

CALsys -35/200

CALsys -35/200 Autocal

Highly accurate & Automatic Liquid Calibration bath for Industrial/Laboratory field use

Liquid Calibration Bath

Wide Temperature Range

Calsys -35/200 & Calsys -35/200 Autocal offer a wide temperature range from -35 °C to 200 °C

Large immersion depth

Calsys -35/200 & Calsys -35/200 Autocal is ideal for Industrial / Laboratory field use. Large immersion depth 150mm with 105x105 access opening and wide operating range.

CFC free refrigerants

Calsys -35/200 & Calsys -35/200 Autocal extremely highly accurate liquid stirrer bath with free of CFC refrigerants. CFC refrigerant is immensely damaging to the environment. CFC damages the Ozone layer and contributes directly to the destruction of our environment.

Accuracy and performance

Calsys -35/200 & Calsys -35/200 Autocal is an easily portable unit that also provides excellent calibration accuracy with stability $\pm 0.04^{\circ}\text{C}$ at 200°C..

Accredited calibration

Calsys -35/200 & Calsys -35/200 Autocal is delivered with an accredited calibration certificate.

Computer Interface

The communication port (RS-232) enables communication with selected CALsys -35/200 & CALsys -35/200 Autocal calibrators for automation calibration and documentation thus it made documentation easy.



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CALsys -35/200 & CALsys -35/200 Autocal offers easy to use liquid temperature calibrator with high temperature range from -35 °C to 200°C. It is a highly stable standard furnace for calibrating thermocouples / RTD. It provide superior thermal environment for probe immersion as no air gape exist between the probe and the medium, thermal coupling is therefore much better than the alternatives described and the stirring results in very even heat distribution throughout the medium. Methanol is used for temperature below 0 °C, water from 0 °C to 80 °C and silicon oil up to 250°C. It has large tank which filled with methanol. The liquid is heated or cooled to the desired temperature. We have seven types of liquid baths. The volume is 6 Ltr and access opening is 105X105mm with 150mm depth. The temperature of the calibrator is set and controlled by a self tuned PID controller with automatic super fine adjustment. Our newly designed CALsys -35/200 model offers better esthetic design and performance wise upgraded to next level. The CALsys -35/200 Autocal is an automatic temperature calibration system for the Thermocouple and RTD's. 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 RTD's. 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.

With the Tempensens make Compact Temperature Calibrator, you have chosen an extremely effective instrument which we hope will live up to all your expectations. This is a fast, timesaving, and reliable true industrial temperature calibrator designed for on-site use.

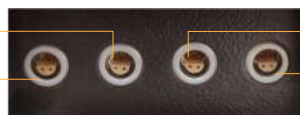
SPECIFICATIONS

CALsys -35/200 Autocal & CALsys -35/200

Temperature range	-35 °C to 200 °C
Accuracy	±0.5 °C
Stability	±0.01°C at -35°C
	±0.03°C at 0°C
	±0.04°C at 200°C
Uniformity	±0.03°C at -35°C
	±0.05°C at 0°C
	±0.07°C at 200°C
Volume	6 Ltr.
Immersion depth	150mm
Access opening	105X105 mm
Method of Control	Self tuned PID controller
Cooling time	60 Min (room temperature to -35°C)
Resolution	0.1 °C
Display	LCD, °C or °F user-selectable
Size (H x W x D)	540(H) x 220(W) x620(D) mm
Weight	41Kg
Power requirements	230 VAC, 2 KW(50 Hz)
Computer interface	RS - 232
Calibration	Accredited calibration certificate provided
Environmental operating conditions	0 °C to 40 °C, 0 % to 90 % RH (non-condensing)
Specifications valid in environmental conditions	13°C 25°C
Input (CALsys -35/200 Autocal)	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 CALsys -35/200 Autocal)	The calibrator will be provided with software for data recording (Manual Mode) and Test Certificate generation in Auto Mode
Data logging (CALsys -35/200 Autocal)	Data logging facility with logged data export to computer through LAN port (optional USB)

The Calibration system provides calibration up to four channels i.e. one master and three test sensors . We use high quality universal LEMO connector i.e. suitable both for T/C and Rtd.

Connection for First TEST Sensor ————
 Connection for MASTER Sensor ————
 Connection for Second TEST Sensor ————
 Connection for Third TEST Sensor ————



USER INTERFACE (CALsys -35/200 Autocal)

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, PT 50 etc.) for calibration with their serial number and temperature unit (C/F/K).

