

Dry Block Temperature Calibrator



- High Accuracy
- High Temperature
- Highly Stable Temperature Calibrator for Industrial Field Uses

High Temperature Dry Block Calibrator



- High Accuracy
- High Temperature
- Highly Stable Temperature Calibrator for Industrial Field Uses

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 $\pm 0.35^{\circ}\text{C}$ 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.

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 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.

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.

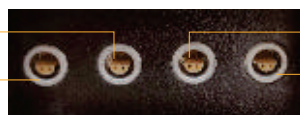
SPECIFICATIONS

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 tuned 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 generation 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)

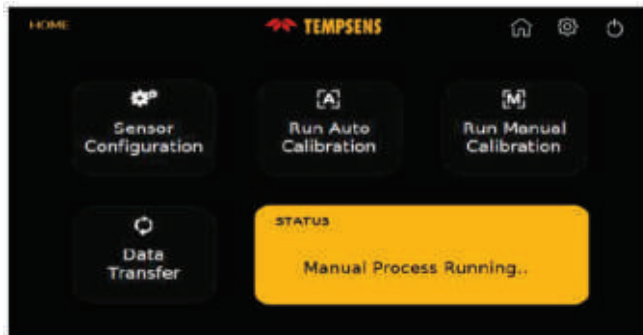
Connection for First TEST Sensor
Connection for MASTER Sensor



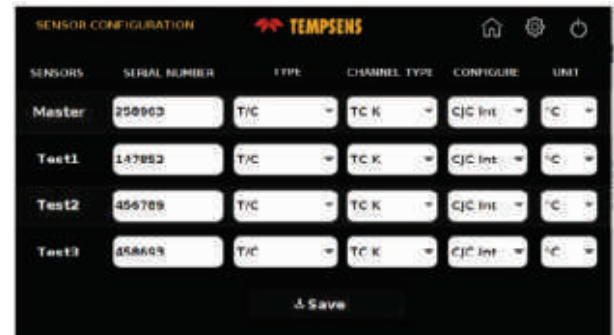
Connection for Second TEST Sensor
Connection for Third TEST Sensor

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.

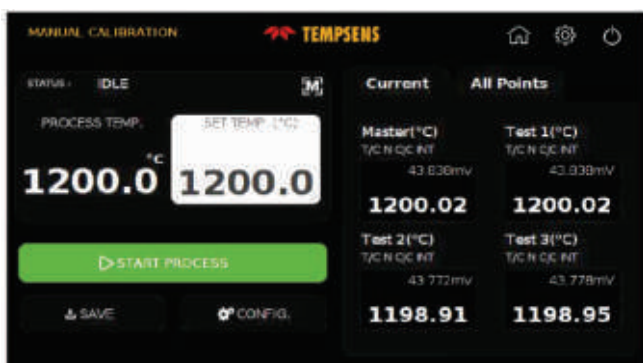


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD(PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

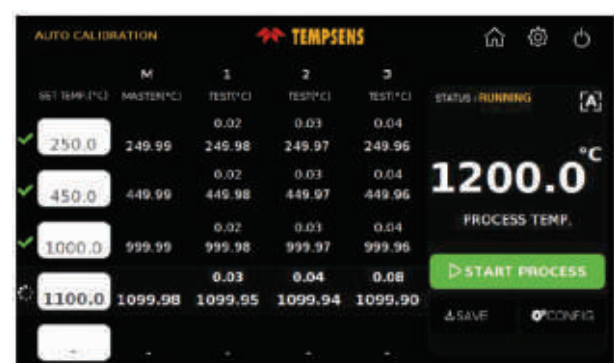


CALSYS 1200L Autocal have two operating modes i.e. Manual and Auto mode

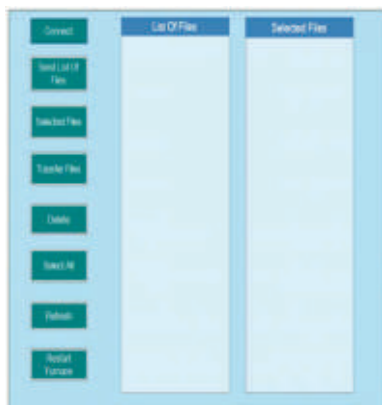
Manual Mode: In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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

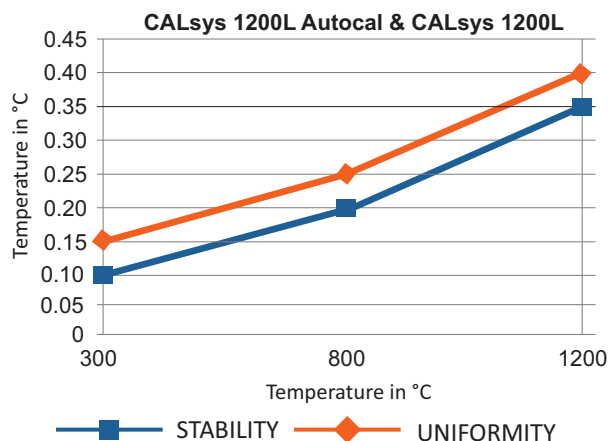


AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- 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 predefined format.

CALIBRATION REPORT (TEMP MEASURING INST.)					
CUSTOMER			SERIAL NO.	1008H	
INST. LOCATION			TEST. NO.		
NAME			PRINT. NO.		
RANGE CALIBRATED	400.00	°C	LAB. CONDITION (TEMP. ± 25.0 ± 5 °C)		
DATE OF CALIBRATION	2015-06-24		ELECTRONICS CALIBRATION DATE		2015-06-24
SER. NO.	STANDARD TEMP. °C	MASTER TEMP. °C	ACTUAL TEMP. °C	PROCESSING POINT NUMBER	REMARK
1	400.00	400.20	203.84	1/100	
2	410.00	407.82	203.80	2/100	
3					
4					
5					

STABILITY / UNIFORMITY



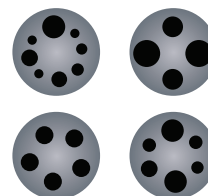
Insert construction

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

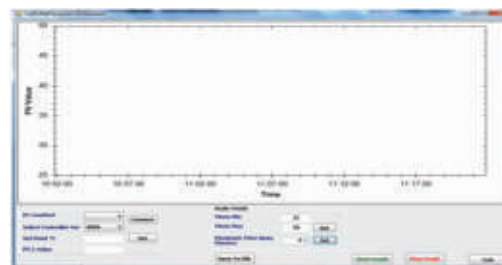
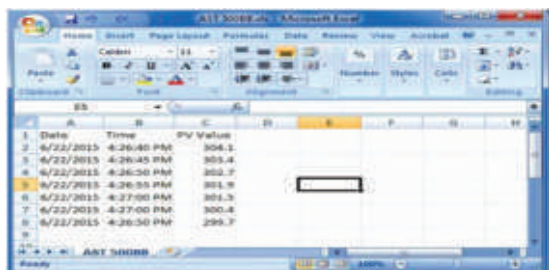
Inserts Model Description

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



Customized Equalizing Block....Part No. EQ1

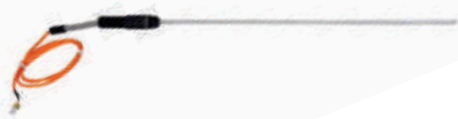
SOFTWARE



- 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



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 $\pm 1.0^{\circ}\text{C}$ 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.

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 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.

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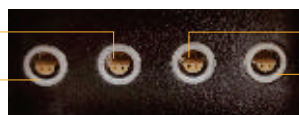
SPECIFICATIONS

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 tuned 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 generation 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)

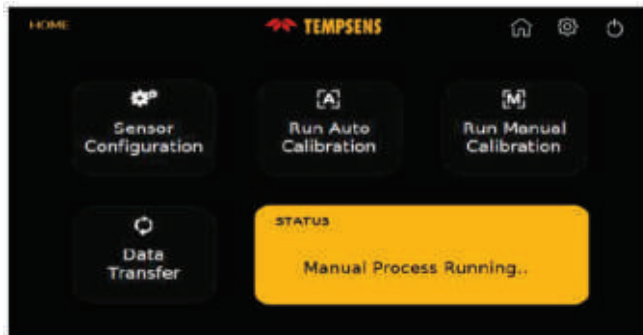
Connection for First TEST Sensor
Connection for MASTER Sensor



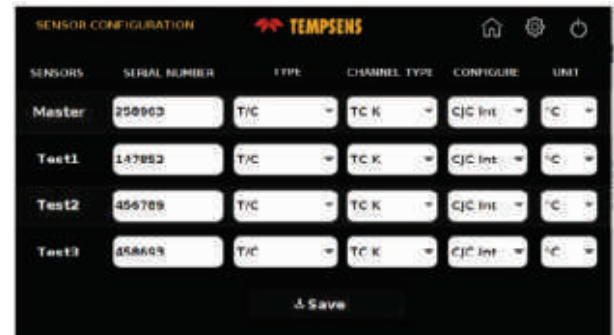
Connection for Second TEST Sensor
Connection for Third TEST Sensor

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.

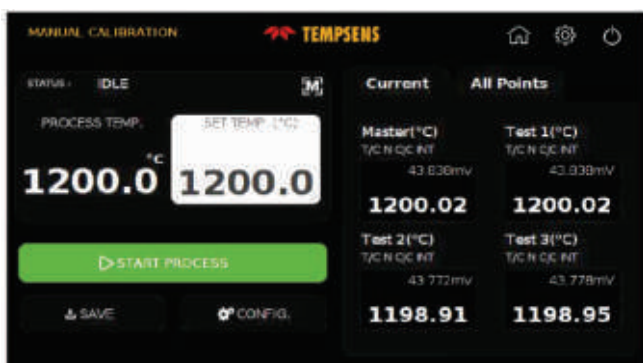


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD(PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

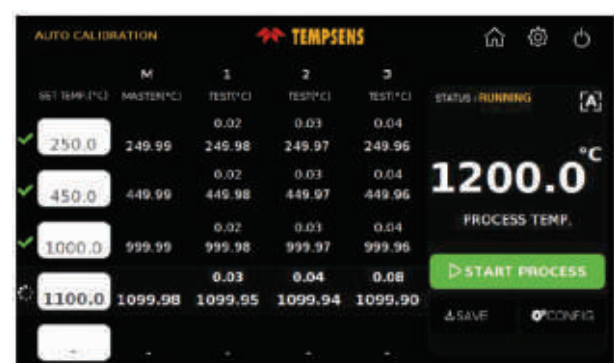


CALSYS 1500L Autocal have two operating modes i.e. Manual and Auto mode

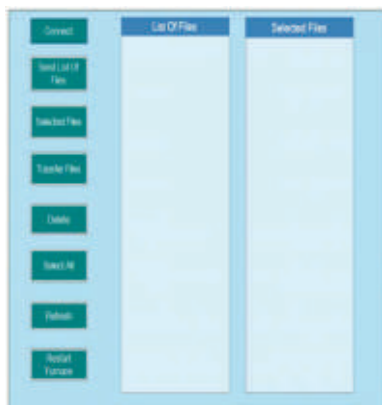
Manual Mode: In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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

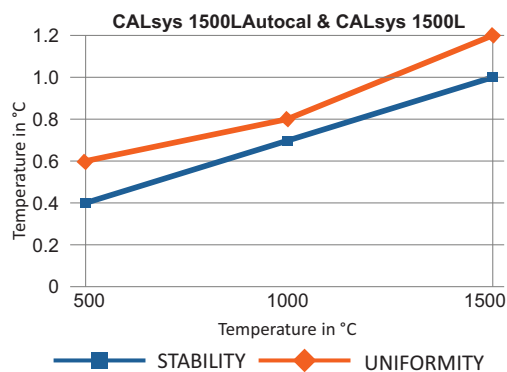


AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- 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 predefined format.

CALIBRATION REPORT (TEMP MEASURING INST.)					
CUSTOMER				SERIAL NO.	1008H
INST. LOCATION				TEST DATE	
NAME				PRINTED BY	
RANGE CALIBRATED	400.00 °C		LAB CONDITION (TEMP. ± 25.0 ± 5 °C)		
DATE OF CALIBRATION	2015-06-24		ELECTRONICS CALIBRATION DATE		2015-06-24
SERIAL	STANDARD TEMP(°C)	MASTER TEMP(°C)	ACTUAL TEMP(°C)	PROCESSING POINT NUMBER	REMARK
1	400.00	400.20	201.84	1/100	
2	410.00	407.82	201.80	2/100	
3					
4					
5					

STABILITY & UNIFORMITY



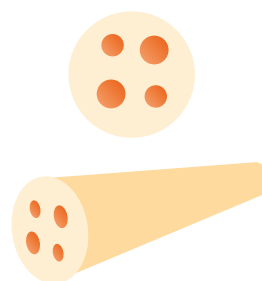
ACCESSORIES

Inserts for CALsys 1500L Autocal & CALsys 1500L model

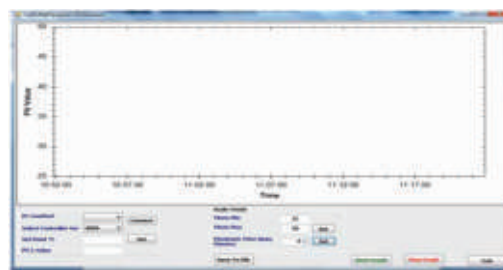
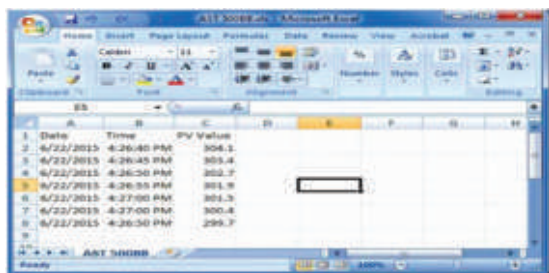
Inserts for CALsys 1500L are made of ceramic block. All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements

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. TCCR - 300 (Optional)



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

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 $\pm 1.5^{\circ}\text{C}$ 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.

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 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.

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.

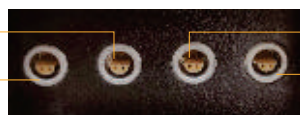
SPECIFICATIONS

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 tuned 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)

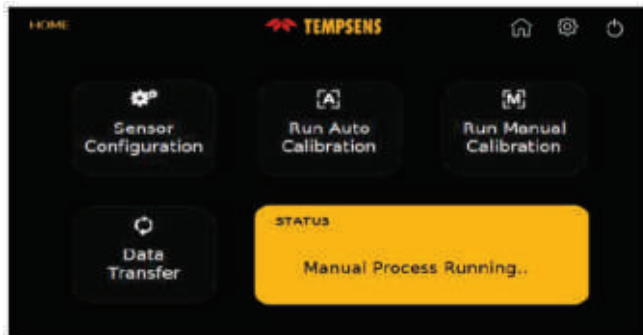
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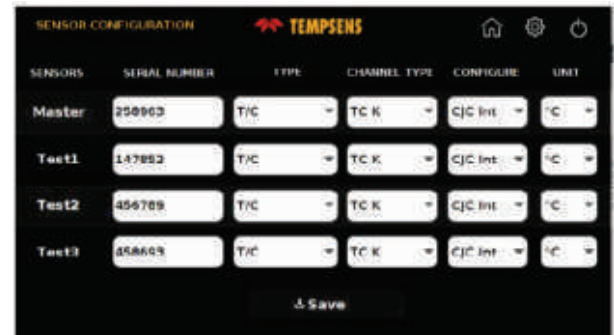
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Home Screen: In this screen user can select sensor configuration (for selection of type of sensors), mode of operation (auto / manual) and data transfer (file transfer). This window also shows the ongoing process.

