TEMPSENS

Automatic Calibration System

-Portable

-Highly Stable

-Highly Stable Temperature Calibrator for Industrial Field Uses

www.tempsens.com

TEMPSENS

CALsys -100/40
CALsys -100/40 Autocal

Portable, Lightweight, highly accurate low temperature FPSC system based Calibrator for Industrial/ Laboratory field use

Dry Block Calibrators

Wide Temperature Range

Calsys -100/40 Autocal & Calsys -100/40 offer a wide temperature range from -100°C to 40°C

Lightweight, portable

The Calsys -100/40 Autocal & Calsys -100/40 block is ideal for Industrial/ Laboratory field use. It only weights about 16 kg, and it is small enough to carry around.

Speed

The Calsys -100/40 Autocal & Calsys -100/40 extremely quick to reach various temperatures, i.e. it cools down to -100°C in 70 minutes and heats up room temp to +40°C in 30 minutes. This saves time and increases productivity.

Accuracy and performance

The Calsys -100/40 Autocal & Calsys -100/40 is an easily portable unit that also provides excellent calibration accuracy and with stability ±0.04°C (30 Min).

Cooling Technology

Tempsens provide low temperature dry block calibrator with use of FPSC system.

FPSC system able to cool down calibration block upto -100°C with minimum power.

Accredited calibration

Each Calsys -100/40 Autocal & Calsys -100/40 is delivered with an accredited calibration certificate.

Computer Interface

The communication port (RS-232/ USB) enables communication with selected Calsys -100/40 Autocal & Calsys -100/40 calibrators for automation calibration & documentation so it made documentation easy.

CALSYS -100/40

CALsys -100/40 Autocal

Calsys -100/40 Autocal & Calsys -100/40 offers easy to use portable low temperature calibrator with temperature range from -100 to 40°C. It is a highly stable standard furnace for calibrating RTD. This calibrator can be used on site for high temperature calibration and also find application in aerospace, oil gas petrochemical, pharmaceutical industry, electric power, automotive and material process industry. The comparison volume is a metallic fixed block of special material, which has a fixed insert with 150mm long. Low temperature dry block furnace based on FPSC cooling system. This model provides special design isothermal enclosure which can calibrate sensor against the calibrator. Temperature of the calibrator is set and controlled by a self tuned PID controller with automatic super fine adjustment. Our newly designed Calsys -100/40 model offers better esthetic design and performance wise upgraded to next level. The CALsys -100/40 Autocal is an automatic temperature calibration system for the Thermocouple and RTD's. The system consists ofTemperature 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.

During the past several years, we have acquired extensive knowledge of industrial temperature calibration. This expertise is reflected in our products which are all designed for daily use in an industrial environment.

SPECIFICATIONS

CALsys -100/40 Autocal & CALsys -100/40

Temperature Range*	-100°C to 40°C
Stability (30 Min)	±0.04 °C or Better
Radial Uniformity	±0.05°C or better
Immersion Depth**	150 mm
Method of Control	Self tunned PID controller
Cooling Time	70 Min (Ambient 25°C to -100°C)
Resolution	0.1 °C (0.01 Optional)
Display	LCD, °C or °F user-selectable
Size (H x W x D)	545(H) x 245(W) x 350(D) mm
Weight	16Kg
Power Requirements	230 VAC, 350W
Computer Interface	RS - 232
Calibration	Accredited calibration certificate provided (Optional)
Environmental Operating Conditions	12 °C to 35 °C, 0 % to 90 % RH (non-condensing)
Specifications valid in environmental conditions	15°C ... 30°C
Input (CALsys -100/40 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 -100/40 Autocal)	**The calibrator will be provided with software for data recording (Manual Mode) and Test Certificate genration in Auto Mode**
Data logging (CALsys -100/40 Autocal)	**Data logging facility with logged data export to computer through LAN port (optional USB)**

***** At 28C Ambient Temperature

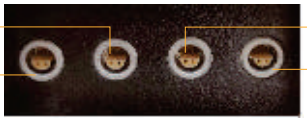
******120mm Deep Plus 30 mm top insulation

Note : Customized options available for resolution and insert construction.

SENSOR CONNECTION (CALsys -100/40 Autocal)

Connection for First TEST Sensor

Connection for MASTER Sensor



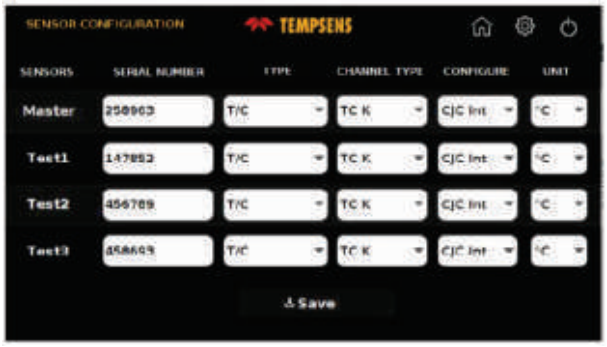
Connection for Second TEST Sensor

Connection for Third TEST Sensor

USER INTERFACE (CALsys -100/40 Autocal)

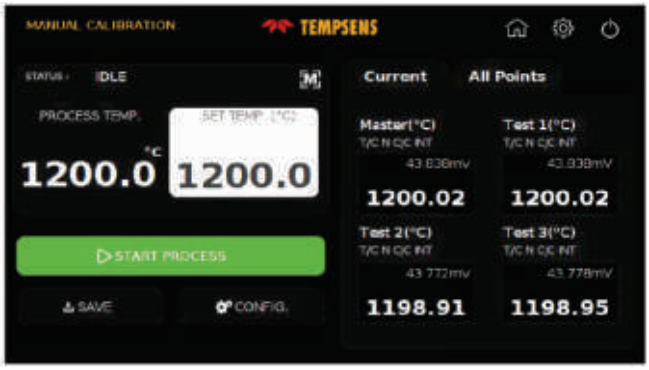
Home Screen: In this screen user can select sensor configuration (for selection of type of sensors), mode of operation (auto / manual) and data transfer (file transfer). This window also shows the ongoing process.

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

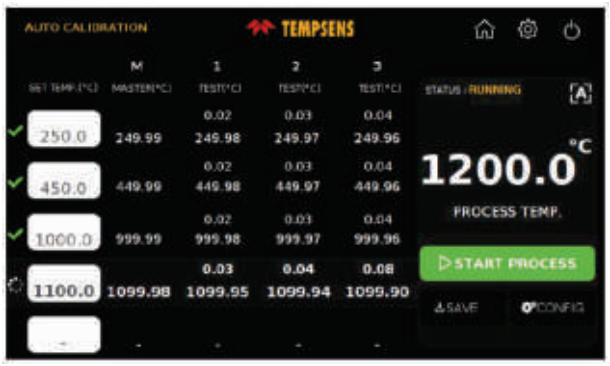


CALSYS -100/40 Autocal have two operating modes i.e. Manual and Auto mode

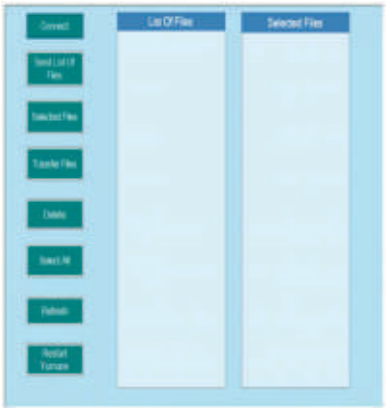
Manual Mode: Inthis screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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

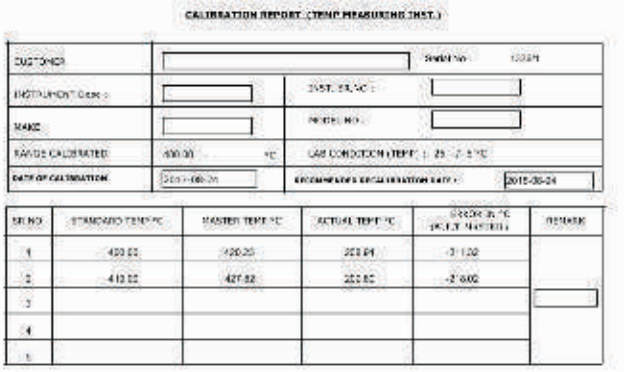


SOFTWARE : Tempsens make Easy to use Customized software enables end user to access temperature data bothfor Manual mode and Automode

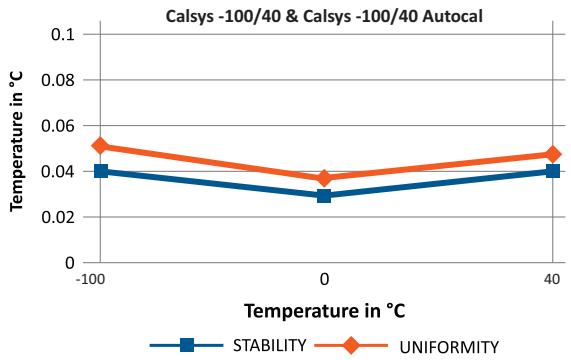


AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- 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 predefine format.



STABILITRY & UNIFORMITY



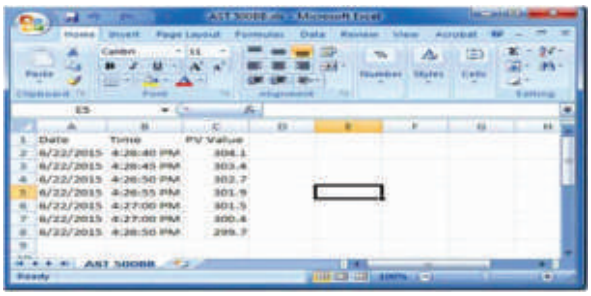
ACCESSORIES

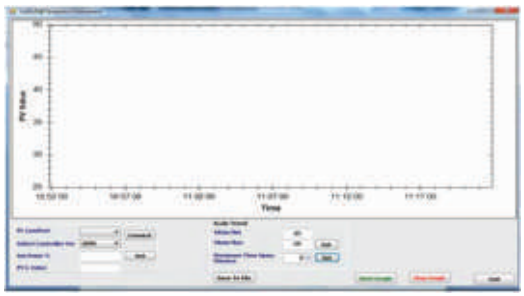
Inserts for Calsys -100/40 Autocal & Calsys -100/40 models

Inserts for CALsys -100/40 Autocal & CALsys -100/40 are made of aluminum .All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements.

Inserts	Description
Ci1	Multihole, 4x 6.5mm
Ci2	Multihole, Special customize

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 points (Optional)
- Operational Manual

CARRY CASE (Optional)

• Tempsens makes customized carry case is a rugged, safe perfectly designed to carry our new CALsys Calibrator & different accessories.

TEMPSENS

Tempsens Instruments (I) Pvt. Ltd. U# II
A-190, Road No.5, M.I.A., Udaipur-313003 (Rajasthan) INDIA
Ph.:+91-294-3500629, Fax.:+91-294-3500631
Email: calsys@tempsens.com, info@tempsens.com

TEMPSENS

CALsys -30/110
CALsys -30/110 Autocal

Highly accurate & Automatic Dry Block Calibrator for Industrial/Laboratory field use

CALsys -30/110 Autocal

CALsys -30/110

Dry Block Calibrators

Wide Temperature Range

Calsys -30/110 & CALsys -30/110 Autocal a wide temperature range from -30 °C to 110 °C

Lightweight, portable

The Calsys -30/110 & CALsys -30/110 Autocal block is ideal for Industrial/ Laboratory eld use.It only weights about 13 kg, and it is small enough to carry around.

