

Dry Block Calibrators

50°C to 650°C

Wide Temperature Range

CALsys 650 & Autocal 650 offer a wide temperature range from 50 °C to 650 °C

Lightweight, Portable

The CALsys 650 & Autocal 650 block is ideal for Industrial/ Laboratory field use. It only weighs about 10 kg.

Speed

The CALsys 650 & Autocal 650 heats up from ambient to +650 °C in 20 minutes and cools down to 100°C in 80 minutes.

Accuracy and performance

The CALsys 650 & Autocal 650 is an easily portable unit that also provides excellent calibration accuracy and with stability $\pm 0.05^\circ$ (at 650 °C.)

Computer Interface

The communication port (LAN/USB) enables communication with selected CALsys 650 & Autocal 650 calibrators.

CALsys 650 Autocal 650

Dry Block Temperature Calibrator



Autocal 650

CALsys 650

CALsys 650 & Autocal 650 offers easy to use portable temperature calibrator with medium temperature range from 50°C to 650°C. It is a highly stable standard calibrator for calibrating thermocouples and RTD. This calibrator can be used on site in workshops, Test and measurement rooms as well as laboratories. The comparison volume is a metallic block of special material, which has a diameter of 32mm and 150 mm long.

The Autocal 650 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 Thermocouples 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 completes the PC software generates a report of actual calibrated values for the inputs.

SPECIFICATIONS

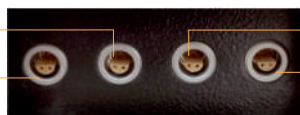
Autocal 650 & CALsys 650

Temperature range	50 °C to 650 °C
Stability	±0.01°C at 50°C
	±0.02°C at 350°C
	±0.05°C at 650°C
Radial uniformity	±0.04°C at 50°C
	±0.07°C at 350°C
	±0.09°C at 650°C
Loading effect (with a 6.35 mm reference probe and three 6.35 mm probes)	0.04°C
Insert OD dimensions	32 mm
Immersion depth	120 mm
Method of Control	Self tuned PID controller
Cooling time	80 Min (650 °C to 100 °C)
Heating time	20 Min.
Stabilization Time	15-20 Min.
Resolution	0.1°C
Display	LCD, °C or F user-selectable
Power requirements	230 VAC or 110 VAC 50/60 Hz 1KW
Calibration	Accredited calibration certificate provided (Optional)
Environmental operating conditions	0°C to 40°C
PC Interface	LAN / USB
Size (H x W x D)	355(H) x 195(W) x 270(D) mm
Weight	10 kg
Input (Autocal 650)	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
Software (Autocal 650)	The calibrator will be provided with software for data recording (Manual Mode) and Excel generation in Auto Mode

SENSOR CONNECTION (Autocal 650)

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

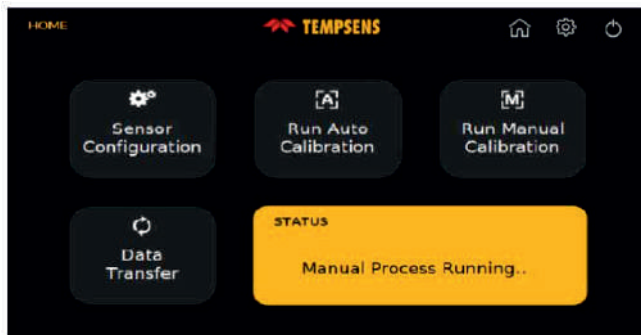
Connection for First TEST Sensor
Connection for MASTER Sensor



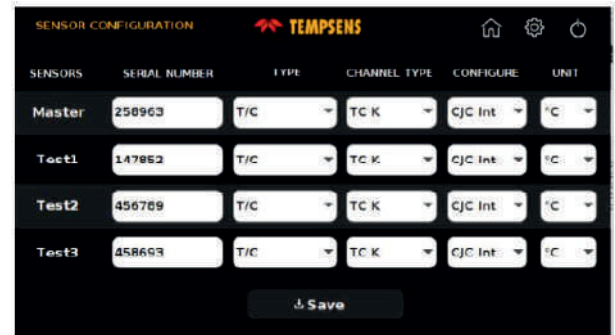
Connection for Second TEST Sensor
Connection for Third TEST Sensor

USER INTERFACE (Autocal 650)

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.

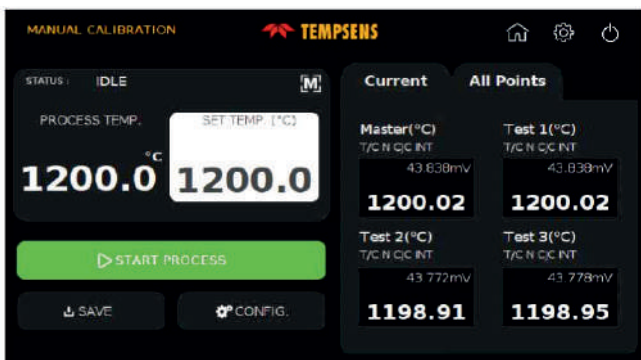


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD(PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

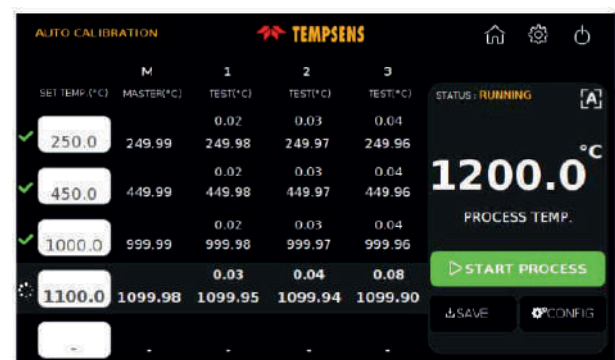


Autocal 650 have two operating modes i.e. Manual and Auto mode

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 650 & CALsys 650 models**

Inserts for Autocal 650 & CALsys 650 are made of special material have multiholes of 4x6.5mm. 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 ('K' Type T/C)**
- **Calsoft Software**
- **Operational Manual**
- **Carry Case**
- **NABL accredited calibration certificate (Optional)**