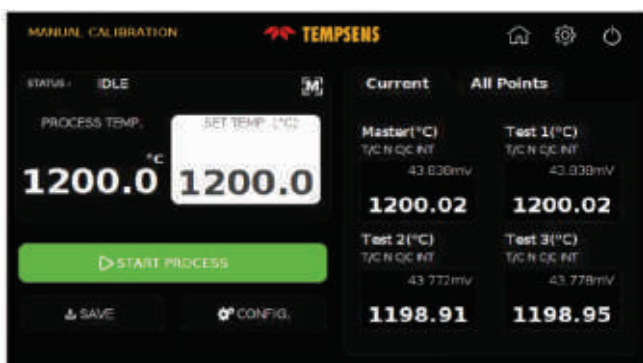


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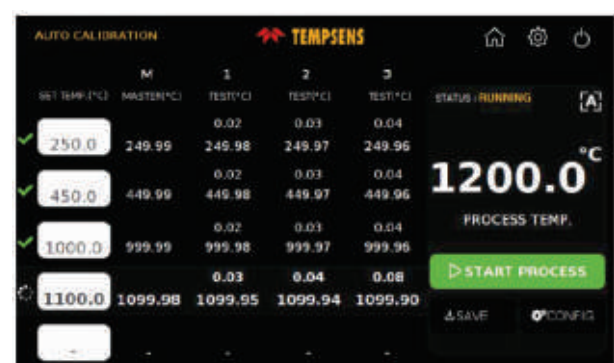


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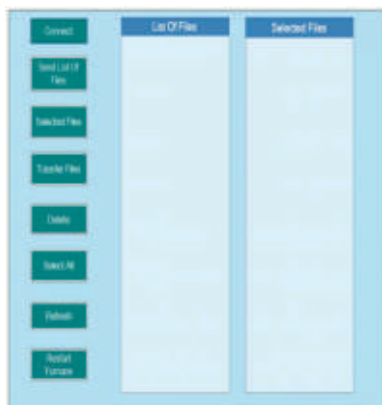
Manual Mode: In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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

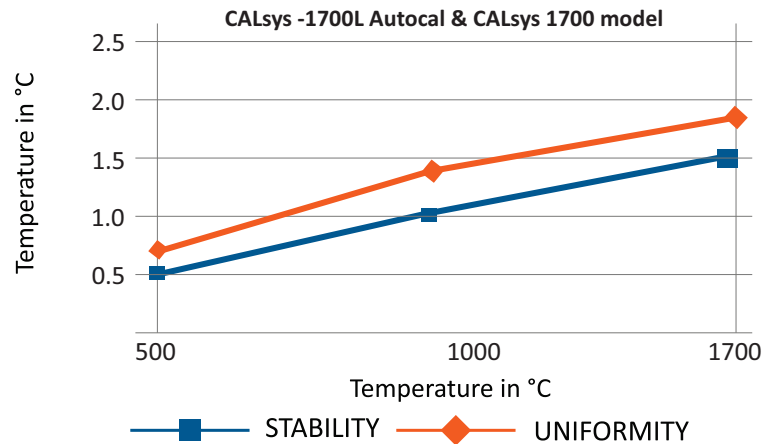


AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- 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 predefined format.

CALIBRATION REPORT (TEMP MEASURING INST.)					
CUSTOMER				SERIAL NO.	1008H
INST. LOCATION				TEST. DATE	
NAME				PRINT. NO.	
RANGE CALIBRATED	400.00	°C	LAB. CONDITION (TEMP. ± 25.0 ± 5 °C)		
DATE OF CALIBRATION	2015-06-24			ELECTRONICS CALIBRATION DATE	
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SER. NO.	STANDARD TEMP. °C	MASTER TEMP. °C	ACTUAL TEMP. °C	PROCESSING POINT NUMBER	REMARK
1	400.00	400.20	400.00	1/100	
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3					
4					
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STABILITY & UNIFORMITY



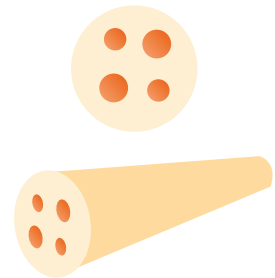
Insert construction

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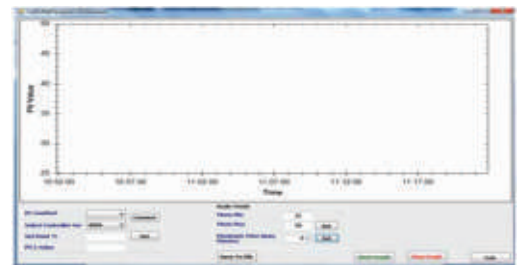
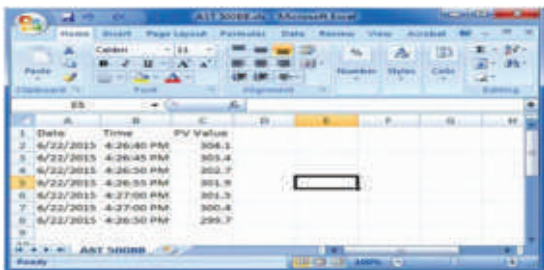
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Inserts Model Description

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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



Portable Temperature Calibrators



- Portable
- Lightweight
- Highly Stable Temperature Calibrator for Industrial Field Uses

Dry Block Calibrators

Wide Temperature Range

CALsys -196/-80 offer a wide temperature range from -190 °C to -80 °C

Lightweight, portable

The CALsys -196/-80 block is ideal for Industrial/ Laboratory field use. It only weights about 15 kg, and it is small enough to carry around.

Accuracy and performance

The CALsys -196/-80 is an easily portable unit that also provides excellent calibration accuracy with stability $\pm 0.1^{\circ}\text{C}$ at -190 °C.

Accredited calibration

Each CALsys -196/-80 is delivered with an accredited calibration certificate.

Computer Interface

The communication port(RS-232/ USB) enables communication with selected CALsys -196/-80 calibrators for automation calibration and documentation thus it made documentation easy.

CALSYS -196/-80

Portable RTD Calibrator for Industrial/
Laboratory Field Use



CALsys -196/-80 offers ultra low temperature range from -190 to -80°C. It is a highly stable standard source for calibrating Thermocouples / RTD. It has been designed for low temperature range calibration and find application in the glass, pharma, electrical power, automotive & material processing industries. The comparison volume is a metallic block of aluminium having dimension 25mm diameter with 300 mm long which fixed into the liquid nitrogen container for calibration of RTD & thermocouple. The temperature of the calibrator is set and controlled by a self tuned PID controller with automatic super fine adjustment.

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.

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

Temperature range	-190 to -80°C
Temperature Resolution	1.0°C
Stability	±0.1°C at -190°C
	±0.1°C at -130°C
	±0.1°C at -80
Uniformity	±0.2°C at -190°C
	±0.15°C at -130°C
	±0.17°C at -80
Controlling Sensor	RTD Pt100
Method of Control	Digital self tuned PID Controller
Insert Construction	Dia 25 x 300 mm long (2 x 6 mm & 2 x 8 mm holes) of 300 mm insertion depth
Time to Reach Max Temp	30 Mins
Computer Interface	RS - 232
Operating Temperature	20 to 45°C
Power Requirement	230 VAC, 300 W
Dimensions of Container	580(H) x 280(Dia)
Nitrogen Container	10Ltr.
Dimension of Control Panel	270(H)x380(W)x270(D)
Weight	15Kg (without packing)

ACCESSORIES

STANDARD ACCESSORIES

- Reference Standard RTD



- NABL accredited calibration certificate - 3 point (Optional)
- Software - Cal Soft including for setting bath temperature and monitoring the PV. Graphical representations of PV/TIME with 2 hours data logging.
- Operational Manual

KEY FEATURE

- Large Immersion Depths
- Wide Operating Range (-190 to -80°C)
- High Stability
- PC interfacing
- Simple to use and cost effective
- Separate control box

OPTIONAL ACCESSORIES

- TEMPMET 08, TEMPMET 09
- Extra Equalizing Block.....Part No. EQ2

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 $\pm 0.04^\circ\text{C}$ (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

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



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 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.

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 tuned 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)

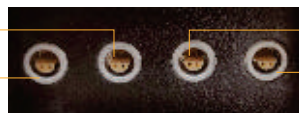
* At 28C Ambient Temperature

**120mm Deep Plus 30 mm top insulation

Note : Customized options available for resolution and insert construction.

SENSOR CONNECTION (CALsys -100/40 Autocal)

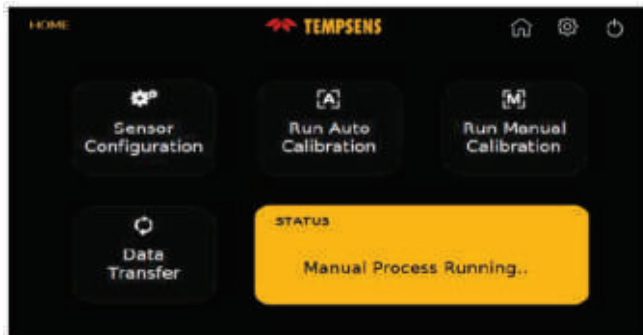
Connection for First TEST Sensor
Connection for MASTER Sensor



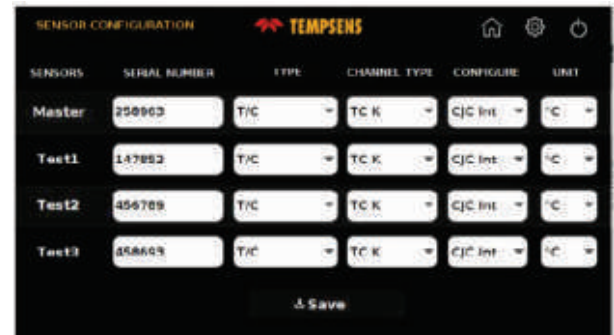
Connection for Second TEST Sensor
Connection for Third TEST Sensor

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.

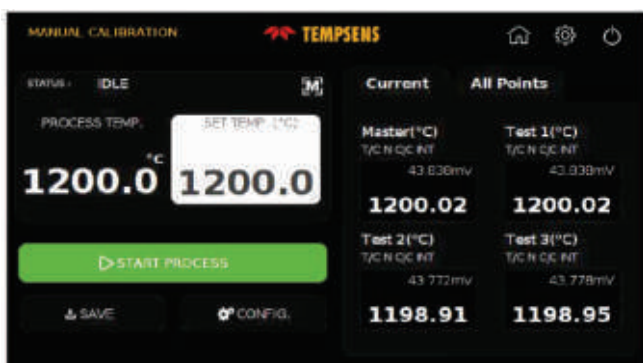


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD(PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

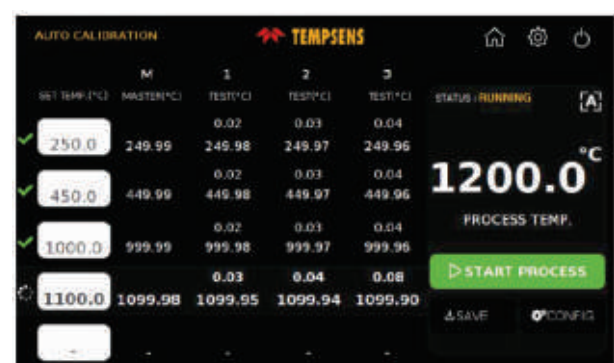


CALSYS -100/40 Autocal have two operating modes i.e. Manual and Auto mode

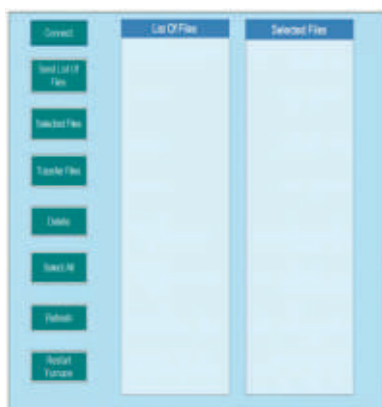
Manual Mode: In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts.



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.

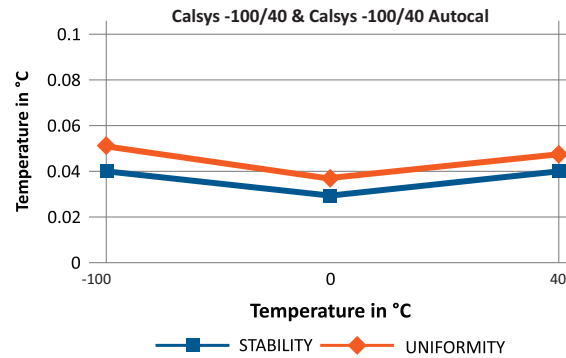


AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- 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 predefined format.

CALIBRATION REPORT (TEMP MEASURING INST.)					
CUSTOMER				SERIAL NO.	1008H
INST. LOCATION				TEST DATE	
NAME				PRINTED BY	
RANGE CALIBRATED	400.00 °C			LAB CONDITION (TEMP. ± 25.0 ± 5 °C)	
DATE OF CALIBRATION	Dec-14-2015			EPOCH/TEMP'S CALIBRATION DATE	
				2015-05-24	
SERIAL	STANDARD TEMP (°C)	MASTER TEMP (°C)	ACTUAL TEMP (°C)	PROCESSING (°C)	REMARKS
1	400.00	400.20	400.00	-0.100	
2	410.00	407.82	400.00	-2.000	
3					
4					
5					

STABILITY & UNIFORMITY



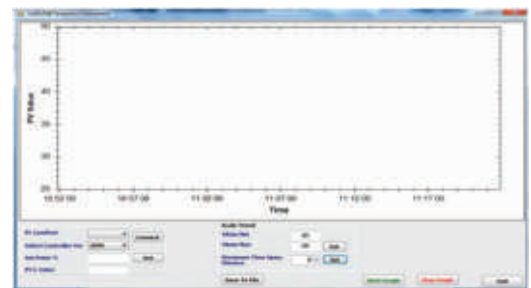
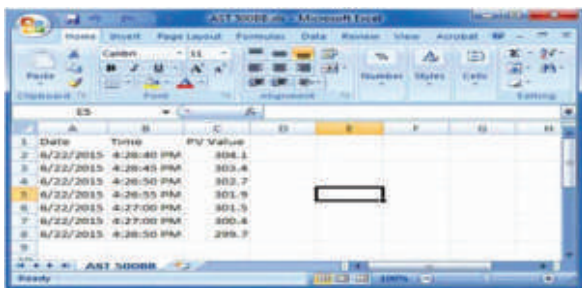
ACCESSORIES

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 Instruments (I) Pvt. Ltd. U# II

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Email: calsys@tempsens.com, info@tempsens.com

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 use. It only weighs 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 $\pm 0.07^\circ\text{C}$ at 110 °C..