Speed

The Calsys -30/110 & CALsys -30/110 Autocal extremely quick to reach various temp. , i.e. it cools down to 110 °C in 25 minutes and heats up room temp to +110 °C in 10 minutes. This saves time and increases productivity.

Accuracy and performance

The Calsys -30/110 & CALsys -30/110 Autocal is an easily portable unit that also provides excellent calibration accuracy with stability ± 0.07 °C at 110 °C..

Accredited calibration

The Calsys -30/110 & CALsys -30/110 Autocal is delivered with an accredited calibration certicate.

Computer Interface

The communication port (RS-232/ USB) enables communication with selected Calsys -30/100 Calibration for automation calibration and documentation easy.

Calsys -30/110 & CALsys -30/110 Autocal easy to use portable low temperature calibrator with temperature range from -30 to 110°C. It is a highly stable standard furnace for calibrating RTD. This calibrator can be used on site for high temperature calibration and also nd application in aerospace, oil gas petrochemical, pharmaceutical industry, electric power, automotive and material process industry. The comparison volume is a metallic fixed block of special material, which has a diameter of 32mm and 120mm long. Low temperature dry block furnace based on thermoelectric cooling circuitry. This model provides special design isothermal enclosure which can calibrate sensor against the calibrator. Temperature of the calibrator is set and controlled by a self tuned PID controller with automatic super ne adjustment. Our newly designed Calsys -30/110 model offers better esthetic design and performance wise upgraded to next level. The CALsys -30/110 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 Tempsens 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.

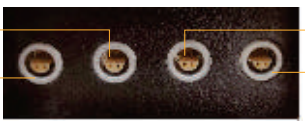
SPECIFICATIONS

CALsys -30/110 Autocal & CALsys 30/110

Temperature range	-30 °C to 110 °C
Stability	±0.04°C at -30°C
	±0.06°C at 0°C
	±0.07°C at 110°C
Radial uniformity	±0.05°C at -30°C
	±0.07°C at 0°C
	±0.08°C at 110°C
Immersion depth	120 mm
Fixed insert dimensions	32 mm
Method of Control	Self tunned PID controller
Heating time	10 Min.
Cooling time	25 Min (110 °C to -30 °C)
Resolution	0.1°C (0.01°C (optional)
Display	LCD,°C or °F user-selectable
Size (HxWxD)	380(H) x 170 (W) x 188 (D) mm
Weight	13 kg
Power requirements	230 VAC,500W (5O Hz)
Computer interface	RS - 232
Calibration	Accredited calibration certificate provided (Optional)
Environmental operating conditions	0°C to 40°C, 0% to 90% RH (non-condensing)
Specifications valid in environmental conditions	l3°C ... 25°C
Input {CALsys -30/110 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 -30/110 Autocal)	**The calibrator will be provided with software for data recording (Manual Mode) and Test Certificate genration in Auto Mode**
Data logging (CALsys -30/110 Autocal)	**Data logging facility with logged data export to computer through LAN port (optional USB)**

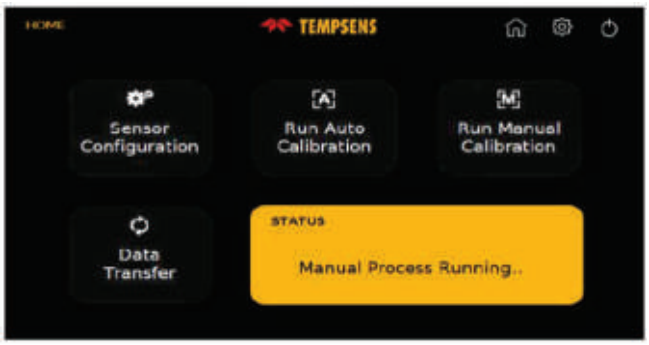
SENSOR CONNECTION (CALsys 30/110 Autocal)

The Calibration system provides calibration upto 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.

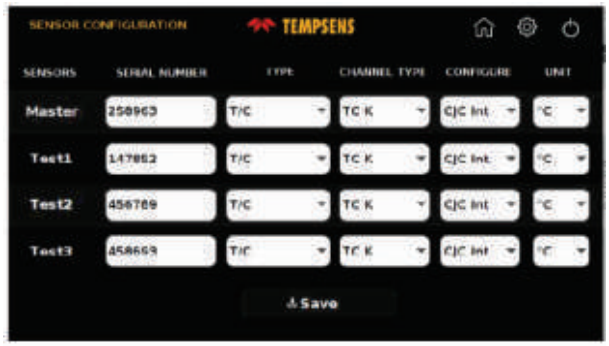


USER INTERFACE (CALsys 30/110 Autocal)

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

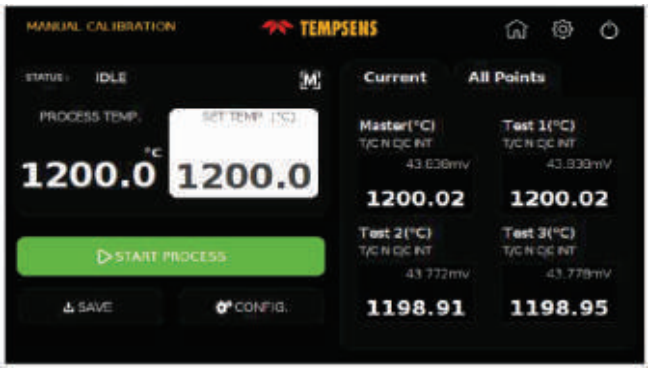


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD (PT 100, PT 1000, PT 50 etc.) for calibration with their serial number and temperature unit (C/F/K).

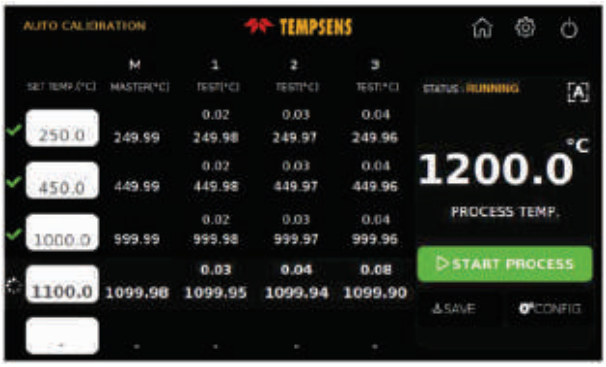


CALSYS -30/110 Autocal have two operating modes i.e. Manual and Auto mode

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



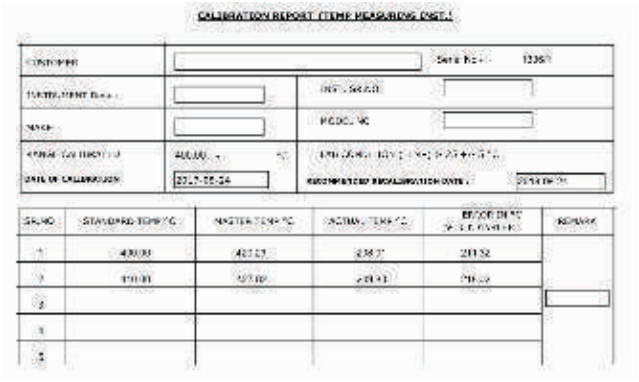
Auto Mode : In this screen user sets the temperature Points for calibration (Max 5 Points)



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 (Optional)

- 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.



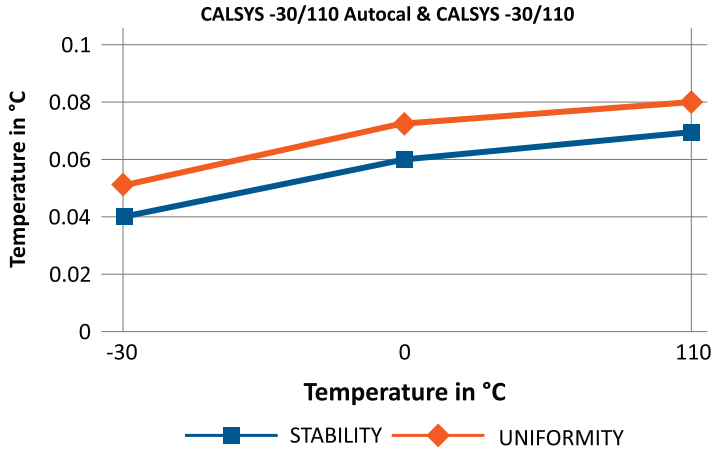
ACCESSORIES

Inserts for CALsys -30/110 Autocal & CALsys -30/110 models

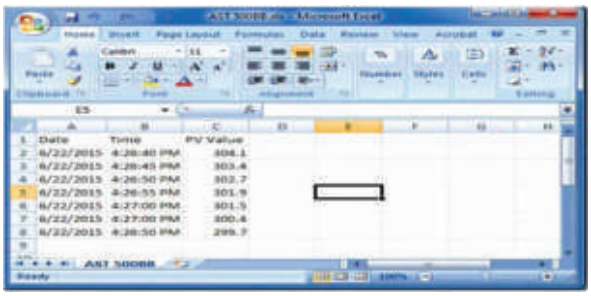
Inserts for CALsys -30/110 Autocal & CALsys -30/110 are made of aluminum .All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements.

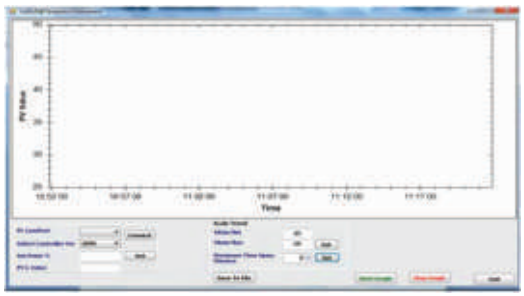
Inserts	Description
Ci1	Multihole 2x6.5 mm, 1x8.5 mm
Ci2	Multihole, Special customize

STABILITRY & 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 points (Optional)

• Operational Manual

CARRY CASE

• Tempsens makes customized carry case is a rugged, safe perfectly designed to carry our new CALsys Calibrator & different accessories.

Tempsens Instruments (I) Pvt. Ltd. U# II
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Ph.:+91-294-3500600, Fax.:+91-294-3500631
Email: calsys@tempsens.com, info@tempsens.com

TEMPSENS

Calsys -15/110
Calsys -15/110 Autocal

Portable, Lightweight, highly accurate low temperature Calibrator for Industrial/ Laboratory field use

Dry Block Calibrators

Wide Temperature Range

Calsys -15/110 offer a wide temperature range from -15 °C to 110 °C

Lightweight, portable

The Calsys -15/110 block is ideal for Industrial/ Laboratory field use. It only weights about 12 kg, and it is small enough to carry around

Speed

The Calsys -15/110 extremely quick to reach various temperatures, i.e. it Heats down to -15 °C in 25 minutes and heats up room temp to +110 °C in 10 minutes. This saves time and increases productivity

Accuracy and performance

The Calsys -15/110 is an easily portable unit that also provides excellent calibration accuracy with stability ±0.07 °C at 110°C.

Accredited calibration

Each Calsys -15/110 is delivered with an accredited calibration certificate.

Computer Interface

The communication port(RS-232/USB) enables communication with selected Calsys -15/110 Temperature calibrator for automation calibration and documentation thus it made documentation easy.

