



MicroCal T150 ATCS



Universal Temperature Calibration System

A unique combination of both dry block and bath in the same unit with standalone automatic sensor calibration capability

PORTABLE CALIBRATORS

Field Portable or Bench

Largest well capacity (50 mm/2")

Range -40°C to +150°C

Resolution 0.01°C

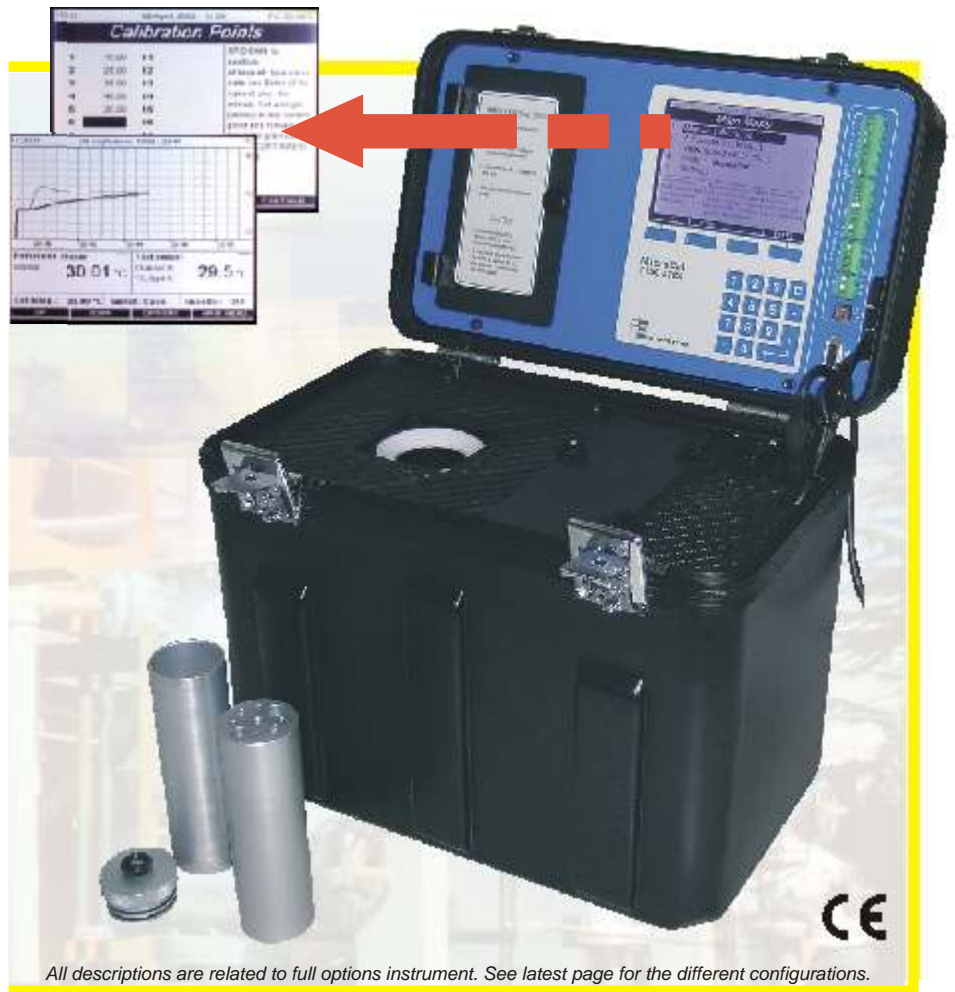
Stability < ±0.004°C

Pt100, Tc, mA and Voltage dual input

Automatic calibration procedure (up to 20 points)

Full graphic display, 1/4 VGA

RS232 interface



All descriptions are related to full options instrument. See latest page for the different configurations.

MicroCal T150 ATCS (Automatic Test & Calibration System) combines dry block well with a liquid bath to check the calibration of a wide range of instrumentation including digital thermometers, bi-metal dial thermometer, mercury thermometer and thermosensor.

One single unit includes:

- dry block calibrator with replaceable 50mm inserts;
- liquid bath with 261 cm³ volume
- High accuracy 2 channel thermometer (Pt100, TC, mA and Volt);
- Thermostat test input;
- Personal Computer with full graphic display 1/4 VGA and Windows CE operating system;
- Correction tables for external references;
- Calibration set-up procedures from keyboard or softkeys



MicroCal T150 ATCS

Specifications

Temperature Range: -40°C* to +150°C * Rel. ambient
Accuracy: ±0.3°C
Resolution: 0.01°C
Uniformity at 95°C w/water: 0.06°C (between bottom and 25mm from top)
Stability (30 min. after normal stabilization):
 * As dry block ±0.02°C
 * As liquid bath ±0.01°C
Well depth: 155mm
Well diameter: 50mm
Bath capacity: 261cm³
Well diameter standard insert: 2x 3.5mm - 2x 4.5mm - 2x 6.5mm - 1x 8.5mm - 1x 10.5mm - 1x 12.5mm
Thermostat test input
Serial interface: RS232
Power Supply: 110V(90-130V), 50/60Hz / 230V(180-250V), 50/60HZ
Operating Temperature: 0 to +40°C
Dimensions: 406x254x356 mm
Weight: 15.5 kg (without inserts)

INPUT PORT A:	RANGE	RES.	ACCURCY
Pt100 2, 3 and 4-wire	-50 to 800°C	0.01°C	±(0.01% rdg + 0.05°C)
INPUT PORT B:			
Pt100 2, 3 and 4-wire	-50 to 800°C	0.01°C	±(0.01% rdg + 0.05°C)
Type K	-100 to 1370°C	0.1°C	±(0.03% rdg + 0.25°C)
Type J	-200 to 1200°C	0.1°C	±(0.03% rdg + 0.25°C)
Type E	-200 to 1000°C	0.1°C	±(0.04% rdg + 0.25°C)
Type T	-200 to 400°C	0.1°C	±(0.03% rdg + 0.25°C)
Type S	0 to 1760°C	0.1°C	±(0.03% rdg + 0.25°C)
Type R	0 to 1760°C	0.1°C	±(0.03% rdg + 0.25°C)
Type B	+400 to 1820°C	0.1°C	±(0.03% rdg + 0.25°C)
Type N	-200 to 1300°C	0.1°C	±(0.05% rdg + 0.25°C)
Voltage	0 to 10V	1µV	±(0.02% rdg + 2µV)
Current	0 to 22mA	1µA	±(0.02% rdg + 2µA)
Cold Junction	0 to 40°C	0.1°C	±0.25% rdg

Ordering Code

Cat. 8154 - A - B - C

Table A	Options
0	None
Table B	Power Supply
4	240 Vac with European plug
5	110 Vac with USA/Japan plug
Table C	Calibration Certificate
1	Eurotron Traceable Certificate

Main Menu - Configuration
 Temperature unit in °C, °F and K

Configuration
 Ref. sensor internal or external
 Ext. ref. sensor correction table or Cv/D coefficient

Correction table
 Sensor under test T/C, Pt100 or 4-20mA

4-20 mA Configuration
 The MicroCal T150 Helper guides you through all Configurations

Main Menu - Calibration
 Calibration set-up from numeric keyboard or softkeys
 Graphical or Numerical display for internal or external ref. sensor and sensor under test
 Switch test indication
 When using MicroCal T150 as a stirred liquid bath, you may set an appropriate impeller speed from this window

Calibration graph
 Zoom level: 1°C / horizontal line
 Impeller speed: 50%

Test sensor
 Channel D, Pt100, 4-wire: 40.23 °C

Reference sensor
 Pt100: 37.23 °C

Specifications may change without notice.