Accredited calibration

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

Computer Interface

The communication port (RS-232/ USB) enables communication with selected Calsys -30/110 Calibration for automation calibration and documentation easy.

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

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 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 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

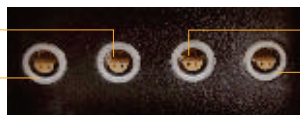
CALsys -30/110 Autocal & CALsys 30/110

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 tuned 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 (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 ... 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 generation 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.

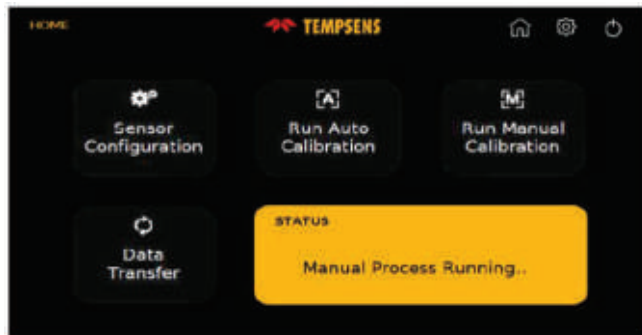
Connection for First TEST Sensor
Connection for MASTER Sensor



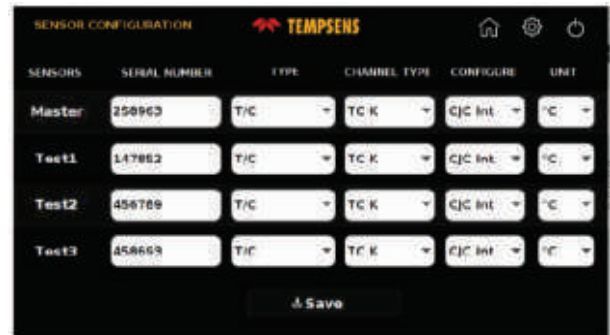
Connection for Second TEST Sensor
Connection for Third TEST Sensor

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.

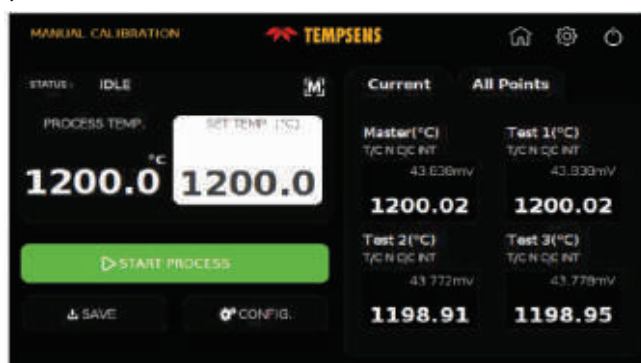


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD (PT 100, PT 1000, PT 50 etc.) for calibration with their serial number and temperature unit (C/F/K).

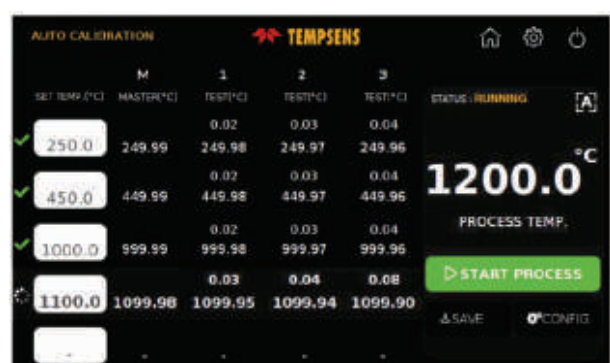


CALSYS -30/110 Autocal have two operating modes i.e. Manual and Auto mode

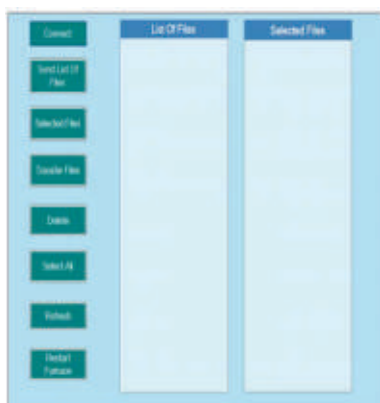
Manual Mode: In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts.



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.

CALIBRATION REPORT (TEMP RECORDING PAGE 1)

CONFIRMED		Date Recd: 12/26/20	
INTERVIEWER		REF. NO.	
NAME		PROCESS	
APPROVED BY	40000	UNIT OF CALIBRATION	2017.05.24
STANDARD TEMP (°C)		MASTER TEMP (°C)	ACTUAL TEMP (°C)
1	400.00	400.00	201.52
2	400.00	400.00	201.52
3			
4			
5			

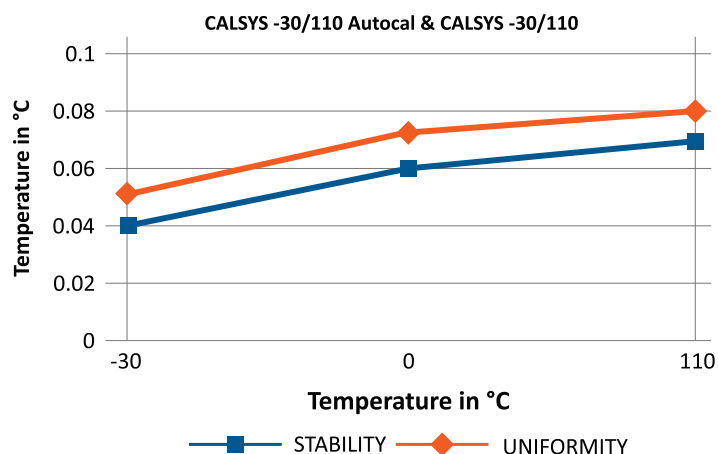
ACCESSORIES

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

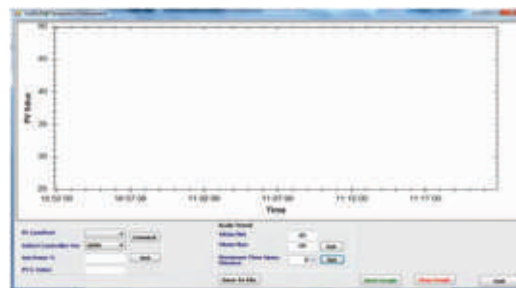
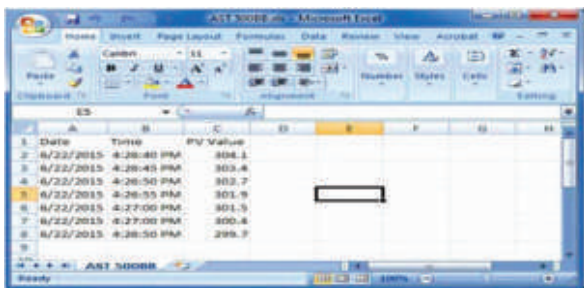
Inserts for CALsys -30/110 Autocal & CALsys -30/110 are made of aluminum .All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements.

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

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 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.

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

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



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 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.

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.

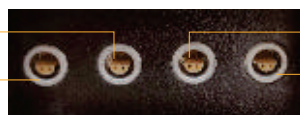
SPECIFICATIONS

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 tuned 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 generation 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)

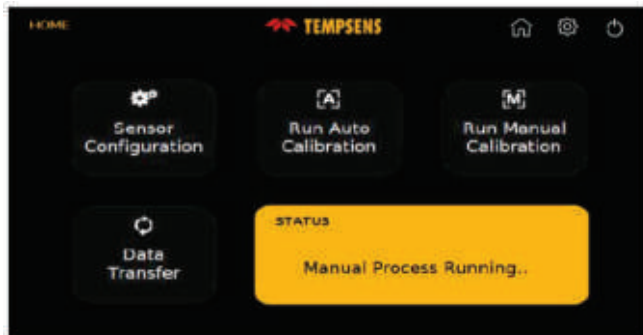
Connection for First TEST Sensor
Connection for MASTER Sensor



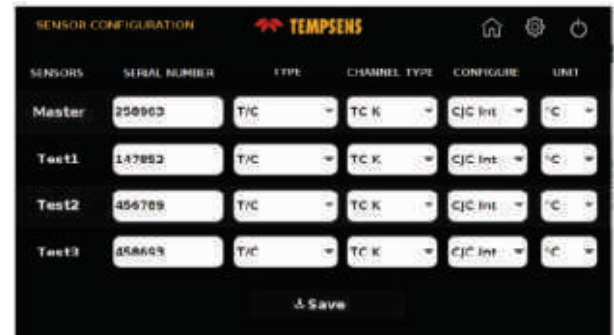
Connection for Second TEST Sensor
Connection for Third TEST Sensor

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.

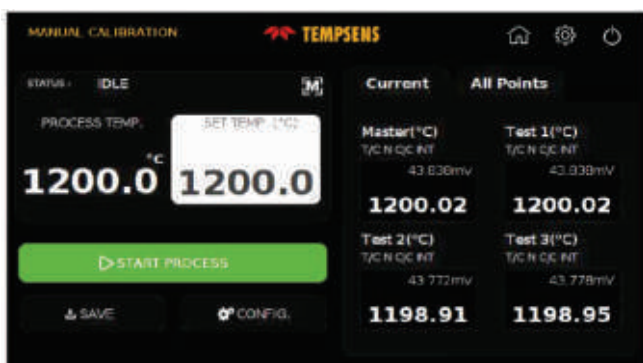


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD(PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

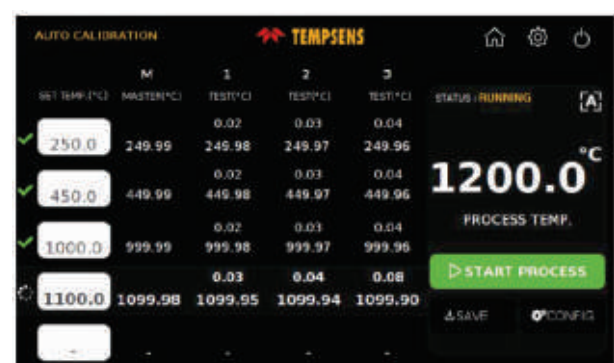


CALSYS -15/110 Autocal have two operating modes i.e. Manual and Auto mode

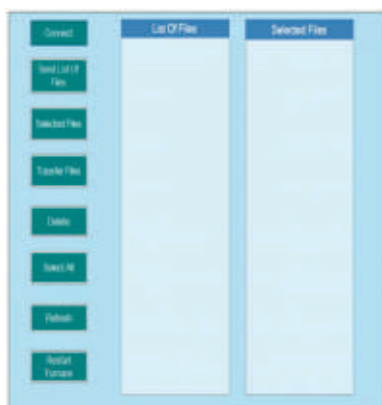
Manual Mode: In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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

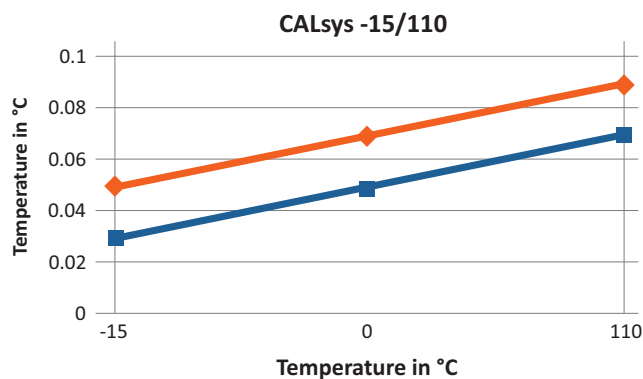


AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- 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 predefined format.

CUSTOMER			REVISION	1.0000	
INST. LOCATION			TEST. SERIAL		
NAME			PRINT. NO.		
RANGE CALIBRATED	400.00 °C		LAB. CONDITION (TEMP. ± 25.0 ± 0.5 °C)		
DATE OF CALIBRATION	2015-06-24		ELECTRONICS CALIBRATION DATE		
SERIAL	STANDARD TEMP. °C	MASTER TEMP. °C	ACTUAL TEMP. °C	PROCESSING POINT NUMBER	REMARKS
1	400.00	400.00	400.00	1	
2	410.00	407.82	400.00	2	
3					
4					
5					

STABILITY & UNIFORMITY



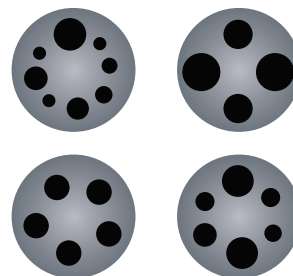
ACCESSORIES

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.

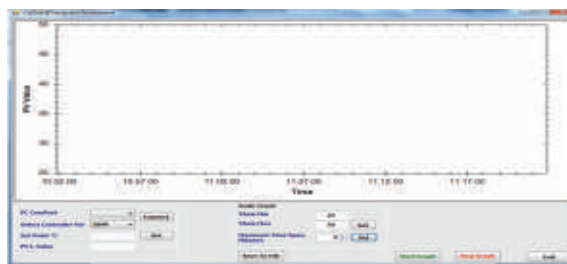
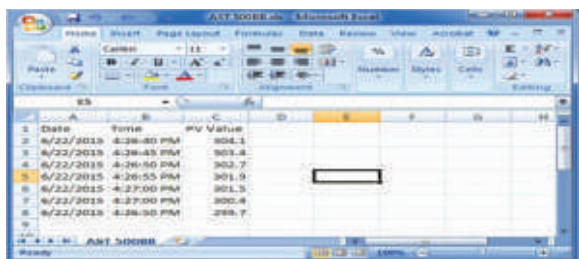
Inserts Model Description

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.

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 weighs about 10 kg, and it is small enough to carry around.

Speed

The CALsys 650 & CALsys 650 Autocal extremely quickly 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 $\pm 0.05^\circ$ (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 CALsys 650 Autocal

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



CALsys 650 Autocal

CALsys 650

CALsys 650 & CALsys 650 Autocal offers easy to use portable temperature calibrator with medium temperature range from 50 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 150mm long. The CALsys 650 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 accepts 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 time which 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

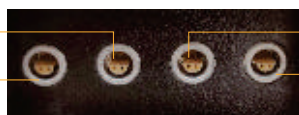
CALsys 650 Autocal & CALsys 650

Temperature range	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
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	13°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.