CALSYS -15/110

CALsys -15/110 Autocal

Calsys -15/110 offers easy to use portable low temperature calibrator with temperature range from –15 to 110°C. It is a highly stable standard furnace for calibrating RTD. This calibrator can be used on site for high temperature calibration and also find application in aerospace, oil gas petrochemical, pharmaceutical industry, electric power, automotive and material process industry. The comparison volume is a metallic block of special material, which has a diameter of 24mm and 120mm long. Low temperature dry block furnace based on thermoelectric cooling circuitry. This model provides special design isothermal enclosure which can calibrate sensor against the calibrator. Temperature of the calibrator is set and controlled by a self tuned PID controller with automatic super fine adjustment. Our newly designed Calsys -15/110 model offers better esthetic design and performance wise upgraded to next level. The CALsys -15/110 Autocal is an automatic temperature calibration system for the Thermocouple and RTD's. The system consists ofTemperature 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.

During the past several years, we have acquired extensive knowledge of industrial temperature calibration. This expertise is reflected in our products which are all designed for daily use in an industrial environment.

SPECIFICATIONS

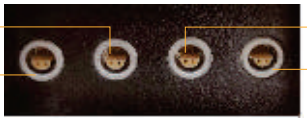
CALsys -15/110 Autocal & CALsys -15/110

Temperature range at 25°c	-15 °C to 110 °C
Stability	±0.03°C at -15°C
	±0.05°C at 0°C
	±0.07°C at 110°C
Radial uniformity	±0.05°C at -15°C
	±0.07°C at 0°C
	±0.09°C at 110°C
Hysteresis	0.02 °C
Immersion depth	120 mm
Insert OD dimensions	24 mm
Method of Control	Self tunned PID controller
Heating time	10 Min
Cooling time	25 Min (110 °C to -15°C)
Resolution	0.1 °C
Display	LCD, °C or °F user-selectable
Size (H x W x D)	380(H) x 170(W) x 188(D) mm
Weight	12Kg
Power requirements	230 VAC, 500 W(50 Hz)
Computer interface	RS - 232
Calibration	Accredited calibration certificate provided (Optional)
Environmental operating conditions	5 °C to 25 °C, 0 % to 90 % RH (non-condensing)
Specifications valid in environmental conditions	5°C ... 25°C
Input (CALsys -15/110 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 -15/110 Autocal)	**The calibrator will be provided with software for data recording (Manual Mode) and Test Certificate genration in Auto Mode**
Data logging (CALsys -15/110 Autocal)	**Data logging facility with logged data export to computer through LAN port (optional USB)**

SENSOR CONNECTION (CALsys -15/110 Autocal)

Connection for First TEST Sensor

Connection for MASTER Sensor



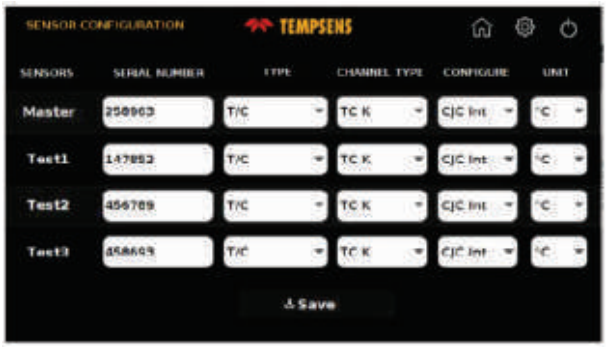
Connection for Second TEST Sensor

Connection for Third TEST Sensor

USER INTERFACE (CALsys -15/110 Autocal)

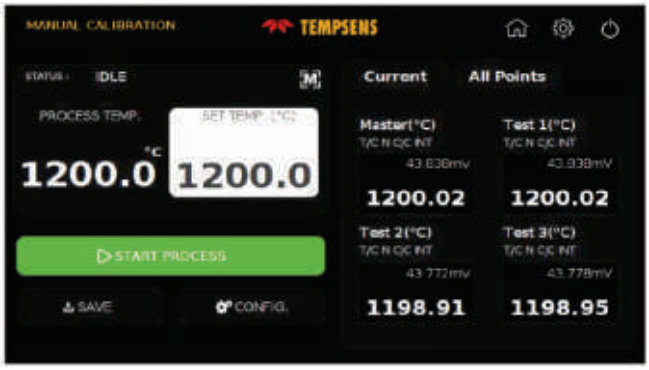
Home Screen: In this screen user can select sensor configuration (for selection of type of sensors), mode of operation (auto / manual) and data transfer (file transfer). This window also shows the ongoing process.

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

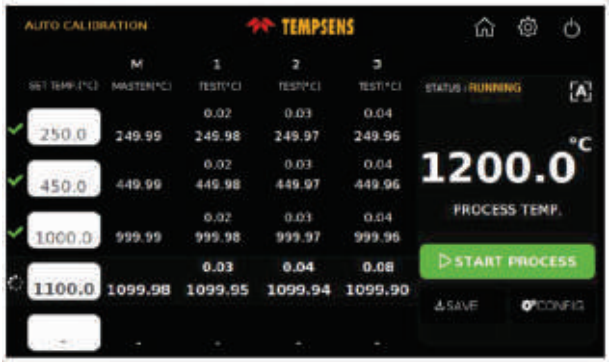


CALSYS -15/110 Autocal have two operating modes i.e. Manual and Auto mode

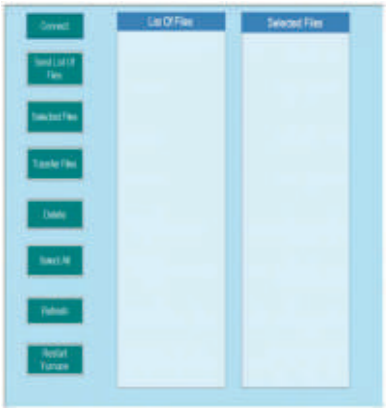
Manual Mode: Inthis screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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

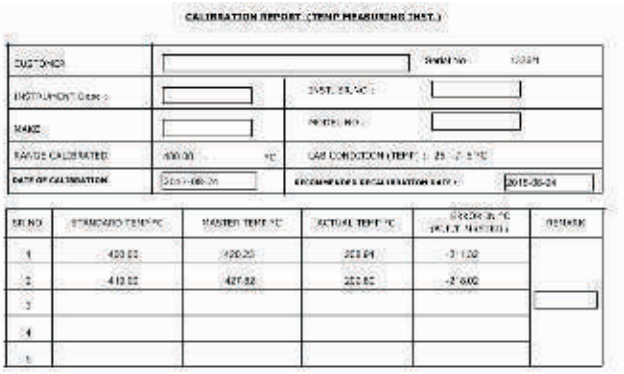


SOFTWARE : Tempsens make Easy to use Customized software enables end user to access temperature data bothfor Manual mode and Automode

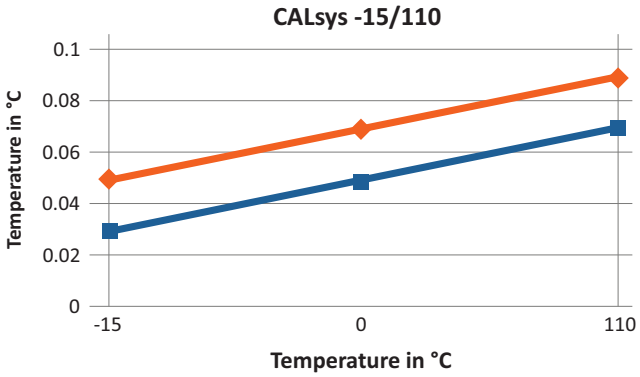


AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- 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 predefine format.



STABILITY & UNIFORMITY



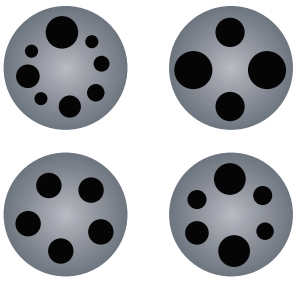
ACCESSORIES

Inserts for Calsys -15/110 models

Inserts for Calsys -15/110 are made of aluminum. All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements.

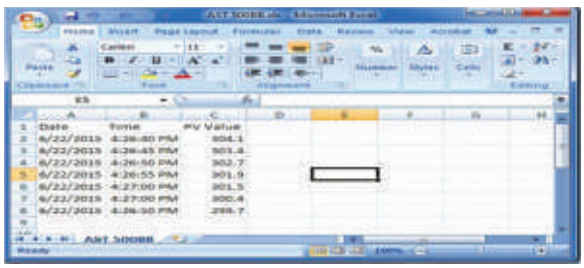
Inserts Model Description

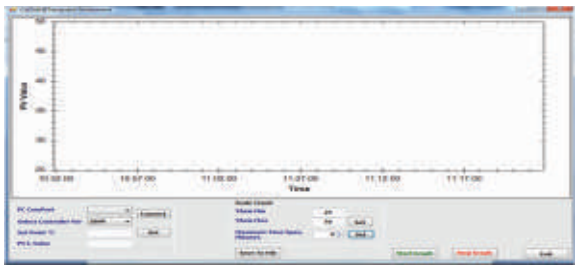
Inserts	Description
Ci1	Multihole, 4 x 6.5 mm
Ci2	Special (Customized)



Customized Equalizing Block....Part No. EQ1

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 (Optional)
- Operational Manual

CARRY CASE

- Tempsens makes customized carry case is a rugged, safe perfectly designed to carry our new CALsys -15/110 calibrator and different accessories.

Tempsens Instruments (I) Pvt. Ltd. U# II
A-190, Road No.5, M.I.A., Udaipur-313003 (Rajasthan) INDIA
Ph.:+91-294-3500600, Fax.:+91-294-3500631
Email: calsys@tempsens.com, info@tempsens.com

TEMPSENS

CALsys 650
CALsys 650 Autocal

Portable, Highly Stable & Automatic Temperature Calibrator for Industrial/Laboratory Field Use

Dry Block Calibrators

Wide Temperature Range

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

Lightweight, Portable

The CALsys 650 & CALsys 650 Autocal block is ideal for Industrial/ Laboratory field use. It only weight about 10 kg , and it is small enough to carry around.

Speed

The CALsys 650 & CALsys 650 Autocal extremely quick to reach various temperatures,i.e.it cools down to 100°C in 80 minutes and heats up room temp to +650 °C in 20 minutes.This saves time and increases productivity

Accuracy and performance

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

Accredited calibration

Each CALsys 650 & CALsys 650 Autocal is delivered with an accredited calibration certificate.

Computer Interface

The communication port (LAN/USB) enables communication with selected CALsys 650 PLUS & CALsys 650 calibrators for automation calibration and documentation.

CALsys 650 Autocal

CALsys 650

CALsys 650 & CALsys 650 Autocal offers easy to use portable temperature calibrator with medium temperature range from 5O to 650°C. It is a highly stable standard furnace for calibrating thermocouples/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 15Omm long.The CALsys 650 Autocal is an automatic temperature calibration system for the Thermocouple and RTD's. The system consists of Temperatu re bath and PC softwa re, 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.Our newly designed CALsys 650 & CALsys 650 Autocal model offers better esthetic design and performance wise upgraded to next level. This model offers better cooling timewhich is 2 times faster than our old model and has stability 30% better than the old model. Hence our new model not only saves important time for our valuable customer but also provides better performance.

