

## Dry Block Calibrators

250°C to 1200°C

### Wide Temperature Range

CALsys 1200 & Autocal 1200 offer a wide temperature range from 250 °C to 1200 °C

### Lightweight, portable

The CALsys 1200 & Autocal 1200 block is ideal for Industrial/Laboratory field use. It only weighs around 12kg.

### Speed

The CALsys 1200 & Autocal 1200 it heats up from ambient to +1200 °C in 90 minutes and cools down to 250°C in 150 minutes.

### Accuracy and performance

The CALsys 1200 & Autocal 1200 provides excellent calibration accuracy with stability  $\pm 0.3^{\circ}\text{C}$  at 1200 °C.

### Computer Interface

The communication port (USB/LAN) enables communication with CALsys 1200 & Autocal 1200 calibrators.

## CALsys 1200 Autocal 1200

Dry Block Calibrator



CALsys 1200 Autocal



CALsys 1200

CALsys 1200 & Autocal 1200 offers easy to use portable temperature calibrator with high temperature range from 250 to 1200°C. It is a highly stable standard calibrator for calibrating thermocouples and RTD. This calibrator can be used on site for high temperature calibration and also find its application in glass, electric power, automotive and material process industry. The comparison volume is a metallic block of special material, which has a diameter of 37mm and 180mm long. The temperature of the calibrator is set and controlled by a self tuned PID controller with automatic super fine adjustment.

The Autocal 1200 is an automatic temperature calibration system for the Thermocouple and RTDs. The system consists of Temperature bath and PC software, which together contribute to the whole cycle of auto calibration process. The system accept 4 channels, 4 Thermocouple or 4 RTDs. The connection for these channels through special type of locking connectors. The channel configuration can be done with LCD display via touch screen keypad. The thermocouple microvolt & RTD ohm reading for each channel is monitored with CJC compensation. After the calibration process complete the PC software generates a report of actual calibrated values for the inputs.

## SPECIFICATIONS

### Autocal 1200 & CALsys 1200

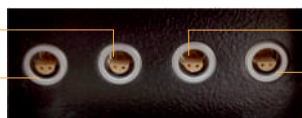
Temperature range	250 °C to 1200 °C
Stability	±0.1°C at 250°C
	±0.2°C at 700°C
	±0.3°C at 1200°C
Radial uniformity	±0.20°C at 250°C
	±0.24°C at 700°C
	±0.36°C at 1200°C
Insert OD dimensions	37 mm
Immersion depth	160 mm
Method of Control	Self tuned PID controller
Cooling time	150 Min ( 1200 °C to 250 °C)
Heating time	90 Min.
Stabilization Time	15-20 Min.
Resolution	0.1°C up to 999°C
Display	LCD, °C or F user-selectable
Power requirements	230 VAC or 110 VAC 50/60 Hz 2kW
Calibration	Accredited calibration certificate provided (Optional)
Environmental operating conditions	0°C to 40°C
PC Interface	LAN/ USB
Size (H x W x D)	425(H) x 230(W) x 305(D) mm
Weight	12 kg
<b>Input (Autocal 1200)</b>	<b>Four channels (one master and three test sensors), High quality universal LEMO connector suitable both for T/C (J, K, N, T, R, S, B type) and RTD</b>
<b>Software (Autocal 1200)</b>	<b>The calibrator will be provided with software for data recording (Manual Mode) and Excel generation in Auto Mode</b>

### SENSOR CONNECTION (Autocal 1200)

The Calibration system provides calibration upto four channels i.e. one master and three test sensors.

Connection for First TEST Sensor

Connection for MASTER Sensor

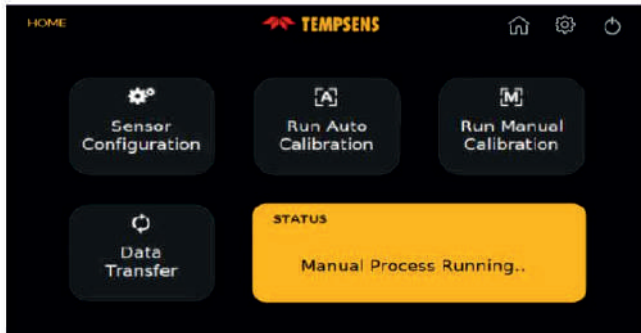


Connection for Second TEST Sensor

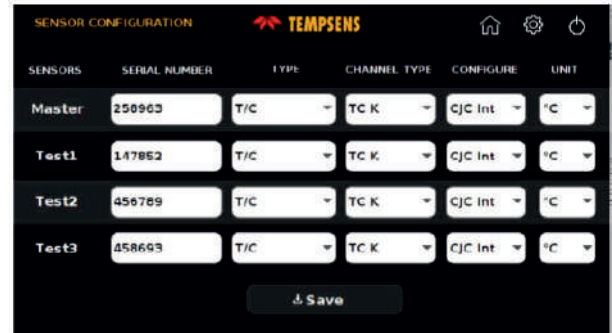
Connection for Third TEST Sensor

## USER INTERFACE (Autocal 1200)

**Home Screen:** In this screen user can select sensor configuration (for selection of type of sensors), mode of operation (auto / manual) and data transfer (file transfer). This window also shows the ongoing process.

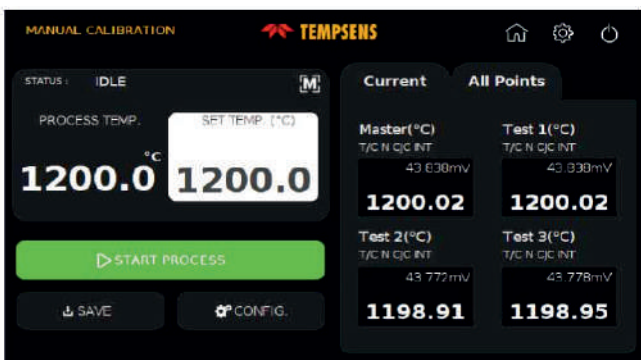


**Sensor Configuration:** In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD (PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

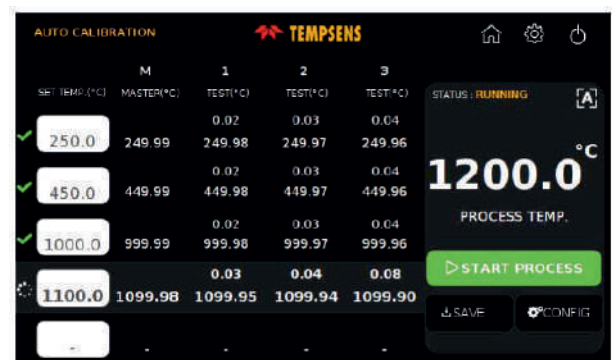


### Autocal 1200 have two operating modes i.e. Manual and Auto mode

**Manual Mode:** In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



**Auto Mode:** In this screen user sets the temperature Points for calibration (Max 5 Points)



**SOFTWARE :** Tempsens make Easy to use Customized software enables end user to access temperature data both for Manual mode and Automode



## ACCESSORIES

- **Inserts for Autocal 1200 & CALsys 1200 models**

Inserts for Autocal 1200& CALsys 1200 are made of special material have multiholes of 2x6.5mm and 2x8.5mm. All specifications on hole size based on outer diameter of the sensor under test.

\*We also offer customized hole size based on Customer requirements.

- **Reference Standard Thermocouple ('N' Type T/C)**
- **Calsoft Software**
- **Operational Manual**
- **Carry Case**
- **NABL accredited calibration certificate (Optional)**