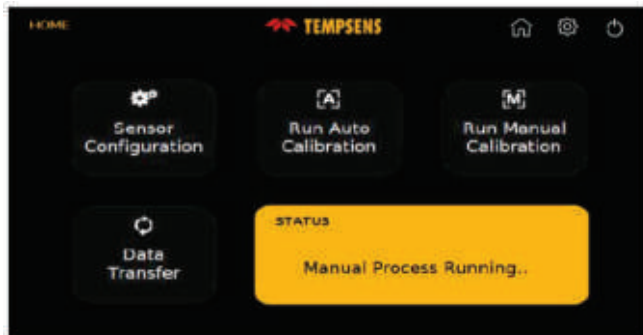
Connection for First TEST Sensor
Connection for MASTER Sensor



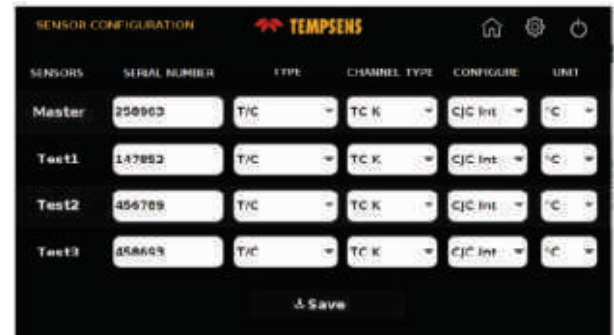
Connection for Second TEST Sensor
Connection for Third TEST Sensor

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 window also shows the ongoing process.

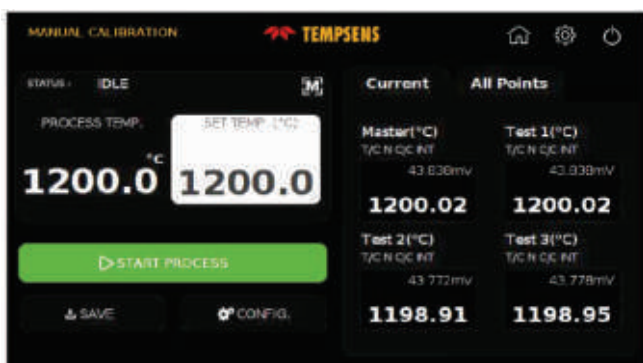


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD (PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

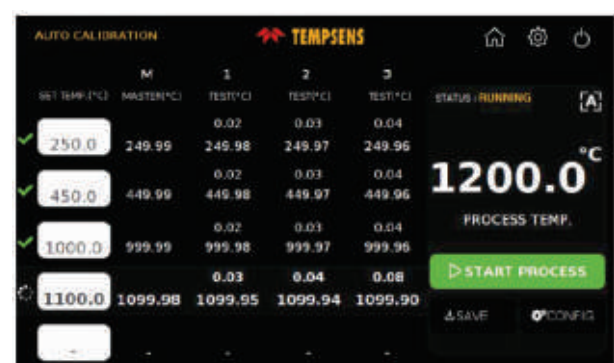


CALSYS 650 Autocal have two operating modes i.e. Manual and Auto mode

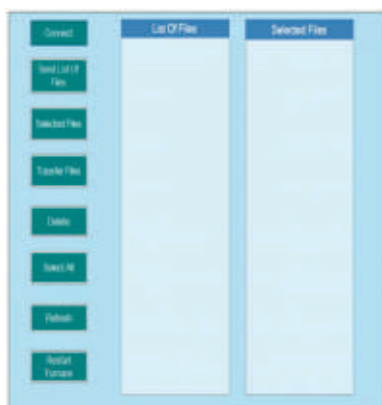
Manual Mode: In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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 Auto mode

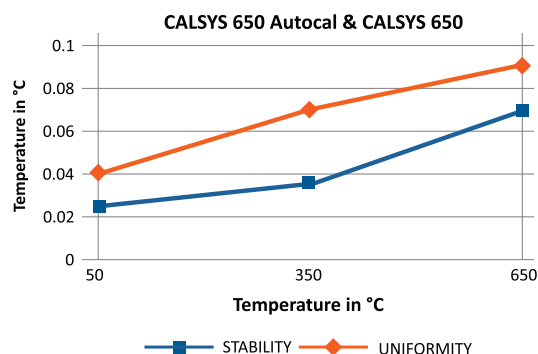


AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

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

CALIBRATION REPORT (TEMP MEASURING INST.)					
CUSTOMER				SERIAL NO.	10088
INST. LOCATION				TESTER NAME	
NAME				PRINTED ON	
RANGE CALIBRATED	400.00 °C		LAB CONDITION (TEMP. ± 25.0 ± 5 °C)		
DATE OF CALIBRATION	2015-06-24		ELECTRONICS CALIBRATION DATE		2015-06-24
SERIAL	STANDARD TEMP (°C)	MASTER TEMP (°C)	ACTUAL TEMP (°C)	PROCESSING (°C)	REMARKS
1	400.00	400.20	250.00	-1.100	
2	410.00	407.82	250.00	-2.000	
3					
4					
5					

STABILITY & UNIFORMITY

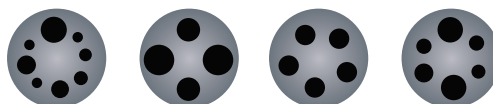


ACCESSORIES

Inserts for CALSYS 650 Autocal & CALSYS 650 models

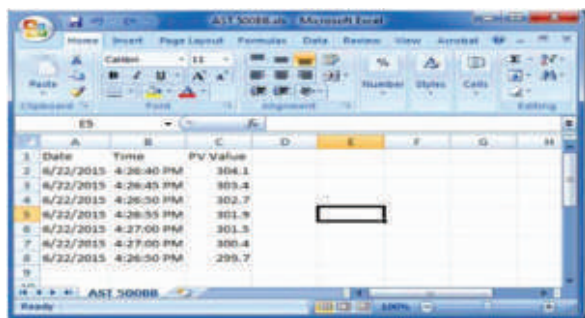
Inserts for CALSYS 650 Autocal & CALSYS 650 are made of Brass. All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements.

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.

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 $\pm 0.3^{\circ}\text{C}$ 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

CALsys 1200 Autocal

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



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 215mm 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

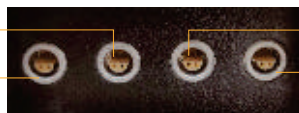
CALsys -1200 Autocal & CALsys 1200

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 tuned 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	13°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 generation 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.

Connection for First TEST Sensor
Connection for MASTER Sensor



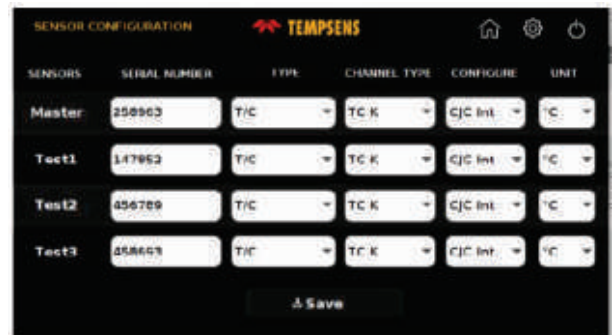
Connection for Second TEST Sensor
Connection for Third TEST Sensor

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 window also shows the ongoing process.

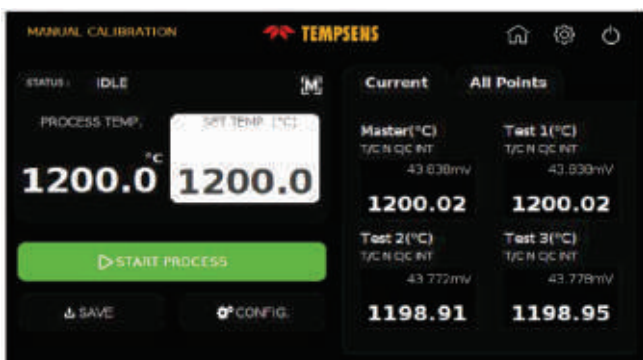


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD (PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

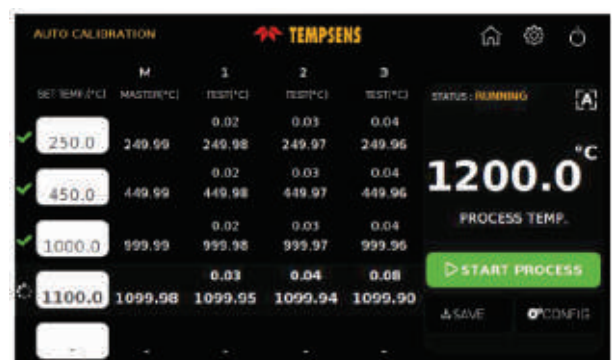


CALSYS 1200 Autocal have two operating modes i.e. Manual and Auto mode

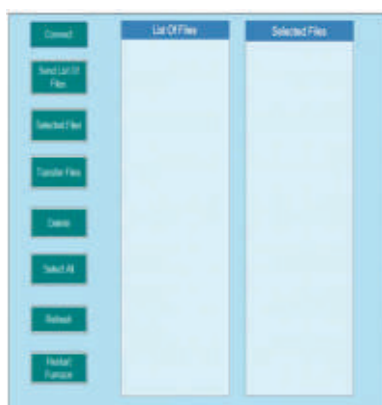
Manual Mode: In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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



AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- Tempsens can offer customized data saving option both for manual and Automode.
- After completion manual / Automode a u t o m a t i c calibration report can be generated at PC side based on predefined format.

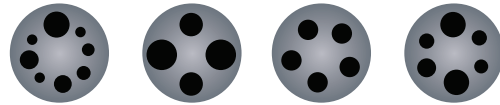
CALIBRATION REPORT (TEMP MEASURING INST.)					
Customer		Inst. No.		Inst. Brand	
Customer Name		Model No.		Range Calibrated	
Range Calibrated	400.00 - 1200.00 °C	Lab. Condition (Temp)	25 ± 0.5 °C	Date of Calibration	2022-04-04
Date of Calibration	2022-04-04	Recommended Recalibration Interval	12 Months		
SL. NO.	STANDARD TEMP (°C)	MASTER TEMP (°C)	ACTUAL TEMP (°C)	DIFFERENCE (°C)	REMARKS
01	80.00	80.00	80.00	0.00	
02	100.00	100.00	100.00	0.00	
03	120.00	120.00	120.00	0.00	
04	140.00	140.00	140.00	0.00	
05	160.00	160.00	160.00	0.00	
06	180.00	180.00	180.00	0.00	
07	200.00	200.00	200.00	0.00	
08	220.00	220.00	220.00	0.00	
09	240.00	240.00	240.00	0.00	
10	260.00	260.00	260.00	0.00	
11	280.00	280.00	280.00	0.00	
12	300.00	300.00	300.00	0.00	
13	320.00	320.00	320.00	0.00	
14	340.00	340.00	340.00	0.00	
15	360.00	360.00	360.00	0.00	
16	380.00	380.00	380.00	0.00	
17	400.00	400.00	400.00	0.00	
18	420.00	420.00	420.00	0.00	
19	440.00	440.00	440.00	0.00	
20	460.00	460.00	460.00	0.00	
21	480.00	480.00	480.00	0.00	
22	500.00	500.00	500.00	0.00	
23	520.00	520.00	520.00	0.00	
24	540.00	540.00	540.00	0.00	
25	560.00	560.00	560.00	0.00	
26	580.00	580.00	580.00	0.00	
27	600.00	600.00	600.00	0.00	
28	620.00	620.00	620.00	0.00	
29	640.00	640.00	640.00	0.00	
30	660.00	660.00	660.00	0.00	
31	680.00	680.00	680.00	0.00	
32	700.00	700.00	700.00	0.00	
33	720.00	720.00	720.00	0.00	
34	740.00	740.00	740.00	0.00	
35	760.00	760.00	760.00	0.00	
36	780.00	780.00	780.00	0.00	
37	800.00	800.00	800.00	0.00	
38	820.00	820.00	820.00	0.00	
39	840.00	840.00	840.00	0.00	
40	860.00	860.00	860.00	0.00	
41	880.00	880.00	880.00	0.00	
42	900.00	900.00	900.00	0.00	
43	920.00	920.00	920.00	0.00	
44	940.00	940.00	940.00	0.00	
45	960.00	960.00	960.00	0.00	
46	980.00	980.00	980.00	0.00	
47	1000.00	1000.00	1000.00	0.00	
48	1020.00	1020.00	1020.00	0.00	
49	1040.00	1040.00	1040.00	0.00	
50	1060.00	1060.00	1060.00	0.00	
51	1080.00	1080.00	1080.00	0.00	
52	1100.00	1100.00	1100.00	0.00	
53	1120.00	1120.00	1120.00	0.00	
54	1140.00	1140.00	1140.00	0.00	
55	1160.00	1160.00	1160.00	0.00	
56	1180.00	1180.00	1180.00	0.00	
57	1200.00	1200.00	1200.00	0.00	

ACCESSORIES

Inserts for CALsys 1200 Autocal & CALsys 1200 models

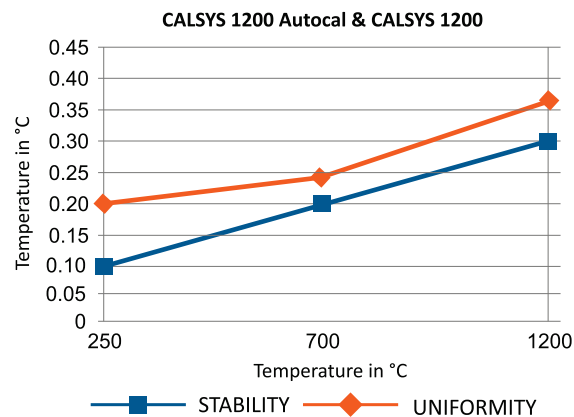
Inserts for Calsys 1200 Autocal & CALsys 1200 are made of special material. All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements.

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

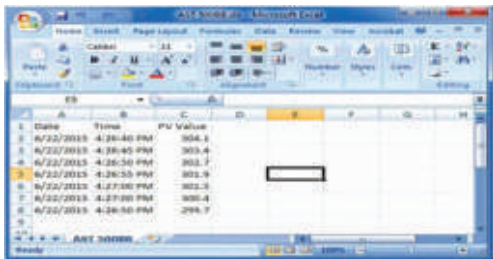


Customized Equalizing Block....Part No. EQ1

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.