With the Tempsens 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

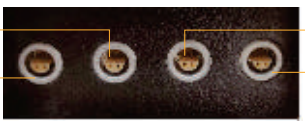
CALsys 650 Autocal & CALsys 650

Temperature range	5O °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
Cooling time	80 Min (650 °C to 100 °C)
Heating time	20 Min.
Resolution	0.1°C
Display	LCD,°C or °F user-selectable
Power requirements	230 VAC,1KW(50 Hz)
Calibration	Accredited calibration certificate provided (Optional)
Environmental operating conditions	0°C to 40°C, 0% to 90% RH (non-condensing)
Specifications valid in environmental conditions	l3°C ... 33°C
PC Interface	Ethernet port (CALsys 650 PLUS) , RS - 232 (CALsys 650)
Size (H x W x D)	325(H) x 185(W) x 265(D) mm
Weight	10 kg
Input {CALsys 650 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 650 Autocal)	**The calibrator will be provided with software for data recording{Manual Mode) and Test Certificate genration in Auto Mode**
Data logging (CALsys 650 Autocal)	**Data logging facility with logged data export to computer through LAN port (optional USB)**

SENSOR CONNECTION (CALsys 650 Autocal)

The Calibration system provides calibration upto 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

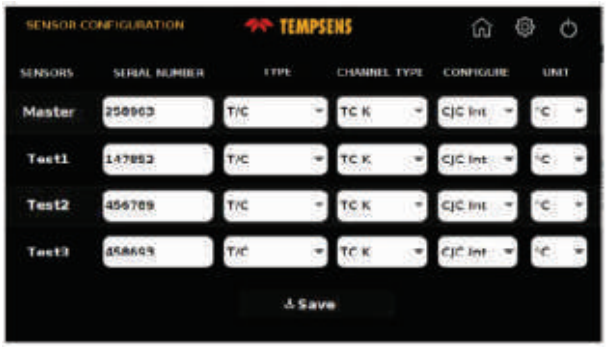


Connection for Second TEST Sensor
Connection for Third TEST Sensor

USER INTERFACE (CALsys 650 Autocal)

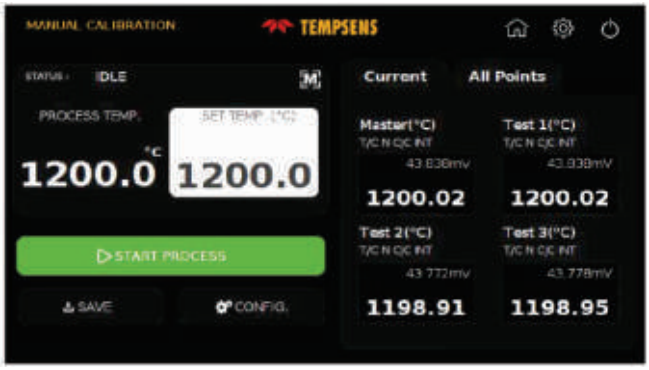
Home Screen: In this screen user can select sensor configuration (for selection of type of sensors), mode of operation (auto / manual) and data transfer (file transfer). This windowalso shows the ongoing process.

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).

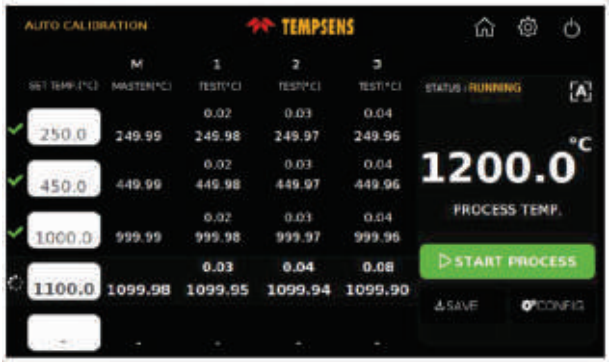


CALSYS 650 Autocal have two operatingmodes i.e. Manual and Auto mode

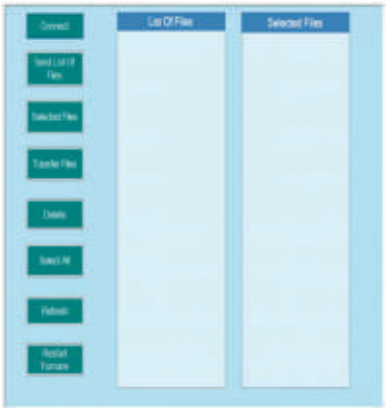
Manual Mode: Inthis screen user set the temp. Point for calibration and on clickingstart process buttonthe process ofcalibration starts



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

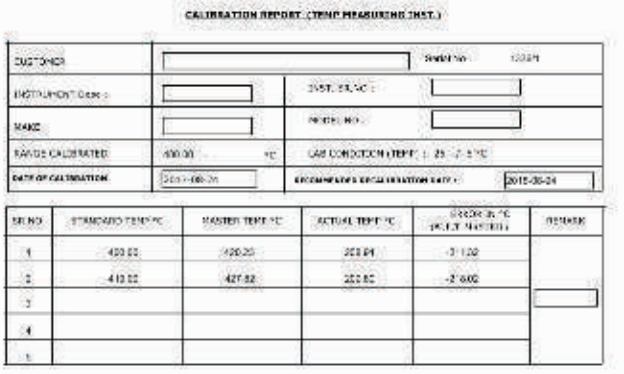


SOFTWARE : Tempsens make Easy to use Customized software enables end user to access temperature data bothfor Manual mode andAutomode

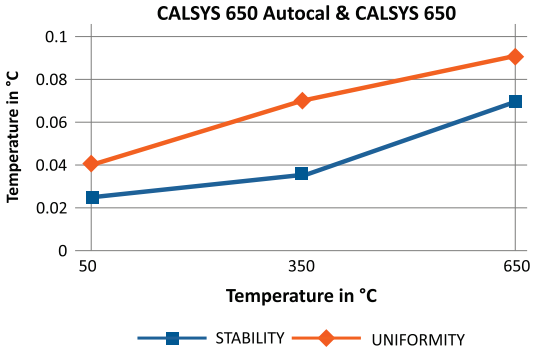


AUTOMATICCALIBRATION REPORT GENERATION (Optional)

- Tempsens can offer customized data saving option bothfor manualand Automode.
- After completion manual / Automode automatic calibration report can be generated at PC side basedon predefine format.



STABILITY & UNIFORMITY

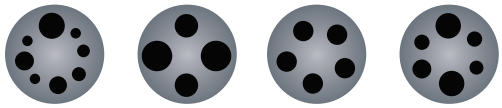


ACCESSORIES

Inserts for CALSYS 650 Autocal & CALSYS 650 models

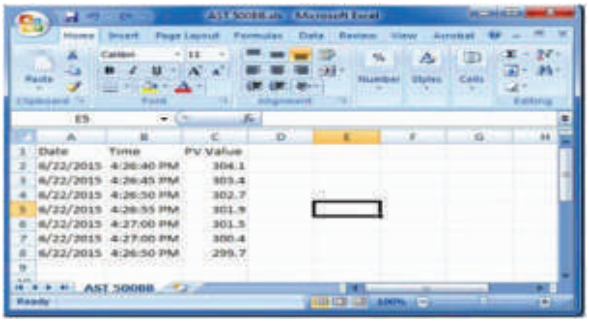
Inserts for CALsys 650 Autocal& CALsys 650 are made of Brass. All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements.

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



Customized Equalizing Block....Part No. EQ1

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 Thermocouple (K' Type T/C)
- Part no. TICK- 300.

- NABL accredited calibration certificate (Optional)
- Operational Manual

CARRY CASE

- Tempsens makes customized carry case is a rugged, safe perfectly designed to carry our new CALsys Calibrator and different accessories.

TEMPSENS

Tempsens Instruments (I) Pvt. Ltd. U# II
A-190, Road No.5, M.I.A., Udaipur-313003 (Rajasthan) INDIA
Ph.:+91-294-3500600, Fax.:+91-294-3500631
Email: calsys@tempsens.com, info@tempsens.com

TEMPSENS

CALsys 1200
CALsys 1200 Autocal

Highly accurate & Automatic Dry Block Calibrator for Industrial/Laboratory field use

Dry Block Calibrators

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

Lightweight, portable
The CALsys 1200 & CALsys 1200 Autocal block is ideal for Industrial/Laboratory field use. It only weight around 12kg and it is small enough to carry around.

Speed
The CALsys 1200 & CALsys 1200 Autocal extremely quick to reach various temperatures i.e. it cools down to 250°C in 150 minutes and heats up room temp to +1200 °C in 60 minutes.

Accuracy and performance
The CALsys 1200 & CALsys 1200 Autocal is an easily portable unit that also provides excellent calibration accuracy with stability ±0.3°C at 1200 °C.

Accredited calibration
Each CALsys 1200 & CALsys is delivered with an accredited calibration certificate.

Computer Interface
The communication port(RS-232/ USB) enables communication with selected CALsys 1200 calibrators for automation calibration and documentation thus it made documentation easy.

CALsys 1200 Autocal

CALsys 1200

CALsys 1200 & CALsys Autocal offers easy to use portable temperature calibrator with high temperature range from 250 to 1200°C. It is a highly stable standard furnace for calibrating thermocouples I RTD.This calibrator can be used on site for high temperature calibration and also find 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 21Smm long. The temperature of the calibrator is set and controlled by a self tuned PID controller with automatic super fine adjustment. Our newly designed CALsys 1200 model offers better esthetic design and performance wise upgraded to next level.

The CALsys-1200 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 Tempsens 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.

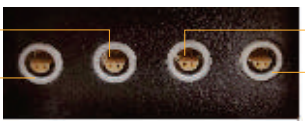
SPECIFICATIONS

CALsys -1200 Autocal & 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
Immersion depth	160 mm
Insert OD dimensions	37 mm
Method of Control	Self tunned PID controller
Heating time	60 Min.
Cooling time	150 Min (1200 °C to 250 °C)
Resolution	0.1°C up to 999°C
Display	LCD,°C or °F user-selectable
Size (HxWxD)	405(H) x 205(W) x 285(D) mm
Weight	12 kg
Power requirements	230 VAC,1.5 KW (50 Hz)
Computer interface	RS - 232
Calibration	Accredited calibration certificate provided (Optional)
Environmental operating conditions	0°C to 40°C, 0% to 90% RH (non-condensing)
Specifications valid in environmental conditions	l3°C ... 33°C
Input {CALsys 1200 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 1200 Autocal)	**The calibrator will be provided with software for data recording (Manual Mode) and Test Certificate genration in Auto Mode**
Data logging (CALsys 1200 Autocal)	**Data logging facility with logged data export to computer through LAN port (optional USB)**

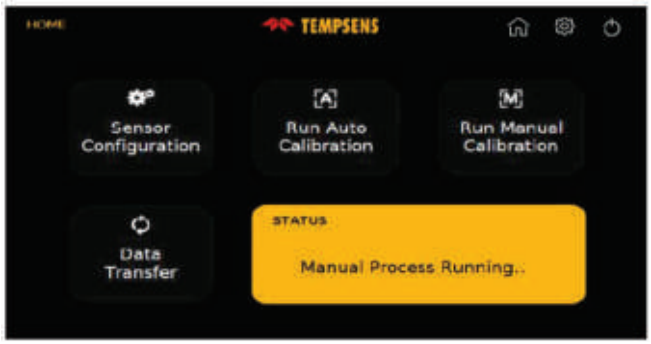
SENSOR CONNECTION (CALsys 1200 Autocal)

The Calibration system provides calibration upto 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.



USER INTERFACE (CALsys 1200 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 windowalso shows the ongoing process.

