



# MicroCal T100 MicroCal T500 MicroCal T1100



## Dry Block Temperature Calibrators

Portable "dry block" furnaces

PORTABLE  
CALIBRATORS

Reliable, Rugged and Stable

Ranges from  $-50^{\circ}\text{C}$  to  $+1100^{\circ}\text{C}$

Resolution  $0.01^{\circ}\text{C}$

Two high accuracy input channels (3/4 wires Pt100 and TCs)

RS232 serial interface

Temperature switch input

CalpMan 2000 and CalpMan Plus software for automatic calibration and documenting in compliance with ISO9000.



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

The temperature parameter represents the most important factor to fulfill quality, operational safety and reliability of industrial processes. Thermocouples, RTDs and any other temperature sensors, when installed in an industrial process, they are subjected to mechanical, thermal and chemical stresses which accelerate their aging. Therefore it is a recommended procedure to inspect, check and calibrate each sensor during the commissioning phase and at regular and programmed time intervals.

The temperature calibrators series MicroCal T are designed to verify and calibrate temperature sensors and process transmitters both in laboratory and in-field. The MicroCal T100 calibrator can generate temperature from  $-50^{\circ}\text{C}$  from ambient temperature to  $+150^{\circ}\text{C}$ .

The MicroCal T500 calibrator can generate temperature from ambient temperature to  $+550^{\circ}\text{C}$  ( $600^{\circ}\text{C}$  in high temperature version).

The MicroCal T1100 calibrator can generate temperature from  $+200^{\circ}\text{C}$  to  $+1100^{\circ}\text{C}$ .



# MicroCal T100

## MicroCal T500

## MicroCal T1100

### Specifications

### Ordering Code

	MicroCal T100	MicroCal T500	MicroCal T1100
<b>Temperature Range</b>	-50 Tamb. to 150°C	Tamb. to 550°C up to 600°C opt.	+200°C to +1100°C*
<b>Stability</b>	±0.03°C	±0.05°C	±0.3°C
<b>Radial Uniformity</b>	0.1°C@100°C	0.2°C@450°C	0.4°C
<b>Axial Uniformity</b>	0.2°C@80mm	0.8°C@80mm	0.4°C@100mm
<b>Resolution</b>	0.01 / 0.1°C	0.01 / 0.1°C	0.01 / 0.1°C
<b>Reading Accuracy</b>	±0.15°C	±0.3°C	±0.3% rdg
<b>Regulation</b>	Pt100 4fili	Pt100 4fili	Tc S
<b>Units</b>	°C / °F	°C / °F	°C / °F
<b>Test wells</b>	6.5-26* mm	4.5-6.5-9.5-17** mm	44 mm
<b>Standard insert</b>	4.5-6.5-9.5 mm	--	7-9-11-13.5 mm
<b>Wells depth</b>	135 mm	185 mm	155 mm
<b>Serial interface</b>	RS232	RS232	RS232
<b>Heating time (MAX)</b>	20°C / min	20°C / min	18°C / min
<b>Cooling time (MAX)</b>	25°C / min	25°C / min	6°C / min
<b>Dimensions</b>	160x340x330 mm	160x340x330 mm	170x330x450 mm
<b>Weight (nett)</b>	10Kg	10Kg	12Kg

\* On request 35 mm test well and 4-4.5-5.5-6.5-8.5-10.5 mm insert wells (min. temp. -48°C from Tamb).

\*\* On request 40 mm test well.

#### Auxiliary TCs & Pt100 inputs

You can connect the working standard and the test probe (Pt100 3/4 wires; thermocouples J, K, N, R, S) for the complete calibration system. The optional internal data acquisition board has gold contact bining posts and automatic cold joint compensation.

Input	Range	Accuracy
Pt 100 IEC 3, 4 wires	-100 to +700 °C	±0.3 °C
Thermocouple J	0 to 1000 °C	±1 °C
Thermocouples K, N, R, S	0 to 1300 °C	±1 °C

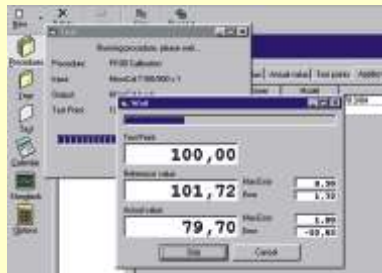
### Calibration Procedure Manager

#### Your software for documenting

Standard Agencies and Quality Auditors require, to keep the compliance with ISO 9000, collection, organization and analysis of traceable documents. Eurotron can offer you two different Windows® based softwares.

#### CalpMan 2000 Software

This supporting software, is able to transfer a selection of calibration routines from a PC to the internal memory of the instrument in order to simplify field calibrations selecting the required TAG number. Eurotron CalpMan 2000 grants the option to document the calibration/inspection activities.



#### CalpMan Plus Software

This software is designed for multiple temperature sensors certification. You can connect up to 16 TCs or 8 RTDs and certify them simultaneously. An analogue multiplexer (scanner) have to be used together the MicroCal T temperature calibrator.

BB700001 RS232 serial communication cable

### MicroCal T100 8172 - A - B - C

### MicroCal T500 8174 - A - B - C

MicroCal T100 Standard package includes: EE460015 insert, extraction tool, user manual, Eurotron calibration certificate.

MicroCal T500 Standard package includes: user manual, Eurotron calibration certificate.

Table A	Options
0	None
1	Aluminium carrying case (EE880063)
2	Extended temperature range to 600°C (MicroCal T500 only)
3	Two channels TCs & Pt100 auxiliary input
4	Vinyl carrying case (BB880047)
9	Special drilling insert

Table B	Power Supply
1	120 Vac with USA plug
2	230 Vac with Schuko plug
3	240 Vac with UK plug
4	230 Vac with European plug
5	100 Vac with Japan/USA plug

Table C	Calibration Certificate
1	Eurotron certificate

MicroCal T100 inserts 26mm:  
cat. EE460010 without drillings  
cat. EE460011 (1 / 14.5 mm)  
cat. EE460012 (1 / 17.5 mm)  
cat. EE460013 (2 / 6.5-12.5 mm)  
cat. EE460014 (3 / 6.5 mm)  
cat. EE460015 (3 / 4.5-6.5-9.5 mm)

MicroCal T500 inserts 17mm:  
cat. EE460016 without drillings  
cat. EE460017 (1 / 9.5 mm)  
cat. EE460018 (1 / 8.0 mm)  
cat. EE460019 (1 / 10.0 mm)  
cat. EE460020 (1 / 11.0 mm)  
cat. EE460021 (1 / 12.0 mm)

### MicroCal T1100 8176 - A - B - C

Standard package includes: extraction tool, no.4 holes insert ( 7/9/11/13.5 mm), ceramic no.4 holes insulator, user manual, Eurotron calibration certificate.

Table A	Options
0	None
1	Aluminium carrying case (EE880064)
2	Two channels TCs & Pt100 auxiliary input
4	Vinyl carrying case (BB880047)
9	Special drilling insert

Table B	Power Supply
1	120 Vac with USA plug
2	230 Vac with Schuko plug
3	240 Vac with UK plug
4	230 Vac with European plug
5	100 Vac with Japan/USA plug

Table C	Calibration Certificate
1	Eurotron certificate

Specifications may change without notice.



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