Dry Block Calibrators

- Wide Temperature Range from 50°C to 660°C
- High Accuracy
- Enhance Temperature Homogeneity
- Metrology Performance in Stability and Uniformity
- Fast Temperature Calibration
- 4 Thermometer Calibration at Same Time
- Optional External Temperature Control
- Quick Push Connectors
- Self Calibration Features
- Easy to Use
- Bright Color Touch Display
- Automation Features
- LAN/Ethernet Connection for Easy Communication with PC

CALsys 650 M

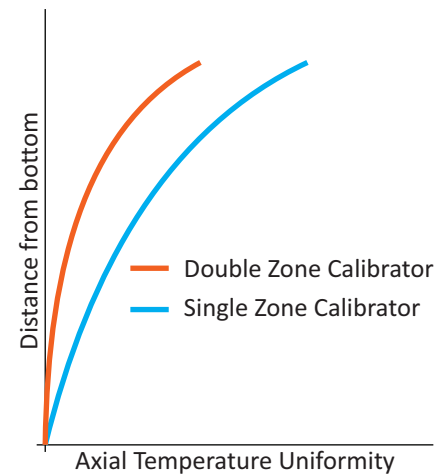
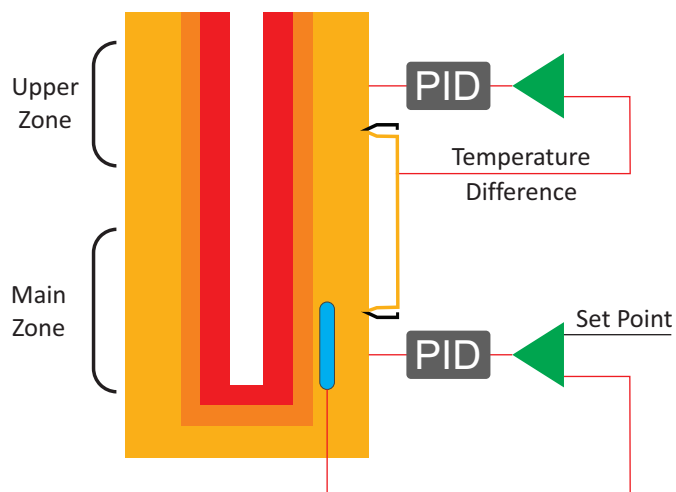
Metrology grade Highly Accurate Automatic Temperature Calibrator for Industrial/Laboratory Field Use



The Tempsens make metrology grade calsys 650 M is a user friendly, highly accurate easy to use dry block calibrator. with the enhanced speed and portability it offers best in class accuracy stability, axial uniformity, radial uniformity, loading and hysteresis. all parameters featuring the highest available performance and well adopted for characterization and performance validation for contact type temperature sensors like thermocouple RTD temperature gauges for a wide temperature ranges. The comparison volume is a metallic block of special material, which has a diameter of 38mm and 180mm long. The CALsys 650 M Upgraded with 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 accepts 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.

Enhance Temperature Uniformity



With Tempsesns dual zone heating technology each zone is independently controlled by PID for precise temperature control for each zone. The bottom zone has a built-in high accuracy thermometer and the upper zone compensates the heat loss thus ensuring perfect temperature homogeneity within 60mm from the bottom part.

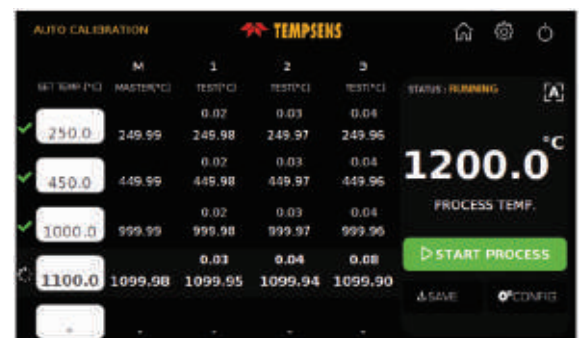
Bright Color Touch Screen Display

The 5-inch bright color touch screen display provides intuitive navigation and provides necessary calibration procedure information to the user. The touch screen is very easy to read and monitor calibration parameters.



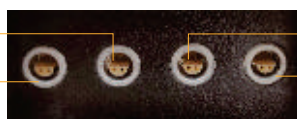
Auto Stepping Mode

User can set up to 5 different temperature steps and that can be programmed including holding time for each step. Universal temperature sensor inputs and the auto-stepping features provide user a complete automatic solution to calibrate up to 4 thermometers at the same time and store and visual calibration information for each sensor under calibration.



4 Thermometers Calibration at a Time

Connection for First TEST Sensor
Connection for MASTER Sensor

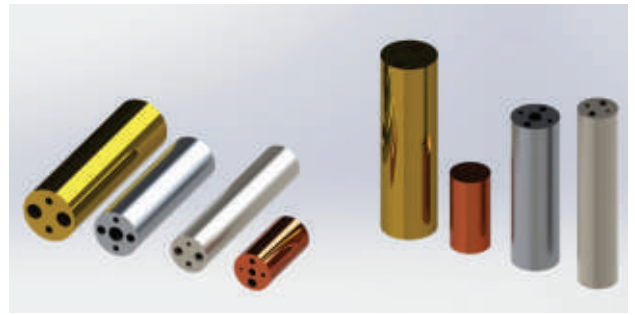


Connection for Second TEST Sensor
Connection for Third TEST Sensor

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.

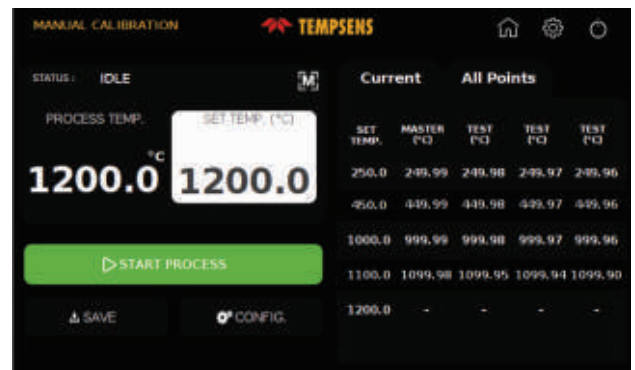
Special Dry Block Capacity

Tempens offers customized insert with user define pre-drilled holes ranging from 3 mm to 28 mm. We are able to design and manufacture custom inserts to meet calibration requirements. We provide 38mm Diameter Interchangeable insert with CALsys 650M Insert made of Special Material and coating for better thermal distribution.



Self Calibration

In comparisons based temperature calibrator an external reference probe is the best option to perform temperature calibration but sometime it is not convenient depending on the application and internal control sensor could be proffered calsys 650 M allowing build in a self calibration features allowing customer to run automated calibration of the internal control sensor using external reference which will improve its accuracy.



Customized Calibration Software

Tempsens make Easy to use Customized software enables end user to access temperature data both for Manual mode and Automode. In User friendly software interface end user can save and Generate calibration Data and specify Master and Test sensor details.

Template: <input type="text" value="Template"/>		<input type="button" value="Import From Excel"/> <input type="button" value="Show Report"/>	
Position Function No. <input type="text" value="015-010-020-10"/> Main Equip No. <input type="text" value="001-001-000-26 TO 32"/> Department <input type="text" value="A-01"/>			
Equipment Under Calibration Instrument Name <input type="text" value="RTD 3 WIRE"/> Plant Name <input type="text" value="ABC"/> Operating Range <input type="text" value="400 TO 3000"/> Accuracy <input type="text" value="±0.3"/> Calibration Start Date <input type="text" value="03-03-2002"/> <input type="button" value="..."/> Calibration Due Date <input type="text" value="06-03-2003"/> <input type="button" value="..."/>			
Master Instrument Instrument Name <input type="text" value="RTD 4 WIRE"/> Tag No. <input type="text" value="472"/> Make <input type="text" value="Temptemp"/> Range <input type="text" value="400 TO 300"/> Accuracy <input type="text" value="±0.3"/> Valid up to <input type="text" value="06-03-2003"/> <input type="button" value="..."/>			
Index 1 Tag No. <input type="text" value="T001"/> Equipment ID <input type="text" value="00100"/> Process Location <input type="text" value="Compressor Room"/>		Index 2 Tag No. <input type="text" value="T002"/> Equipment ID <input type="text" value="00101"/> Process Location <input type="text" value="Compressor Hall"/>	
Index 3 Tag No. <input type="text" value="T003"/> Equipment ID <input type="text" value="00102"/> Process Location <input type="text" value="Compressor Hall"/>		Index 4 Tag No. <input type="text" value="T004"/> Equipment ID <input type="text" value="00103"/> Process Location <input type="text" value="Compressor Hall"/>	

On Board Documentation

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 predefined format. It can generate Customized Test certificate as per user lab format with expanded uncertainty calculation of UUT.

[illegible]

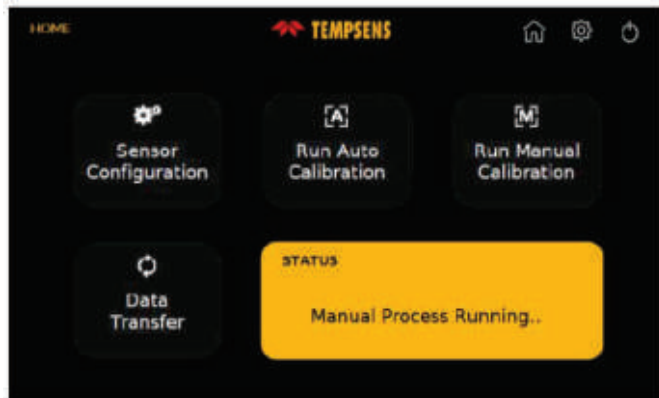
Specifications

CALsys 650 M

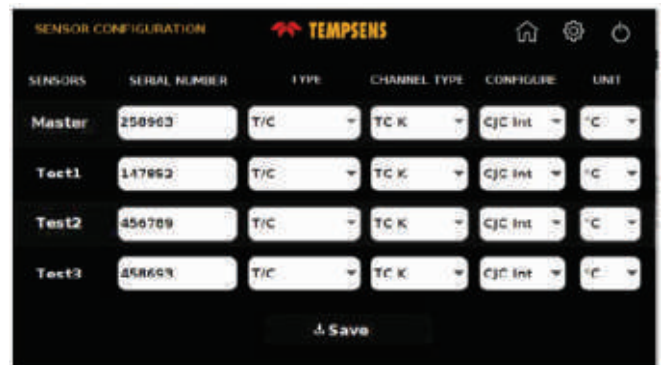
Temperature range	50 °C to 660 °C
Display Accuracy	±0.5°C
Stability	±0.01°C at 50°C ±0.02°C at 350°C ±0.05°C at 660°C
Axial uniformity (40mm)	±0.09°C at 100°C ±0.22°C at 400°C ±0.35°C at 660°C
Axial uniformity (60mm)	±0.12°C at 100°C ±0.30°C at 400°C ±0.60°C at 660°C
Radial uniformity	±0.03°C at 50°C ±0.05°C at 350°C ±0.09°C at 660°C
Loading effect (with a 6.35 mm reference probe and three 6.35 mm probes)	±0.05°C
Hysteresis	±0.07°C
Insert OD dimensions	38 mm
Immersion depth	160 mm
Cooling time	70 Min (660 °C to 100 °C)
Heating time	20 Min.
Stability time	15 Min
Set Point Resolution	0.1°C
Units	°C, °F and K
Display	5Inch LCD, Color Touch Display
Power requirements	230 VAC, 1KW(50 Hz)
Calibration	Accredited calibration certificate provided
Environmental operating conditions	0°C to 40°C, 0% to 90% RH (non-condensing)
Specifications valid in environmental conditions	15°C ... 30°C
PC Interface	Ethernet port
Size (H x W x D)	383(H)x230(W)x304(D) mm
Weight	14 kg
Input	Four channels (one master and three test sensors).high quality universal LEMO connector suitable both for T/C K, N,T,R,S, B type) and Rtd
RTD Input Channel Accuracy	±0.05°C ±0.005% RDG
TC Input Channel Accuracy	E,J,K,N,T: ±0.3°C, R,S,B: ±0.5°C
CJC Accuracy	±0.35°C (15°C to 30°C)
Software	The calibrator will be provided with software for data recording (Manual Mode) and Test Certificate generation in Auto Mode
Data logging	Data logging facility with logged data export to computer through LAN port (optional USB)

User Interface

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.

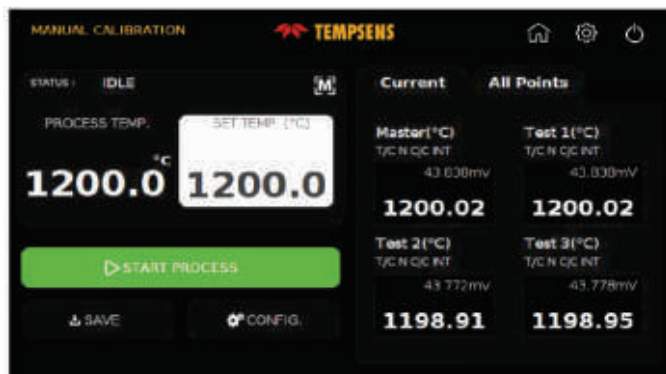


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD (PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

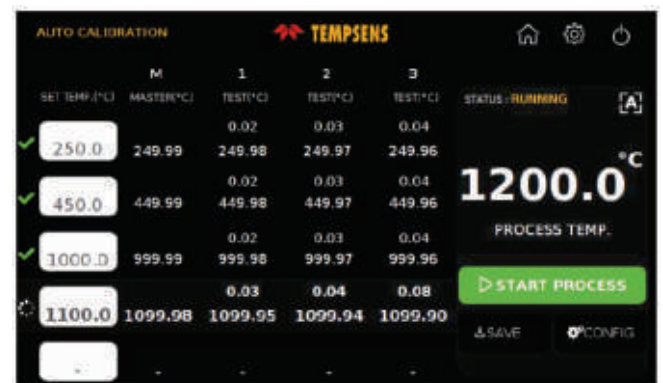


CALsys 650 M have two operating modes i.e. Manual and Auto mode

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

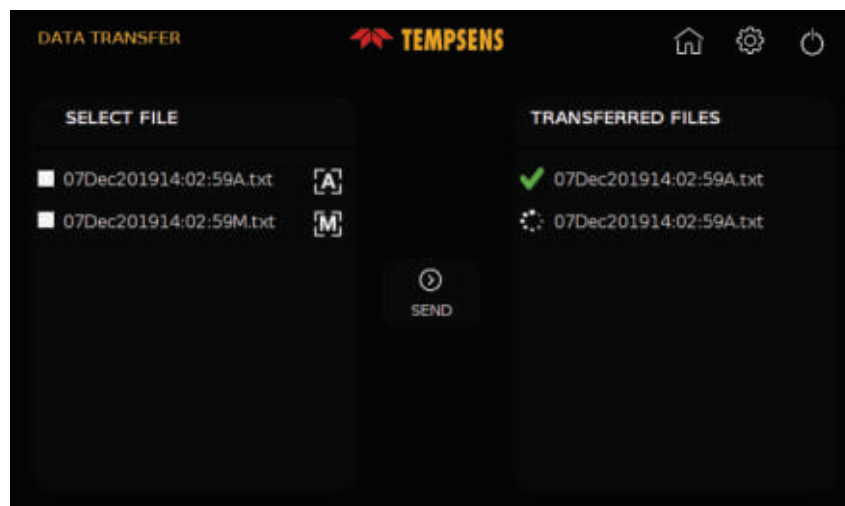


Auto Mode: In this screen user sets the temperature points for calibration (Max 5 Points).