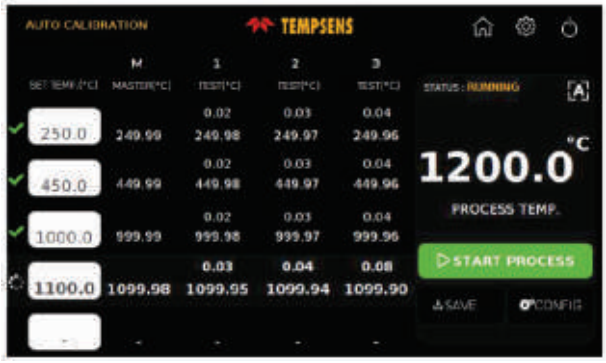


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD(PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

CALSYS 1200 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

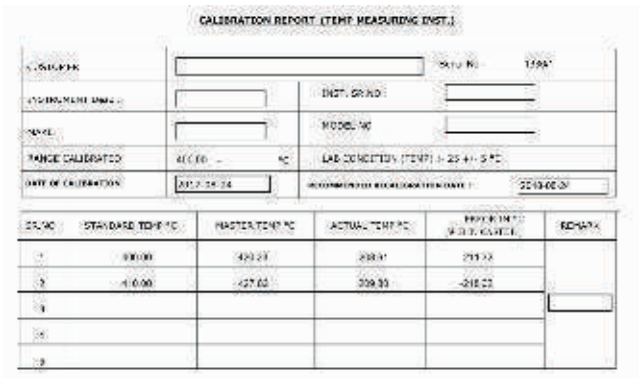
Auto Mode : In this screen user sets the temperature Points for calibration (Max 5 Points)



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

AUTOMATICCALIBRATION REPORT GENERATION (Optional)

- 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 predefine format.

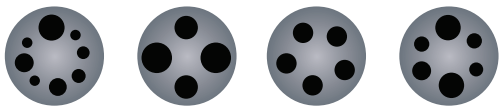


ACCESSORIES

Inserts for CALsys 1200 Autocal & CALsys 1200 models

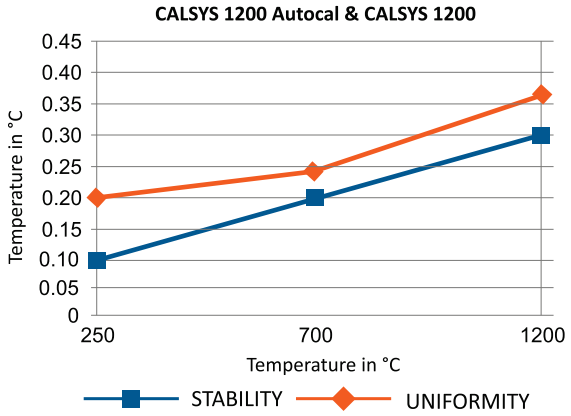
Inserts for Calsys 1200 Autocal & CALsys 1200 are made of special material. All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements.

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

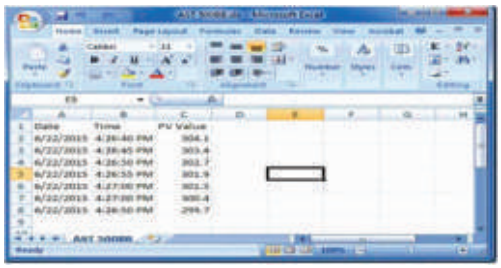


Customized Equalizing Block....Part No. EQ1

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 Thermocouple ('N' Type T/C)
- Part no. TTCN- 300.

- NABL accredited calibration certificate (Optional)
- Operational Manual

CARRY CASE

- Tempsens makes customized carry case is a rugged, safe perfectly designed to carry our new CALsys Calibrator and different accessories.

Tempsens Instruments (I) Pvt. Ltd. U# II
A-190, Road No.5, M.I.A., Udaipur-313003 (Rajasthan) INDIA
Ph.:+91-294-3500600, Fax.:+91-294-3500631
Email: calsys@tempsens.com, info@tempsens.com

High Temperature Dry Block Furnace

Wide Temperature Range

CALsys 1200L Autocal & CALsys 1200L offer a wide temperature range from 300 °C to 1200 °C

Simple to use

The 1200L Autocal & CALsys 1200L block is ideal for Industrial/ Laboratory field use. it is simple enough to testing and calibration uses.

Accuracy and performance

The 1200L Autocal & CALsys 1200L is an easy to use also provides excellent calibration accuracy with stability ±0.35°C at 1200°C.

Accredited calibration

Each 1200L Autocal & CALsys 1200L is delivered with an accredited calibration certificate.

Computer Interface

The communication port(RS-232) enables communication with selected 1200L Autocal & CALsys 1200L calibrators for automation calibration and documentation thus it made documentation easy.

TEMPSENS

Calsys 1200L
Calsys 1200L Autocal

Highly accurate temperature Calibrator for Industrial / Laboratory field use

CALSYS -1200L | **CALsys -1200L Autocal**

CALsys 1200L Autocal & CALsys 1200L offers easy to use temperature calibrator with high temperature range from 300 to 1200°C. It is a highly stable standard furnace for calibrating thermocouples / RTD. This calibrator can be used on site for high temperature calibration and also find 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 160mm 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 1200L model offers better esthetic design and performance wise upgraded to next level. The CALsys-1200L Autocal is an automatic temperature calibration system for the Thermocouple and RTD's. The system consists ofTemperature 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.

During the past several years, we have acquired extensive knowledge of industrial temperature calibration. This expertise is reflected in our products which are all designed for daily use in an industrial environment.

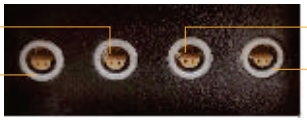
SPECIFICATIONS

CALsys 1200L Autocal & CALsys 1200L

Temperature range	300 °C to 1200 °C
Stability	±0.1°C at 300°C
	±0.2°C at 800°C
	±0.35°C at 1200°C
Radial uniformity	±0.15°C at 300°C
	±0.25°C at 800°C
	±0.4°C at 1200°C
Controlling sensors	R type duplex
Stabilization time	15 to 20 mins
Immersion depth	160mm
Insert OD dimensions	37 mm
Method of Control	Self tunned PID controller
Heating time	1.5 Hrs
Resolution	1 °C
Display	LCD, °C or °F user-selectable
Size (H x W x D)	590(H) x 450(W) x 530(D) mm
Weight	55Kg
Power requirements	230 VAC, 50 Hz
Computer interface	RS - 232
Calibration	Accredited calibration certificate provided (Optional)
Environmental operating conditions	0 °C to 40 °C, 0 % to 90 % RH (non-condensing)
Specifications valid in environmental conditions	13 °C ... 33 °C
Input (CALsys 1200L 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 1200L Autocal)	**The calibrator will be provided with software for data recording (Manual Mode) and Test Certificate genration in Auto Mode**
Data logging (CALsys 1200L Autocal)	**Data logging facility with logged data export to computer through LAN port (optional USB)**

SENSOR CONNECTION (CALsys 1200L Autocal)

Connection for First TEST Sensor
Connection for MASTER Sensor

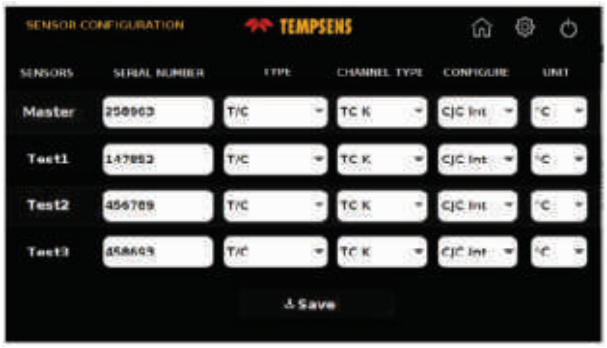


Connection for Second TEST Sensor
Connection for Third TEST Sensor

USER INTERFACE (CALsys 1200L Autocal)

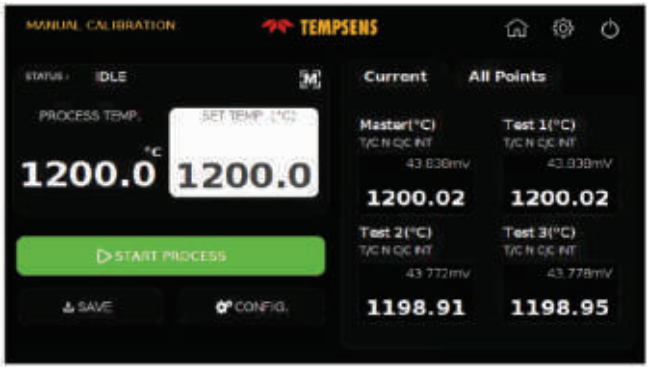
Home Screen: In this screen user can select sensor configuration (for selection of type of sensors), mode of operation (auto / manual) and data transfer (file transfer). This window also shows the ongoing process.

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

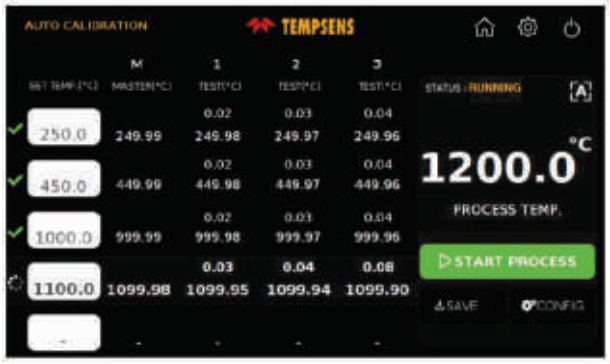


CALSYS 1200L Autocal have two operating modes i.e. Manual and Auto mode

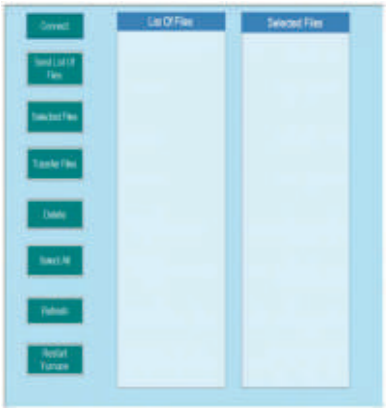
Manual Mode: Inthis screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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

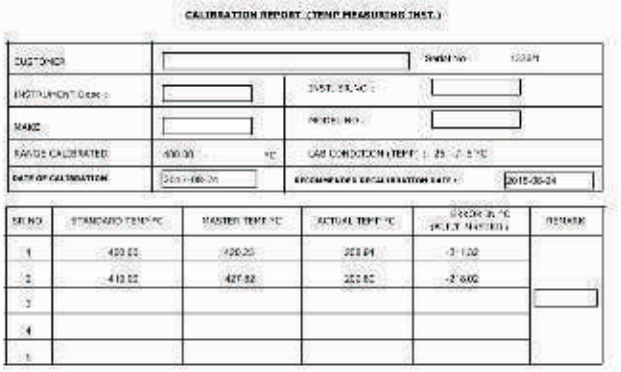


SOFTWARE : Tempsens make Easy to use Customized software enables end user to access temperature data bothfor Manual mode and Automode

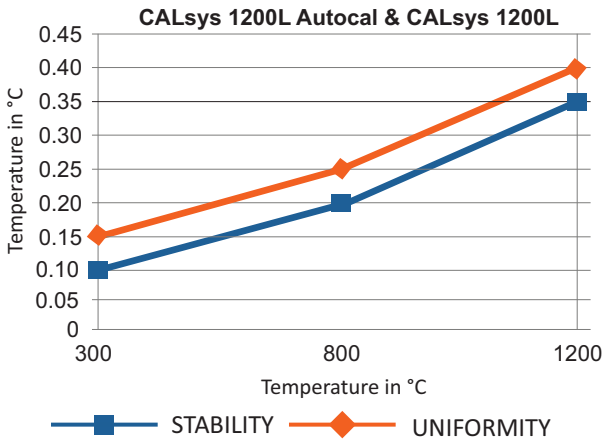


AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- 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 predefine format.