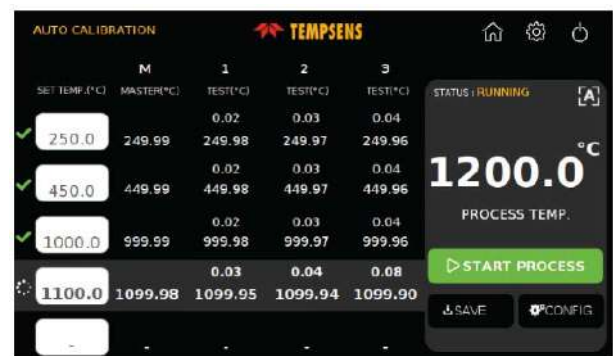


CALSYS -35/200 Autocal have two operating modes i.e. Manual and Auto mode

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



AUTOMATIC CALIBRATION REPORT GENERATION

- Tempsens can offer customized data saving option both for manual and Automode.
- After completion manual/Automode automatic calibration report can be generated at PC side based on pre define format.

CALIBRATION REPORT (TEMP MEASURING INST.)

CUSTOMER			Serial No.-	1336/1
INSTRUMENT Desc :		INST. SR.NO :		
MAKE		MODEL NO. :		
RANGE CALIBRATED	400.00	°C	LAB CONDITION (TEMP) :- 25 +/- 5 °C	
DATE OF CALIBRATION	2017-08-24		RECOMMENDED RECALIBRATION DATE : 2018-08-24	

SR.NO	STANDARD TEMP °C	MASTER TEMP °C	ACTUAL TEMP °C	ERROR IN °C (W.R.T MASTER)	REMARK
1	400.00	420.23	208.91	-211.32	
2	410.00	427.82	209.80	-218.02	
3					
4					
5					

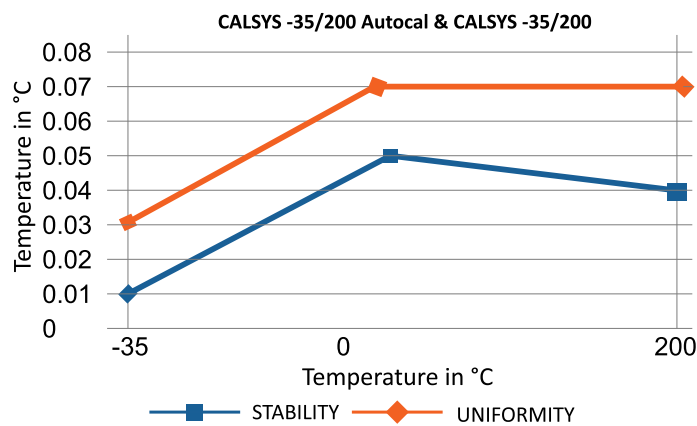
ACCESSORIES

Inserts for CALSYS -35/200 Autocal & CALSYS -35/200 models

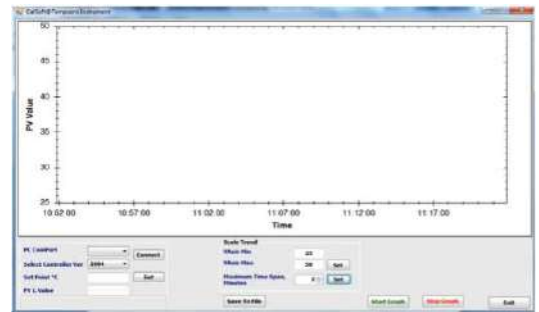
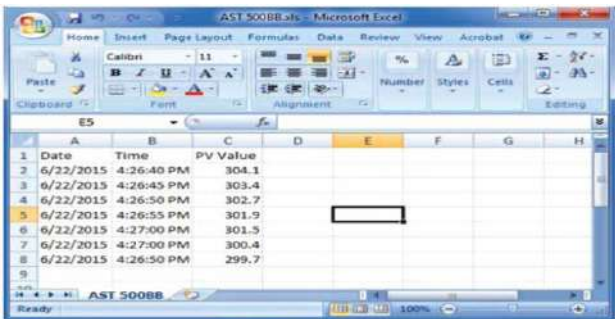
Inserts for CALSYS -35/200 Autocal & CALSYS -35/200 is about 105 X 105 mm access opening with 150 mm insertion depth. All specifications based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements.

Hole Size	Description
Ci1	Multihole, 4 x 6.5 mm
Ci2	Special (Customized)

STABILITY & UNIFORMITY



SOFTWARE



- CalSoft including for setting bath temperature and monitoring the PV. Graphical representations of PV/TIME with 2 hours data logging.

MASTER SENSOR

- Reference Standard RTD Part no. TPRT-A-300.



- NABL accredited calibration certificate - 3 point
- Operational Manual

BLACK BODY CAVITY (OPTIONAL)

The calibration of infrared (IR) thermometers can be performed with black body cavity included with CALSYS -35/200 & CALSYS -35/200 calibrator. The black body has special design and structure that ensure a high emissivity and accurate result.