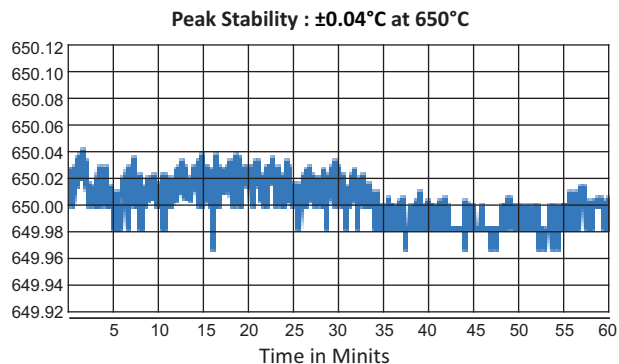
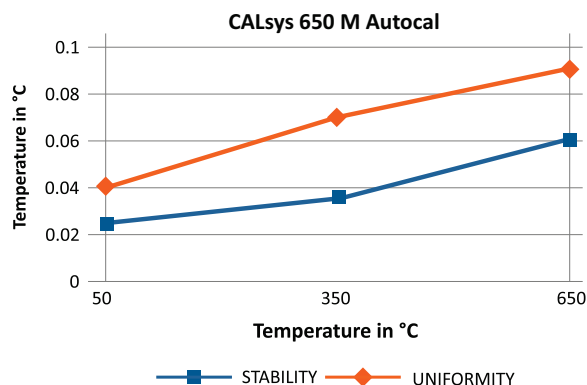


Data Transfer

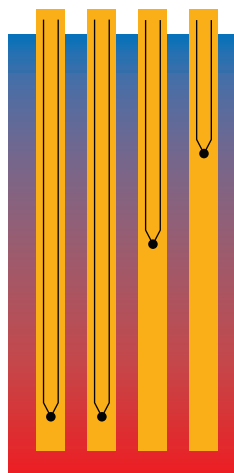
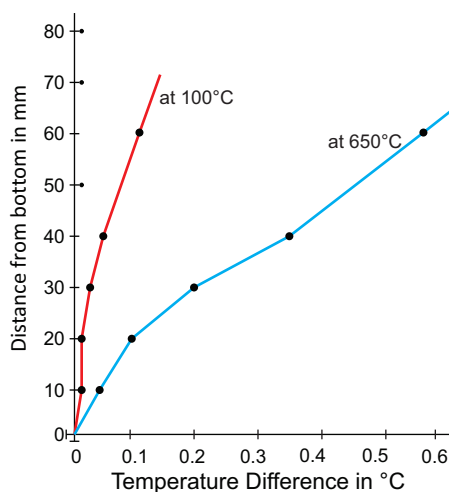
In this screen the files are transferred to pc for report generation.



Stability & Radial Uniformity



Axial Uniformity

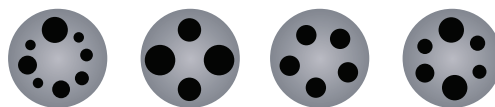


Accessories

Inserts for CALsys 650 M models

Inserts for CALsys 650 M 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 4X6.5mm
Ci2	Special (Customized)



Customized Equalizing Block....Part No. EQ1

Master Sensor (Optional)

- Reference Standard High Accuracy Thermometer (RTD)
- Part no. TICP- 300.



- NABL accredited calibration certificate - 3 point
- Operational Manual

Carry Case

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



Universal Lemo Connector

- 4 No. Universal Lemo Connector for Connect RTD & Thermocouples



Dry Block Calibrators

- Wide Temperature Range from -40°C to 150°C
- High Accuracy
- Enhance Temperature Homogeneity
- Metrology Performance in Stability and Uniformity
- Fast Temperature Calibration
- 4 Thermometer Calibration at Same Time
- Optional External Temperature Control
- Quick Push Connectors
- Self Calibration Features
- Easy to Use
- Bright Color Touch Display
- Automation Features
- LAN/Ethernet Connection for Easy Communication with PC

CALsys -40/150 M

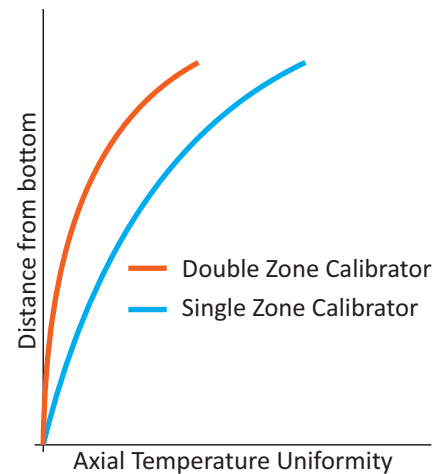
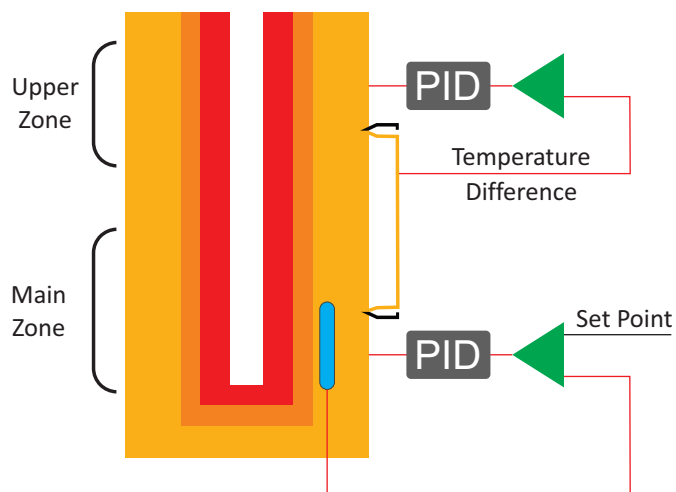
Metrology grade Highly Accurate Automatic Temperature Calibrator for Industrial/Laboratory Field Use



The Tempsens make metrology grade calsys -40/150 M is a user friendly, highly accurate easy to use dry block calibrator. with the enhanced speed and portability it offers best in class accuracy stability, axial uniformity, radial uniformity, loading and hysteresis. all parameters featuring the highest available performance and well adopted for characterization and performance validation for contact type temperature sensors like thermocouple RTD temperature gauges for a wide temperature ranges. The comparison volume is a metallic block of special material, which has a diameter of 25mm and 120mm long. The CALsys -40/150 M Upgraded with 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 accepts 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.

Enhance Temperature Uniformity



With Tempsesns dual zone heating technology each zone is independently controlled by PID for precise temperature control for each zone. The bottom zone has a built-in high accuracy thermometer and the upper zone compensates the heat loss thus ensuring perfect temperature homogeneity within 60mm from the bottom part.

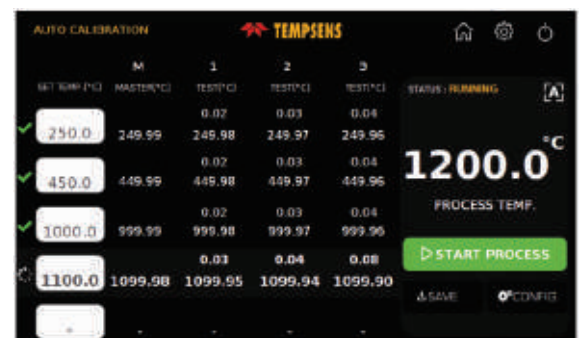
Bright Color Touch Screen Display

The 5-inch bright color touch screen display provides intuitive navigation and provides necessary calibration procedure information to the user. The touch screen is very easy to read and monitor calibration parameters.



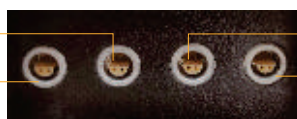
Auto Stepping Mode

User can set up to 5 different temperature steps and that can be programmed including holding time for each step. Universal temperature sensor inputs and the auto-stepping features provide user a complete automatic solution to calibrate up to 4 thermometers at the same time and store and visual calibration information for each sensor under calibration.



4 Thermometers Calibration at a Time

Connection for First TEST Sensor
Connection for MASTER Sensor



Connection for Second TEST Sensor
Connection for Third TEST Sensor

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.

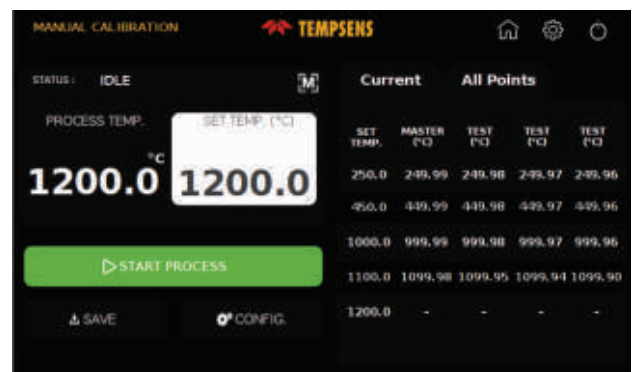
Special Dry Block Capacity

Tempens offers customized insert with user define pre-drilled holes ranging from 3 mm to 28 mm. We are able to design and manufacture custom inserts to meet calibration requirements. We provide 38mm Diameter Interchangeable insert with CALsys 650M Insert made of Special Material and coating for better thermal distribution.



Self Calibration

In comparisons based temperature calibrator an external reference probe is the best option to perform temperature calibration but sometime it is not convenient depending on the application and internal control sensor could be proffered calsys 650 M allowing build in a self calibration features allowing customer to run automated calibration of the internal control sensor using external reference which will improve its accuracy.



Customized Calibration Software

Tempsens make Easy to use Customized software enables end user to access temperature data both for Manual mode and Automode. In User friendly software interface end user can save and Generate calibration Data and specify Master and Test sensor details.

Template: Template			
Previous			
Formal No.	074-014-010-13	Revision	1 2
Prod. SOP No.	074-013-010-28 10 30	Revision No.	1 2
Department	LAB	Effective Date	26-03-2022
		Import From Excel	
		Show Report	
Instrument Under Calibration			
Instrument Name	HTD 3 WIRE	Instrument Name	HTD 4 WIRE
Plant Name	ADC	Tag No.	472
Operating Range	400 TO 3000	Make	
Accuracy	±0.3	Range	400 TO 300
Calibration Due Date	10-03-2022	Accuracy	±0.3
Calibration Due Date	16-03-2022	Valid up to	16-03-2022
Rule 1		Rule 2	
Tag No.	1201	Tag No.	1202
Equipment ID	00106	Equipment ID	00101
Process Location	Compressor B08	Process Location	Compressor D04
Rule 3		Rule 4	
Tag No.		Tag No.	
Equipment ID		Equipment ID	
Process Location		Process Location	

On Board Documentation

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 predefined format. It can generate Customized Test certificate as per user lab format with expanded uncertainty calculation of UUT.

[illegible]

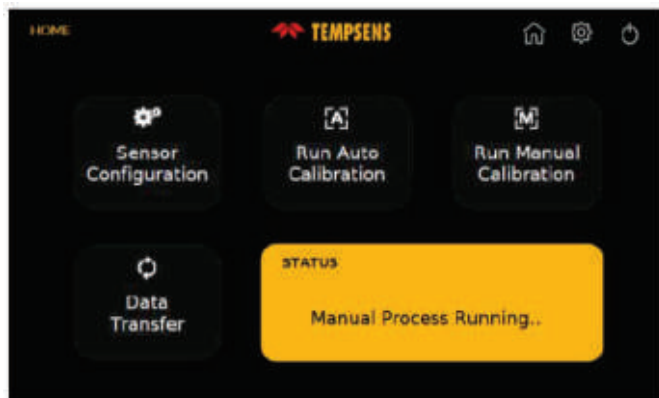
Specifications

CALsys -40/150 M

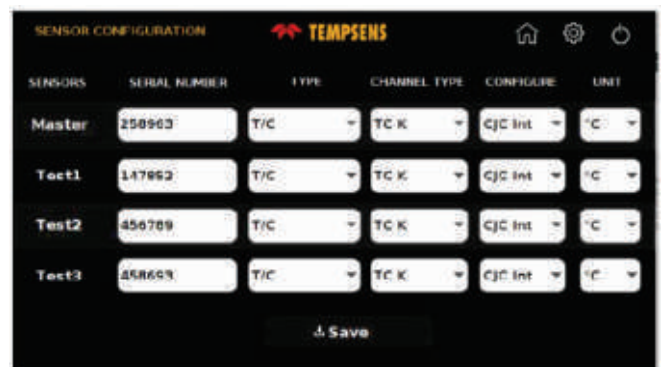
Temperature Range at 23°C	40°C to 150°C
Display Accuracy	±0.2 °C
Stability	0.01°C
Axial Uniformity (40 mm)	±0.05°C
Radial Uniformity	±0.01°C
Loading effect (with a 6.35mm reference probe and three 6.35 mm probes)	±0.02°C
Hysteresis	±0.03°C
insert OD dimensions	25 mm
Immersion depth	120 mm
Cooling time	15 Min (23°C to -30°C)
Heating time	15 Min (23°C to 140°C)
Stability time	15 Min
Set Point Resolution	0.1°C
Units	°C, °F and K
Display	5 Inch LCD, Color touch display
Power requirements	230 VAC, 1 KW (50 Hz)
Calibration	Accredited calibration certificate provided
Environmental Operating conditions	0°C to 40°C, 0% to 90%RH (non-condensing)
Specification valid in environmental conditions	15°C -30°C
PC interface	Ethrenet port
Size (HxWxD)	325(H)x185(W)x265(D) mm
Weight	10kg
Input	Four channels (one master and three test sensors). High quality universal LEMO connector suitable both for T/C K,N,T,R,S,B type) and Rtd
RTD input channel accuracy	±0.35°C (15°C to 30°C)
Software	The calibrator will be provided with software for data recording (Manual Mode) and Test Certificate generation in Auto Mode
Data logging	Data logging facility with logged data export to computer through LAN port (optional USB)

User Interface

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.

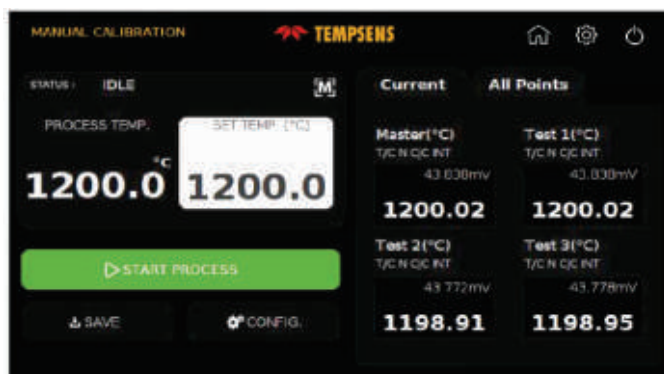


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD (PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

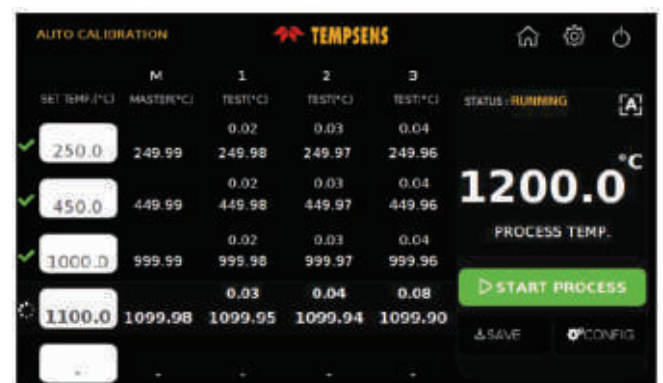


CALsys -40/150 M have two operating modes i.e. Manual and Auto mode

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

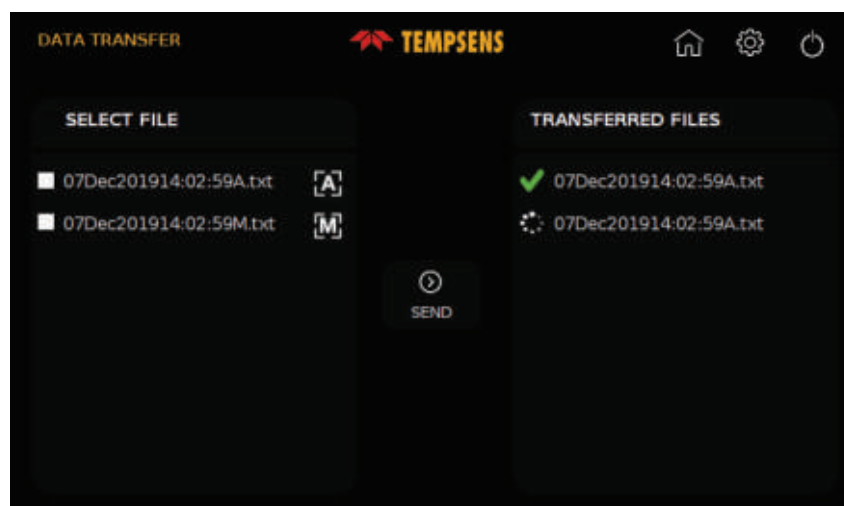


Auto Mode: In this screen user sets the temperature points for calibration (Max 5 Points).