STABILITY / UNIFORMITY



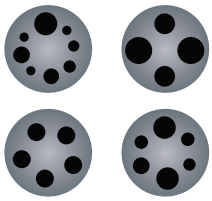
Insert construction

Inserts for CALsys -1200L Autocal & CALsys 1200L model

Inserts for CALsys 1200L are made of metallic block of special material. All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements

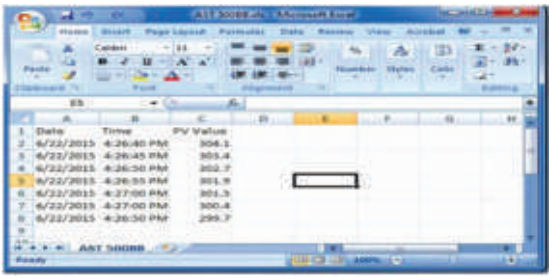
Inserts Model Description

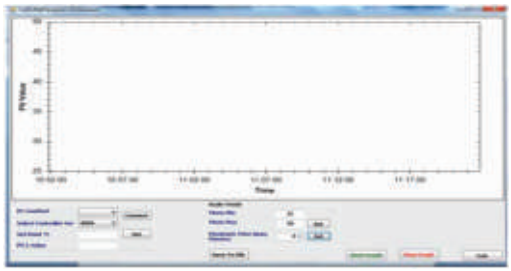
Inserts	Description
Ci1	Multihole, 2 x 6.5 mm, 2x8.5 mm
Ci2	Special (Customized)



Customized Equalizing Block....Part No. EQ1

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 Thermocouple ('N' Type T/C)
- Part no. TTCN- 300.

- NABL accredited calibration certificate - 3 points (Optional)
- Operational Manual

TEMPSENS

Tempsens Instruments (I) Pvt. Ltd. U# II
A-190, Road No.5, M.I.A., Udaipur-313003 (Rajasthan) INDIA
Ph.:+91-294-3500600, Fax.:+91-294-3500631
Email: calsys@tempsens.com, info@tempsens.com

High Temperature Dry Block Furnace

Wide Temperature Range

CALsys 1500L Autocal & CALsys 1500L offer a wide temperature range from 500 °C to 1500 °C

Simple to use

The CALsys 1500L Autocal & CALsys 1500L block is ideal for Industrial/ Laboratory field use. It is simple enough to testing and calibration uses.

Accuracy and performance

The CALsys 1500L Autocal & CALsys 1500L is an easy to use that also provides excellent calibration accuracy with stability ±1.0°C at 1500°C.

Accredited calibration

Each CALsys 1500L Autocal & CALsys 1500L is delivered with an accredited calibration certificate.

Computer Interface

The communication port (RS-232) enables communication with selected CALsys 1500L Autocal & CALsys 1500L calibrators for automation calibration and documentation thus it made documentation easy.

TEMPSENS

Calsys 1500L
Calsys 1500L Autocal

Highly accurate temperature Calibrator for Industrial / Laboratory field use

CALSYS -1500L **CALsys -1500L Autocal**

CALsys 1500L Autocal & CALsys 1500L offers easy to use temperature calibrator with high temperature range from 500 to 1500°C. It is a highly stable standard furnace for calibrating thermocouples / RTD. This calibrator can be used on site for high temperature calibration and also find 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 245mm long. The temperature of the calibrator is set and controlled by a self tuned PID controller with automatic super fine adjustment. Our newly designed CALsys 1500L Autocal & CALsys 1500L model offers better esthetic design and performance wise upgraded to next level. The CALsys 1500L Autocal is an automatic temperature calibration system for the Thermocouple and RTD's. The system consists ofTemperature 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.

During the past several years, we have acquired extensive knowledge of industrial temperature calibration. This expertise is reflected in our products which are all designed for daily use in an industrial environment.

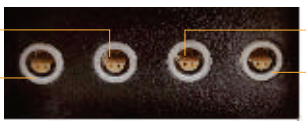
SPECIFICATIONS

CALsys 1500L Autocal & CALsys 1500L

Temperature range	500 °C to 1500 °C
Stability	±0.4°C at 500°C
	±0.6°C at 1000°C
	±1°C at 1500°C
Uniformity	±0.6°C at 500°C
	±0.8°C at 1000°C
	±1.2°C at 1500°C
Controlling sensors	R type duplex
Stabilization time	15 to 20 mins
Immersion depth	140 mm
Insert dimensions	37 mm
Method of Control	Self tunned PID controller
Heating time	2 Hrs
Resolution	1 °C
Display	LCD, °C or °F user-selectable
Size (H x W x D)	590(H) x 450(W) x 530(D) mm
Weight	55Kg
Power requirements	230 VAC, 3.0 KW(50 Hz)
Computer interface	RS - 232
Calibration	Accredited calibration certificate provided (Optional)
Environmental operating conditions	0 °C to 40 °C, 0 % to 90 % RH (non-condensing)
Specifications valid in environmental conditions	13 °C ... 33 °C
Input (CALsys 1500L 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 1500L Autocal)	**The calibrator will be provided with software for data recording (Manual Mode) and Test Certificate genration in Auto Mode**
Data logging (CALsys 1500L Autocal)	**Data logging facility with logged data export to computer through LAN port (optional USB)**

SENSOR CONNECTION (CALsys 1500L Autocal)

Connection for First TEST Sensor
Connection for MASTER Sensor

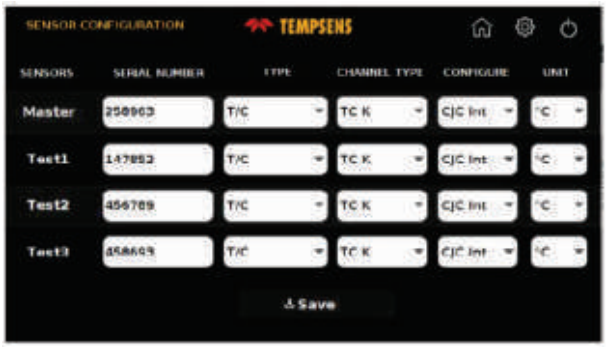


Connection for Second TEST Sensor
Connection for Third TEST Sensor

USER INTERFACE (CALsys 1500L Autocal)

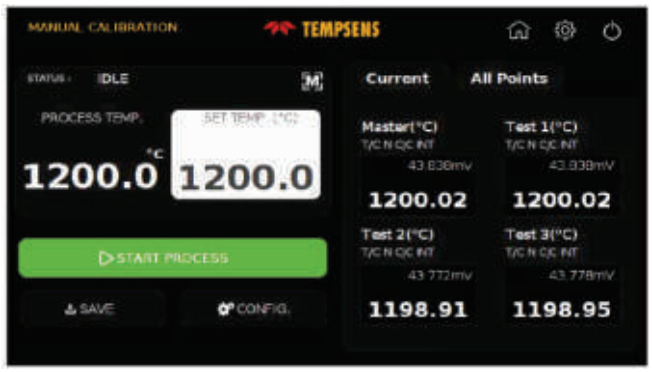
Home Screen: In this screen user can select sensor configuration (for selection of type of sensors), mode of operation (auto / manual) and data transfer (file transfer). This window also shows the ongoing process.

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

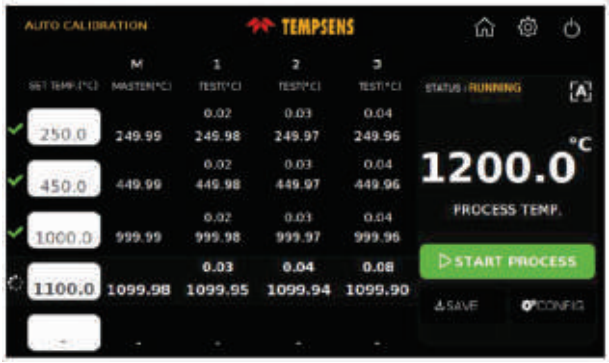


CALSYS 1500L Autocal have two operating modes i.e. Manual and Auto mode

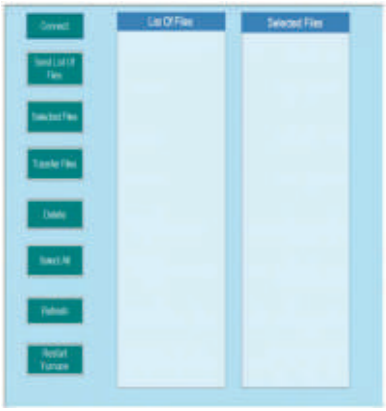
Manual Mode: Inthis screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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

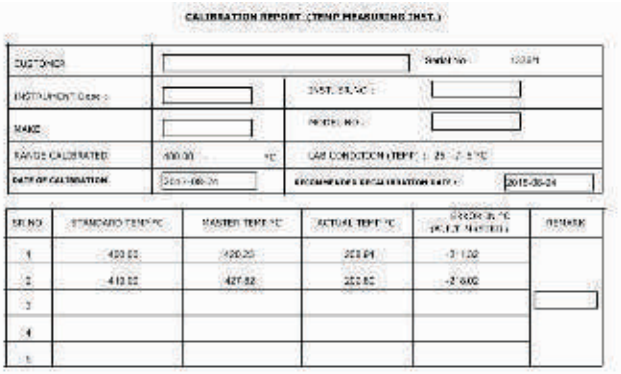


SOFTWARE : Tempsens make Easy to use Customized software enables end user to access temperature data bothfor Manual mode and Automode

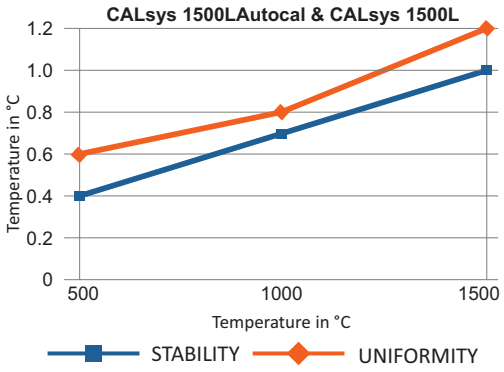


AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- 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 predefine format.



STABILITY & UNIFORMITY



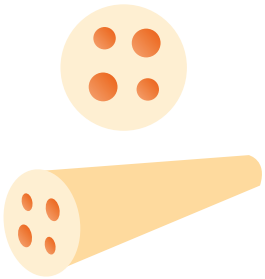
ACCESSORIES

Inserts for CALsys 1500L Autocal & CALsys 1500L model

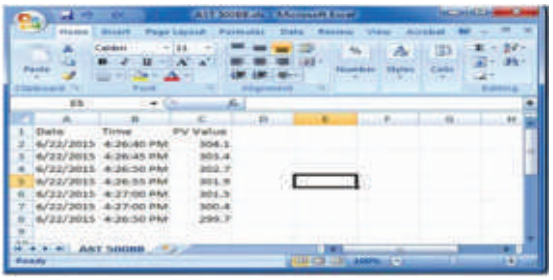
Inserts for CALsys 1500L are made of ceramic block. All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements

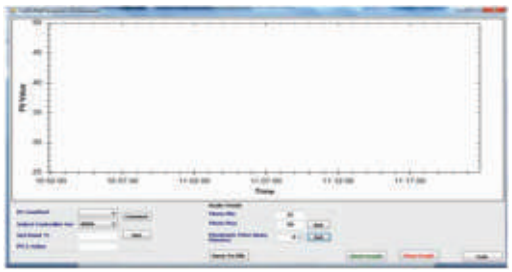
Inserts Model Description

Inserts	Description
Ci1	Multihole, 2 x 6.5 mm, 2x8.5 mm
Ci2	Special (Customized)



SOFTWARE

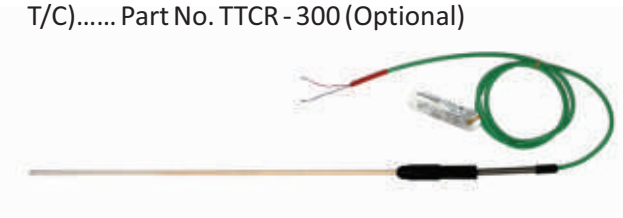




- CalSoft including for setting bath temperature and monitoring the PV. Graphical representations of PV/TIME with 2 hours data logging.

