/8"
CL703B	2 x 1/4", 2 x 3/8"
CL704B	2 x 1/4", 2 x 1/2"
CL705B	1 x 1/4", 9/16"
CL707B	1 x 1/4", 5/8"
CL708B	1 x 1/4", 11/16"
CL709B	1 x 1/4", 3/4"
CL710B	1 x 1/4"
CL706B	Insert undrilled

Inserts for CL-750A (Insertion depth: 6")

Model No.	Description
CL701A	5 x 1/4"
CL702A	5 x 3/8", 5/16", 1/4", 3/16", 1/8"
CL703A	2 x 1/4", 2 x 3/8"
CL704A	2 x 1/4", 2 x 1/2"
CL705A	1 x 1/4", 9/16"
CL707A	1 x 1/4", 5/8"
CL708A	1 x 1/4", 11/16"
CL709A	1 x 1/4", 3/4"
CL710A	1 x 1/4"
CL706A	Insert undrilled

To Order

Model No.	Description	Range
CL-740A	Block calibrator	-45°C below ambient to 140°C
CL-750A	Block calibrator	25°C above ambient to 650°C
CL-760A	Block calibrator	20°C above ambient to 425°C

Comes complete with operator's manual, RS232 communication, PC software package (CD and RS232 cable), removable AC power cord, soft carrying case with carrying strap, insert extractor tool and 1x multi-hole insert (1/8, 3/16, 1/4, 5/16, 3/8").

To order with 230V, add suffix "-230" to model number, no additional charge.

Ordering Example: CL-740A, block calibrator with program storage, switch input, and PC

Accessories

Model No.	Description
CAL-SOFT	Software CD and RS232 cable
CL7A-PROBE	Cooling coil for all units, shortens cool-down time
CL7A-CHILL	Circulating bath chiller, lowers effective unit operation at -40°C (-40°F) for CL-740