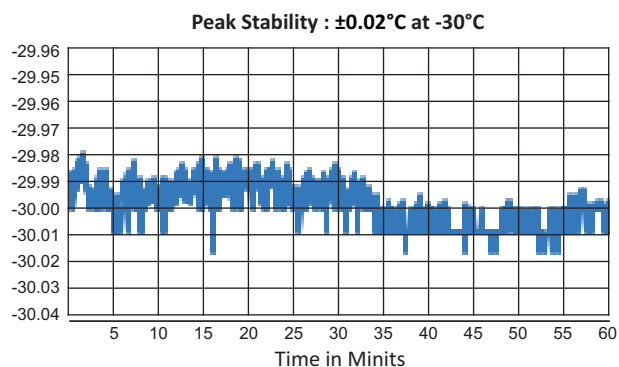
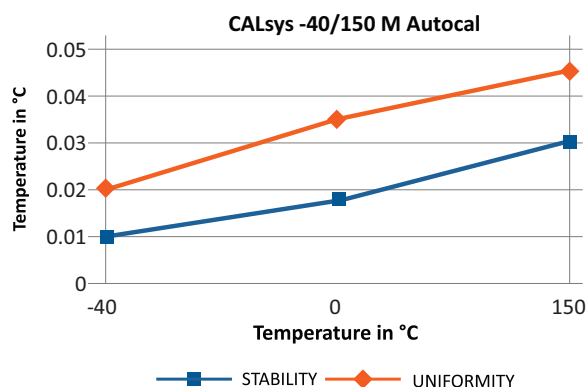


Data Transfer

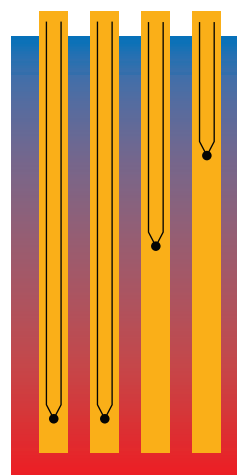
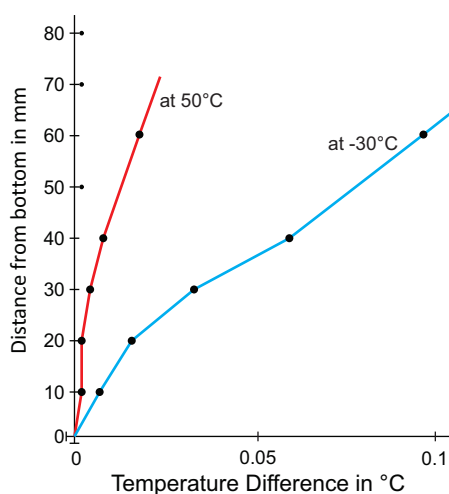
In this screen the files are transferred to pc for report generation.



Stability & Radial Uniformity



Axial Uniformity

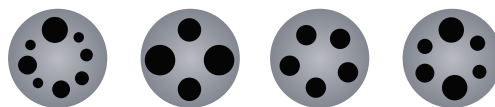


Accessories

Inserts for CALsys -40/150 M models

Inserts for CALsys -40/150 M 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 4X6.5mm
Ci2	Special (Customized)



Customized Equalizing Block....Part No. EQ1

Master Sensor (Optional)

- Reference Standard High Accuracy Thermometer (RTD)
- Part no. TICP- 300.



- NABL accredited calibration certificate - 3 point
- Operational Manual

Carry Case

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



Universal Lemo Connector

- 4 No. Universal Lemo Connector for Connect RTD & Thermocouples



Automatic Calibration System



- Portable
- Highly Stable
- Highly Stable Temperature Calibrator for Industrial Field Uses

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 $\pm 0.04^\circ\text{C}$ (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

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



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 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.

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 tuned 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)

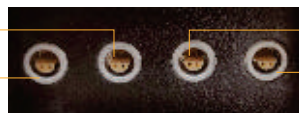
* At 28C Ambient Temperature

**120mm Deep Plus 30 mm top insulation

Note : Customized options available for resolution and insert construction.

SENSOR CONNECTION (CALsys -100/40 Autocal)

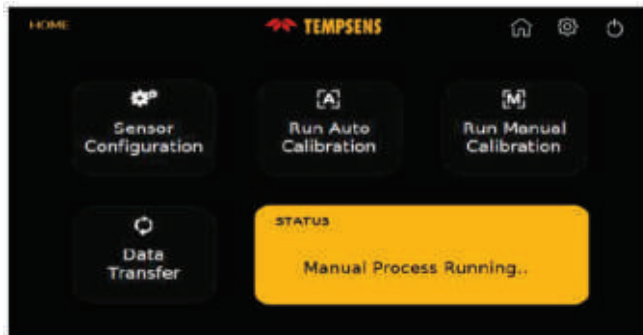
Connection for First TEST Sensor
Connection for MASTER Sensor



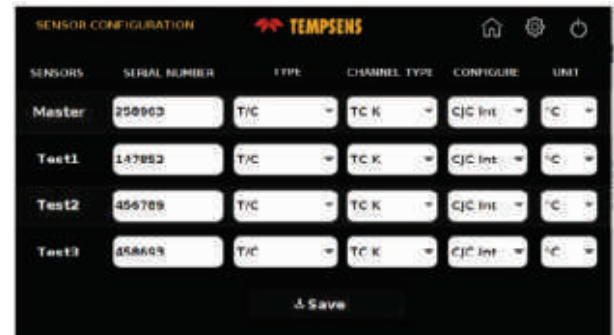
Connection for Second TEST Sensor
Connection for Third TEST Sensor

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.

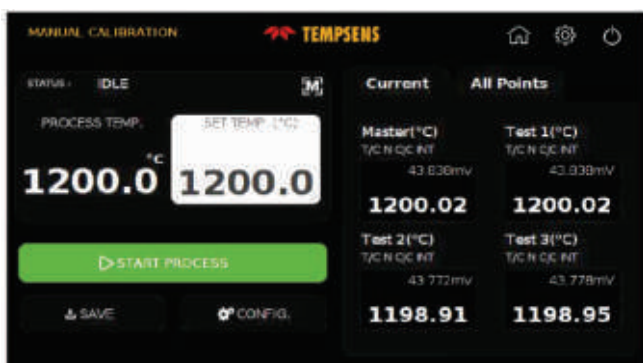


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD(PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

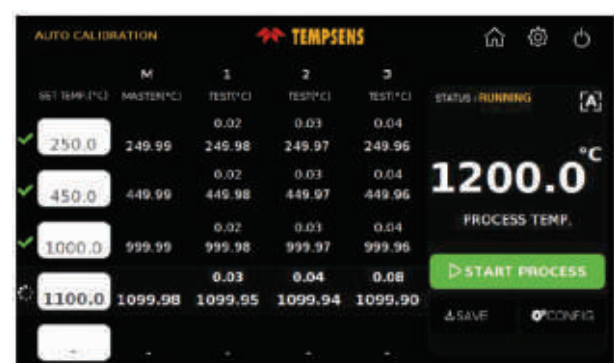


CALSYS -100/40 Autocal have two operating modes i.e. Manual and Auto mode

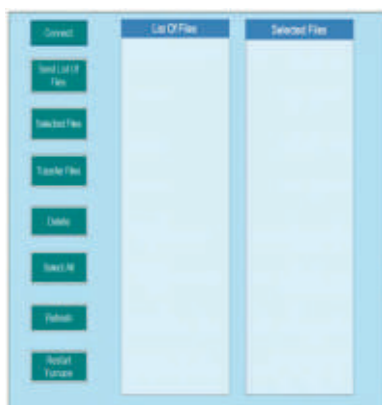
Manual Mode: In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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



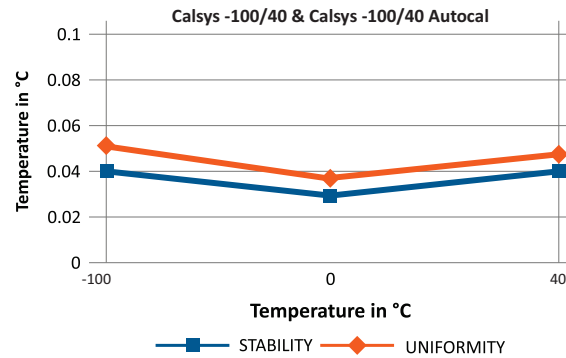
AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- 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 predefined format.

CALIBRATION REPORT (TEMPSENS INST.)

CUSTOMER			SENSOR	1000PH	
INST. LOCATION		TEST. SERIAL			
NAME		PRINT. NO.			
RANGE CALIBRATED	400.00	°C	CAL. CONDITION (TEMP. ± 25.0 ± 5.0 °C)		
DATE OF CALIBRATION	2015-06-24		RECOMMENDED CALIBRATION DATE	2015-06-24	
SERIAL	STANDARD TEMP(°C)	MASTER TEMP(°C)	ACTUAL TEMP(°C)	PROCESSING POINT NUMBER	REMARK
1	400.00	400.00	250.00	1	
2	410.00	407.82	250.00	2	
3					
4					
5					

STABILITY & UNIFORMITY



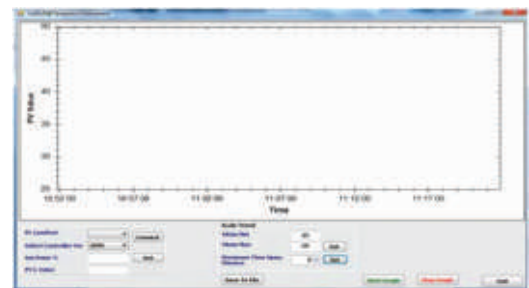
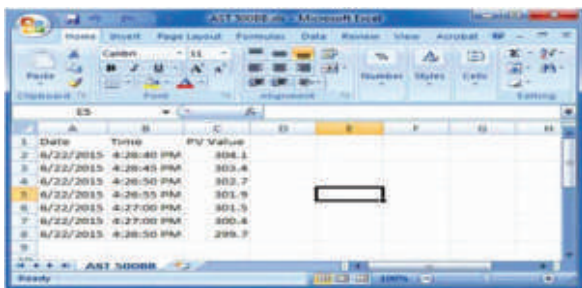
ACCESSORIES

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 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

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 use. It only weighs 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 $\pm 0.07^\circ\text{C}$ at 110 °C.

Accredited calibration

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

Computer Interface

The communication port (RS-232/ USB) enables communication with selected Calsys -30/110 Calibration for automation calibration and documentation easy.

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

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 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 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

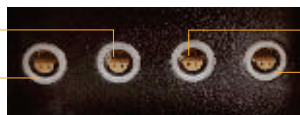
CALsys -30/110 Autocal & CALsys 30/110

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 tuned 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 (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 ... 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 generation 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.

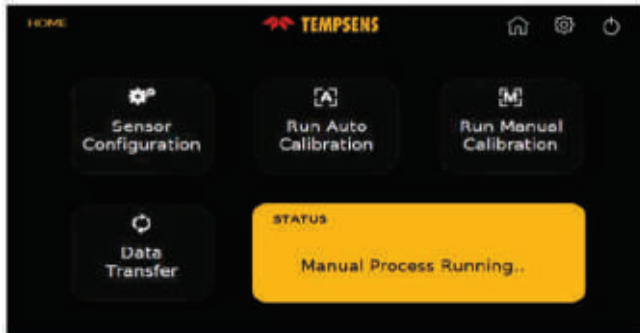
Connection for First TEST Sensor
Connection for MASTER Sensor



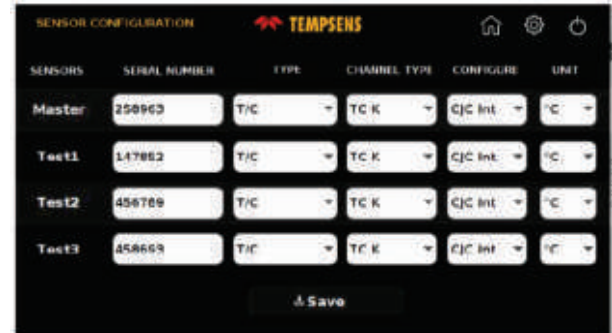
Connection for Second TEST Sensor
Connection for Third TEST Sensor

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.

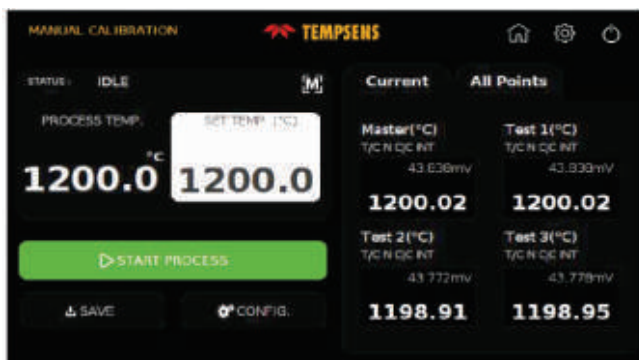


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD (PT 100, PT 1000, PT 50 etc.) for calibration with their serial number and temperature unit (C/F/K).