MASTER SENSOR

- Reference Standard Thermocouple (PT-RH-RH/PT R Type T/C)..... Part No. TTCR - 300 (Optional)



- NABL accredited calibration certificate - 3 points (Optional)
- Operational Manual

TEMPSENS

Tempsens Instruments (I) Pvt. Ltd. U# II
A-190, Road No.5, M.I.A., Udaipur-313003 (Rajasthan) INDIA
Ph.:+91-294-3500600, Fax.:+91-294-3500631
Email: calsys@tempsens.com, info@tempsens.com

High Temperature Dry Block Furnace

Wide Temperature Range

CALsys 1700L Autocal & CALsys 1700L offer a wide temperature range from 500 °C to 1700 °C

Simple to use

The CALsys 1700L Autocal & CALsys 1700L block is ideal for Industrial/ Laboratory field use and it is simple enough to testing and calibration uses.

Accuracy and performance

The CALsys 1700L Autocal & CALsys 1700L is an easy to use that also provides excellent calibration accuracy with stability ±1.5°C at 1700°C.

Accredited calibration

Each CALsys 1700L Autocal & CALsys 1700L is delivered with an accredited calibration certificate.

Computer Interface

The communication port (RS-232) enables communication with selected CALsys 1700L Autocal & CALsys 1700L calibrators for automation calibration and documentation thus it made documentation easy.

TEMPSENS

Calsys 1700L
Calsys 1700L Autocal

Highly accurate temperature Calibrator for Industrial / Laboratory field use

CALSYS -1700L

CALsys -1700L Autocal

CALsys 1700L Autocal & CALsys 1700L offers easy to use temperature calibrator with high temperature range from 500 to 1700°C. It is a highly stable standard furnace for calibrating thermocouples / RTD. This calibrator can be used on site for high temperature calibration and also find 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 240mm long. The temperature of the calibrator is set and controlled by a self tuned PID controller with automatic super fine adjustment. Our newly designed CALsys 1700L model offers better esthetic design and performance wise upgraded to next level. The CALsys 1700L Autocal is an automatic temperature calibration system for the Thermocouple and RTD's. The system consists ofTemperature 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.

Tempsens make Temperature Calibrator is 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

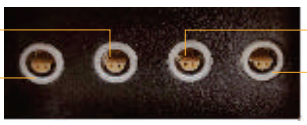
CALsys 1700L Autocal & CALsys 1700L

Temperature range	500 °C to 1700 °C
Stability	±0.5°C at 500°C
	±1.0°C at 1000°C
	±1.5°C at 1700°C
Radial uniformity	±0.6°C at 500°C
	±1.4°C at 1000°C
	±1.9°C at 1700°C
Stabilization time	15 to 20mins
Controlling sensor	B type duplex
Method of Control	Self tunned PID controller
Immersion depth	225mm
Insert OD dimensions	37 mm
Heating time	3 Hrs
Resolution	1 °C
Display	LCD, °C or °F user-selectable
Size (H x W x D)	700(H) x 500(W) x 550(D) mm
Weight	130Kg
Power requirements	230 VAC 50/60Hz
Computer interface	RS - 232
Calibration	Accredited calibration certificate provided (Optional)
Environmental operating conditions	0 °C to 40 °C, 0 % to 90 % RH (non-condensing)
Specifications valid in environmental conditions	13 °C ... 33 °C
Input (CALsys 1700L 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 1700L Autocal)	**The calibrator will be provided with software for data recording (Manual Mode) and Test Certificate genration in Auto Mode**
Data logging (CALsys 1700L Autocal)	**Data logging facility with logged data export to computer through LAN port (optional USB)**

SENSOR CONNECTION (CALsys 1700L Autocal)

Connection for First TEST Sensor

Connection for MASTER Sensor



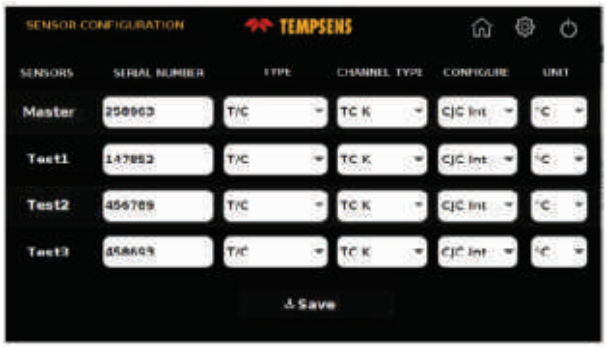
Connection for Second TEST Sensor

Connection for Third TEST Sensor

USER INTERFACE (CALsys 1700L Autocal)

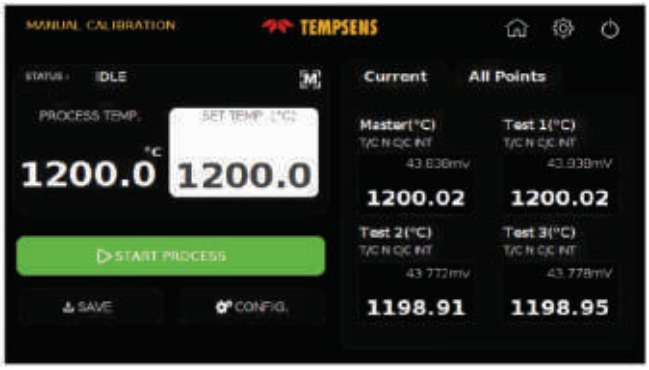
Home Screen: In this screen user can select sensor configuration (for selection of type of sensors), mode of operation (auto / manual) and data transfer (file transfer). This window also shows the ongoing process.

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

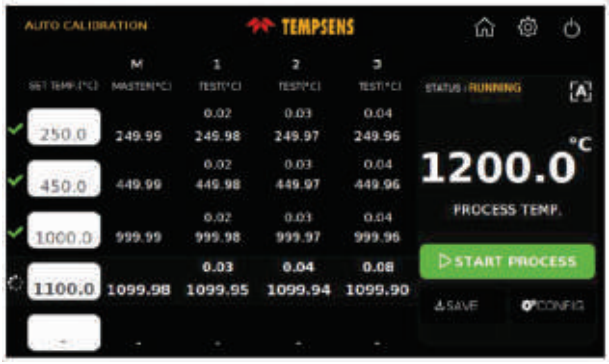


CALSYS 1700L Autocal have two operating modes i.e. Manual and Auto mode

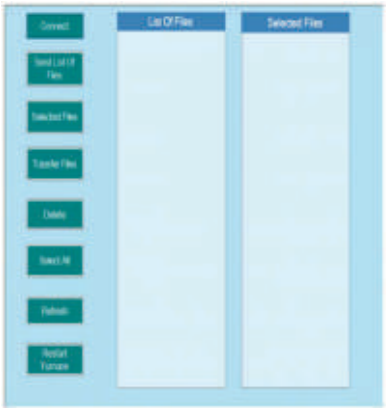
Manual Mode: Inthis screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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

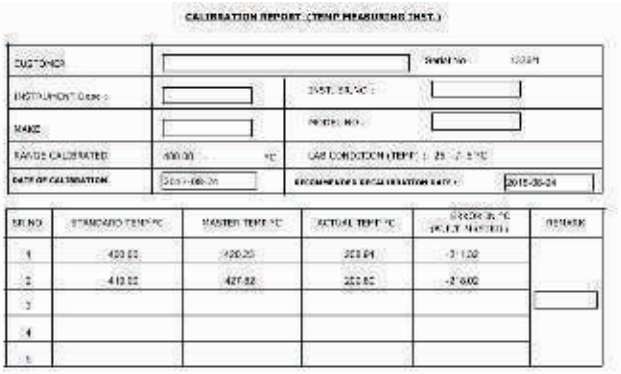


SOFTWARE : Tempsens make Easy to use Customized software enables end user to access temperature data bothfor Manual mode and Automode

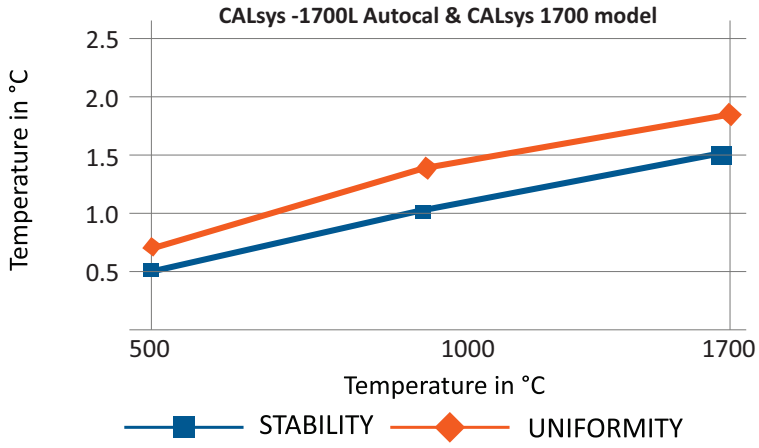


AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- 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 predefine format.



STABILITRY & UNIFORMITY



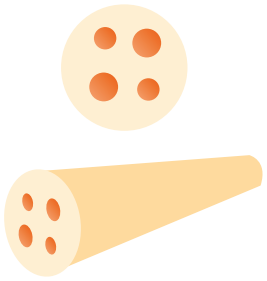
Insert construction

Inserts for CALsys -1700L Autocal & CALsys 1700L model

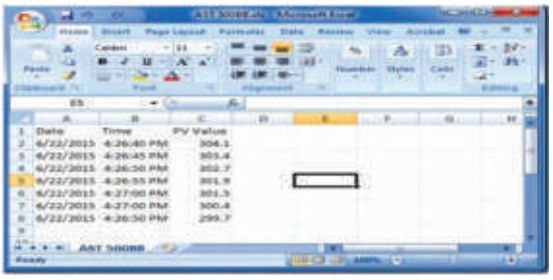
Inserts for CALsys 1700L are made of special material. All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements

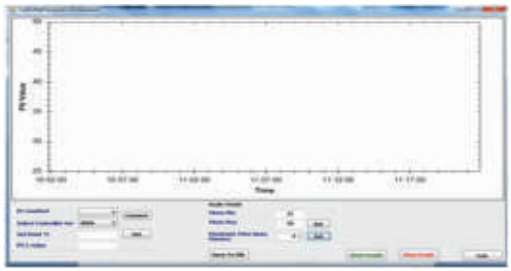
Inserts Model Description

Inserts	Description
Ci1	Multihole, 2 x 6.5 mm, 2x8.5 mm
Ci2	Special (Customized)



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 Thermocouple (PT-RT/PT "B type T/C")..... Part No. TTCB - 300 (Optional)

- NABL accredited calibration certificate - 3 points (Optional)
- Operational Manual

TEMPSENS

Tempsens Instruments (I) Pvt. Ltd. U# II
A-190, Road No.5, M.I.A., Udaipur-313003 (Rajasthan) INDIA
Ph.:+91-294-3500600, Fax.:+91-294-3500631
Email: calsys@tempsens.com, info@tempsens.com

TEMPSENS

CALSYS C-4004 PLUS

(With Autocalibration Facility)

Features:

- High stability
- igh accuracy of RTD measurement 0.01°C
- High accuracy of T/C measurement 0.1°C
- High Resolution (0.01/0.001)
- 2 measuring inputs
- 12 Thermocouples B, C, D, E, J, K, N, R, S, T
- 12 RTD's PT-100, PT-10, PT-50, PT-500, PT-200, PT-1000, SPRT
- Thermocouple reference junction external, internal and offUnits °C/ °F
- Data Logging 4000 values
- Suitable for 2/3/4 wire RTD

Note : CALSYS C-4004 PLUS gives standard two channel input for TC & two channel input for RTD. If user wants more than two input channels for that CALSYS C-4004 PLUS gives inbuilt multiplexer module.

Data Logging

The CALSYS C-4004 PLUS includes an inbuilt data logger internally storing upto 4000 values for both the channels with date and time.

High Accuracy

Highest accuracy is for PT-100 input, CALSYS C-4004 PLUS is providing accuracy of 0.01°C in the temperature range of -100 to +500°C, 0.02°C accuracy for -200 to -100°C and 0.02°C for +500 to +800°C.

Accuracy for thermocouple measurement (B, C, D, E, J, K, N, R, S, T) is 0.1°C.

FRONT VIEW

BACK VIEW

CALSYS C-4004 PLUS is fully characterized for all major sensors (thermocouples such as B, C, D, E, J, K, N, R, S, T and RTD's like PT-100, PT-50, PT-10, PT-200, PT-500, PT-1000, SPRT). The instrument can be used in industries where high accuracy temperature

measurement is essential. Two channel input provides A, B & A-B measurement on LCD Display. The device is providing exceptionally stable cold junction compensation with choices for user like Automatic, Off and External.

CALSYS C-4004 PLUS comes with front panel keys for easy operation like unit selection (°C/°F), Resolution (0.01/0.001) and Data Logging.

Overall stability is optimized by utilizing high quality components with high precision. There are four input ports, two for thermocouple and two for RTD.

In order to measure temperature suitable probe should be connected to TC & RTD input. The temperature measured by the device will be displayed in bigger fonts and the actual resistance (ohms) in case of RTD and voltage (mV) in case of Thermocouple will be displayed in smaller fonts. All channel details and configuration will be displayed on the LCD display.

CALSYS C-4004 PLUS can accept two RTD's, or two Thermocouples or one RTD and one Thermocouple at a time. Measured temperature can be displayed from one of the inputs or Difference of both the input channels.

Technical Specifications

Display	192x64 LCD Graphic Panel with back light
Inputs	2 Channels for RTD and Thermocouple via lemo 1-S series connector
Reference Junction	Reference Junction compensation may be selected for the following modes : **Automatic** : Internal reference junction range 0 to +100 °C **External** : Via Pt 100 sensor connected to channel A and B range to 0 to +100 °C **Off** : Turns the Reference Junction OFF = 0° C
Working Temperature	0....50°C rel. humidity Less than 90% non condensing condition
Storage Temperature	-20 to +55 °C
Mains Supply	85-264 VAC / 120-370 VDC 47-63 Hz
Data Logging	Up to 4000 values can be stored along with date and time
Dimensions	244 x 350 x 114

Input Sensor Range

THERMOCOUPLE SENSOR TYPE	TEMPERATURE RANGE	RESOLUTION
Type K Thermocouple	-200°C to 1372°C	0.01
Type J Thermocouple	-210°C to 1200°C	0.01
Type E Thermocouple	-200°C to 1000°C	0.01
Type N Thermocouple	-200°C to 1300°C	0.01
Type R Thermocouple	0°C to 1768°C	0.01
Type S Thermocouple	0°C to 1768°C	0.01
Type B Thermocouple	400°C to 1820°C	0.01
Type T Thermocouple	-250°C to 400°C	0.01
Type C Thermocouple	0°C to 2315°C	0.01
Type D Thermocouple	0°C to 2315°C	0.01

RTD SENSOR TYPE	TEMPERATURE RANGE	RESOLUTION
PT-100	-200°C to -100°C	0.001
PT-100	-100°C to +500°C	0.001
PT-100	+500°C to +800°C	0.001
PT-10	-200°C to +800°C	0.001
PT-50	-200°C to +800°C	0.001
PT-200	-200°C to +800°C	0.001
PT-500	-200°C to +800°C	0.001
PT-1000	-200°C to +800°C	0.001
SPRT	-196°C to +660.323°C	0.001

Multiplexer Module (Optional)

CALSYS C-4004 PLUS offers three modes of configuration, which are user configurable. These three modes are : Only TC mode : In this mode user can connect maximum 12 TC input at a time.

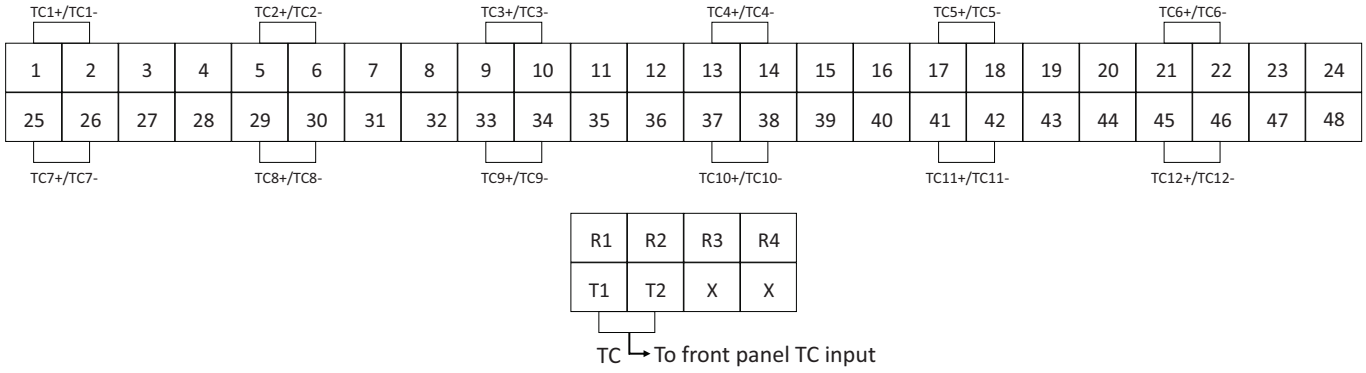
Only RTD mode : In this mode user can connect maximum 12 RTD inputs at a time. Mix Mode (TC + RTD) : In this mode user can connect maximum 6 TC input and 6 RTD input at a time.

Over size screw terminal connection blocks are standard for easier connections. Autocalibration facility of multiple channel using a PC software.

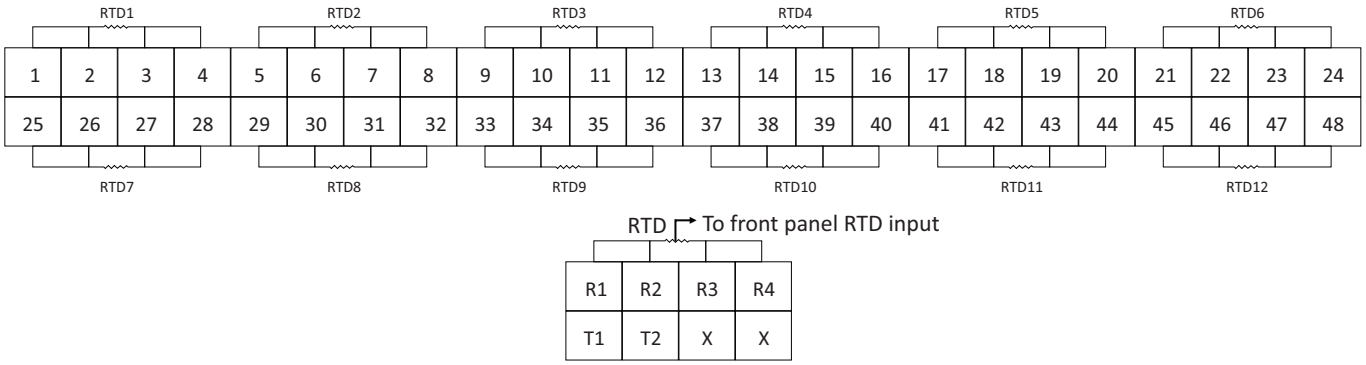
Configuration Mode

It has three modes of configuration.

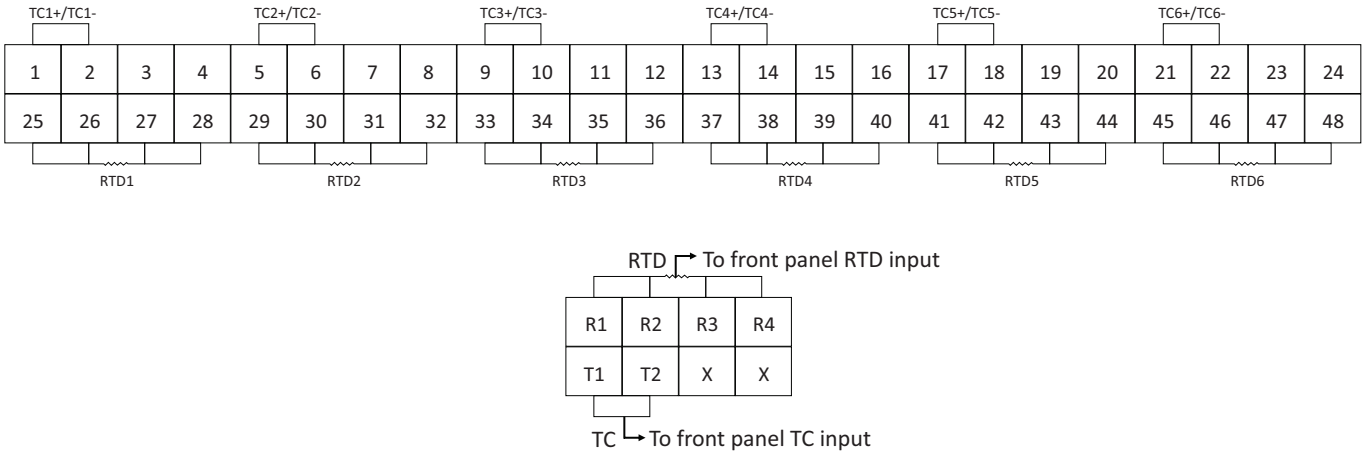
1. Only Thermocouple Mode : User can connect 12 thermocouple input at a time. When using this multiplexer module, user will have to connect TC Probe from rear panel connector pins T1 & T2 to the front panel input channel A or input channel B of the TC input channel.



2. Only RTD Mode : User can connect 12 RTD input at a time. When using these channels, user will have to connect RTD Probe from rear panel connector pins R1, R2, R3 & R4 to the front panel input channel A or input channel B of the RTD input channel.



3. Mix Mode(TC+RTD) : User can connect 6 TC input and 6 RTD input at a time. When using this mode, user will have to connect TC Probe from rear panel connector pins T1 & T2 to the front panel input channel A or input channel B of the TC input channel as well as connect the RTD probe from rear panel connector pins R1, R2, R3 & R4 to the front panel input channel A or input channel B of the RTD input channel.



TEMPSENS

Tempsens Instruments (I) Pvt. Ltd. U# II
A-190, Road No.5, M.I.A., Udaipur-313003 (Rajasthan) INDIA
Ph.:+91-294-3500600, Fax.:+91-294-3500631
Email: CAL FAST @tempsens.com, info@tempsens.com