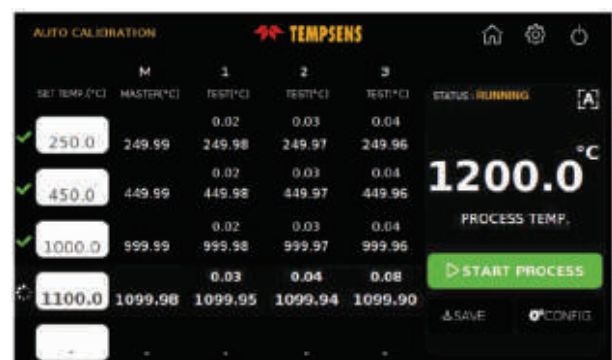


CALSYS -30/110 Autocal have two operating modes i.e. Manual and Auto mode

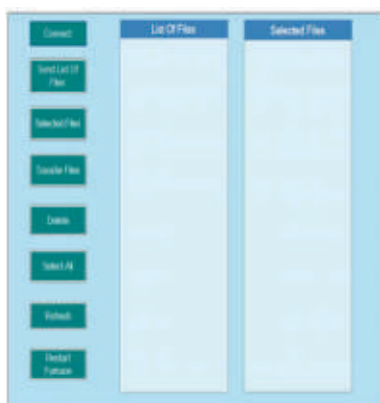
Manual Mode: In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts.



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.

CALIBRATION REPORT (TEMP RECORDS) (C/F)

CONFIRMED	<div style="border: 1px solid black; width: 150px; height: 20px;"></div> Date Recd: 12/05/20			
INTERVIEWER	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	REF. NO.	<div style="border: 1px solid black; width: 150px; height: 20px;"></div>	
NAME	<div style="border: 1px solid black; width: 100px; height: 20px;"></div>	PROJECT NO.	<div style="border: 1px solid black; width: 150px; height: 20px;"></div>	
APPROVED BY	400.00	NO.	100.00	
DATE OF CALIBRATION	20/05/20	RECORDED BY: CALIBRATION UNIT:		20/05/20

SERIAL	STANDARD TEMP (°C)	MASTER TEMP (°C)	ACTUAL TEMP (°C)	RECORDING	REMARK
1	400.00	400.00	200.00	200.00	<div style="border: 1px solid black; width: 100px; height: 100px;"></div>
2	100.00	100.00	200.00	200.00	
3					
4					
5					

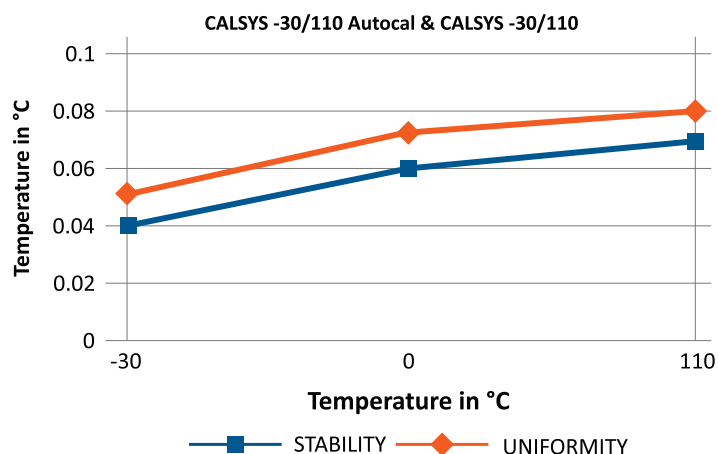
ACCESSORIES

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

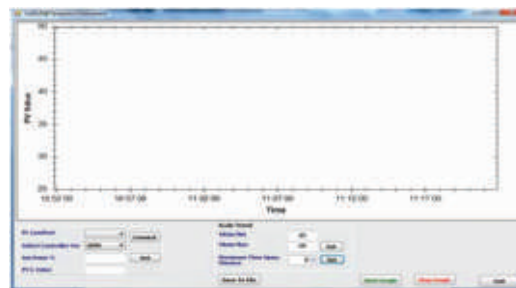
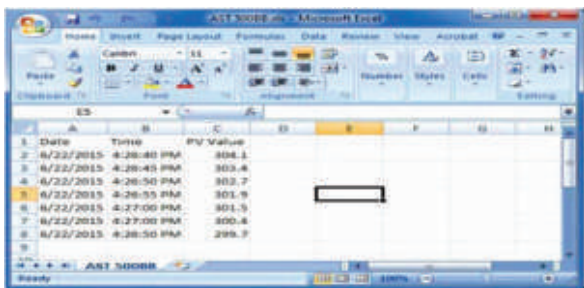
Inserts for CALsys -30/110 Autocal & CALsys -30/110 are made of aluminum .All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements.

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

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 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.

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

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



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 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.

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.

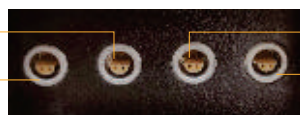
SPECIFICATIONS

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 tuned 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 generation 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)

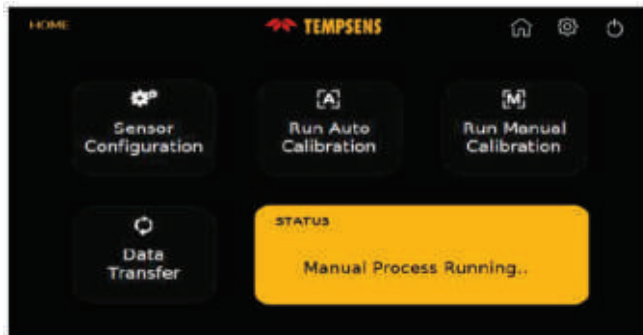
Connection for First TEST Sensor
Connection for MASTER Sensor



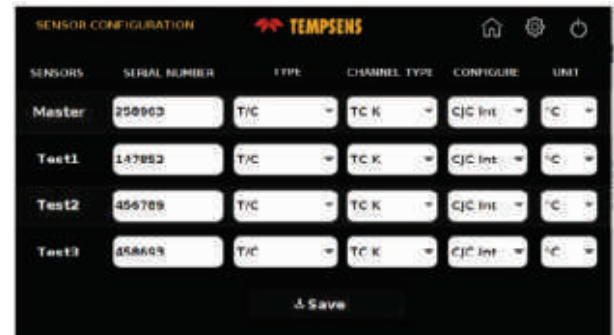
Connection for Second TEST Sensor
Connection for Third TEST Sensor

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.

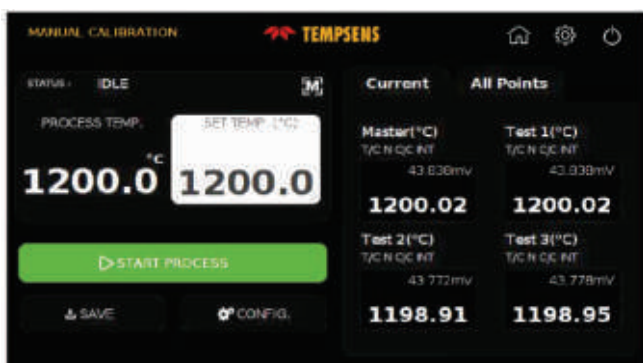


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD(PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

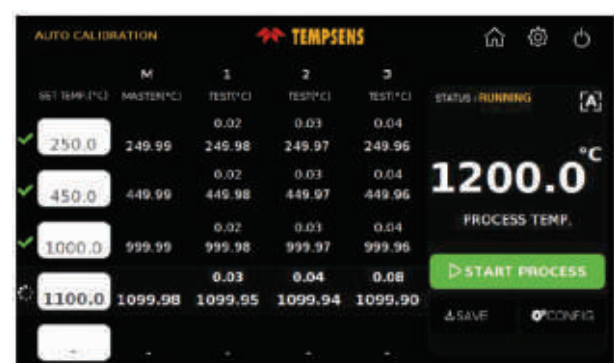


CALSYS -15/110 Autocal have two operating modes i.e. Manual and Auto mode

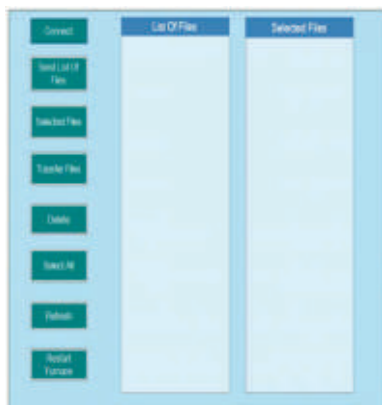
Manual Mode: In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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

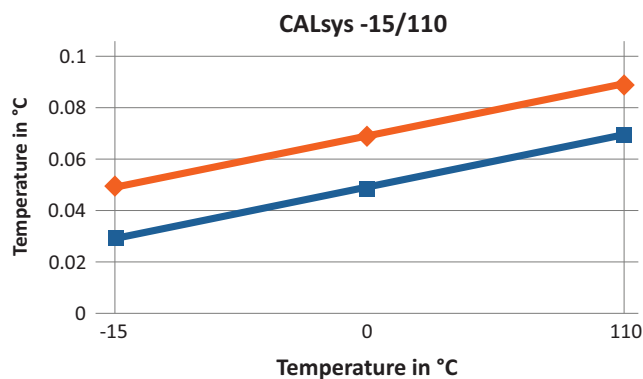


AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- 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 predefined format.

CALIBRATION REPORT (TEMP MEASURING INST.)					
CUSTOMER			SERIAL NO.	1008H	
INST. LOCATION			TEST TEMP. °C		
NAME			REF. NO.		
RANGE CALIBRATED	400.00 °C		LAB CONDITION (TEMP. ± 25.0 ± 0.5 °C)		
DATE OF CALIBRATION	2015-06-24		ELECTRONICS CALIBRATION DATA		2015-06-24
SERIAL	STANDARD TEMP. °C	MASTER TEMP. °C	ACTUAL TEMP. °C	PROCESSING POINT NUMBER	REMARK
1	400.00	400.20	250.00	1	
2	410.00	407.82	250.00	2	
3					
4					
5					

STABILITY & UNIFORMITY



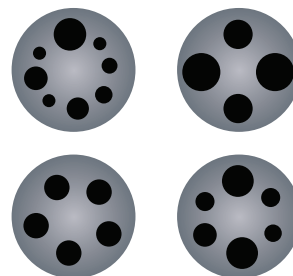
ACCESSORIES

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.

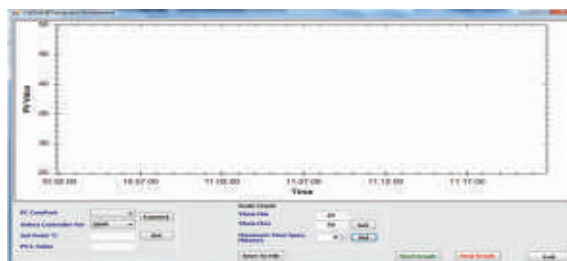
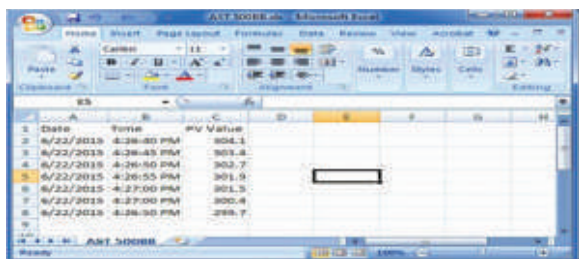
Inserts Model Description

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.

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 weighs 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 $\pm 0.05^\circ$ (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 CALsys 650 Autocal

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



CALsys 650 Autocal

CALsys 650

CALsys 650 & CALsys 650 Autocal offers easy to use portable temperature calibrator with medium temperature range from 50 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 150mm long. The CALsys 650 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 accepts 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 time which 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

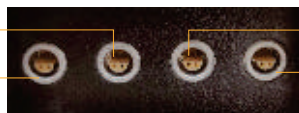
CALsys 650 Autocal & CALsys 650

Temperature range	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
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	13°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.

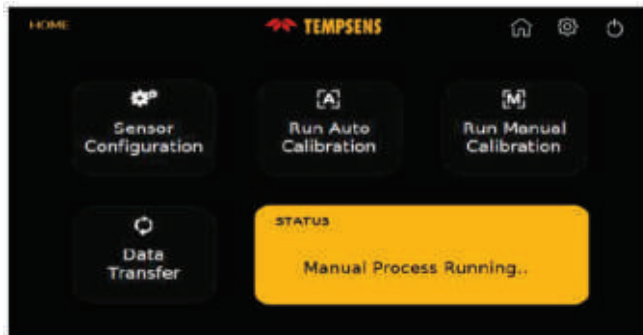
Connection for First TEST Sensor
Connection for MASTER Sensor



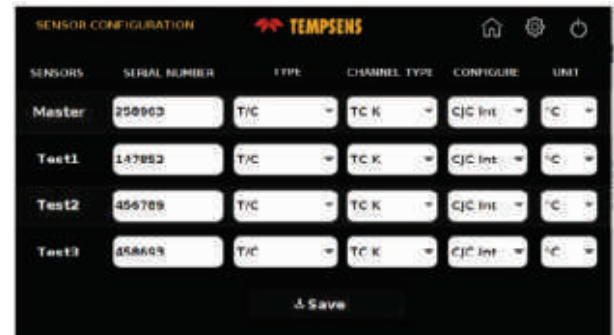
Connection for Second TEST Sensor
Connection for Third TEST Sensor

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 window also shows the ongoing process.

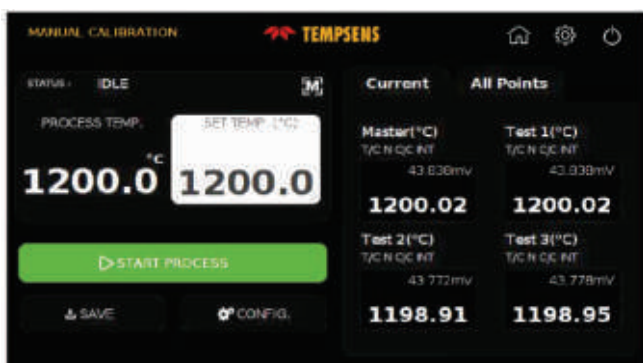


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD (PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

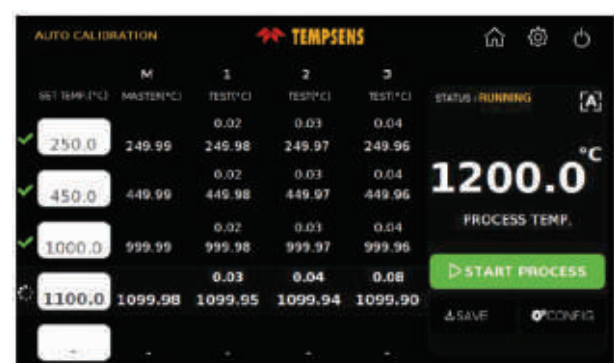


CALSYS 650 Autocal have two operating modes i.e. Manual and Auto mode

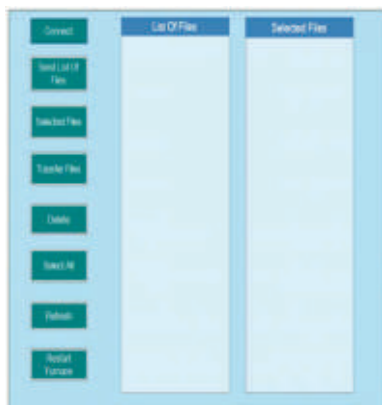
Manual Mode: In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts.



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 Auto mode.

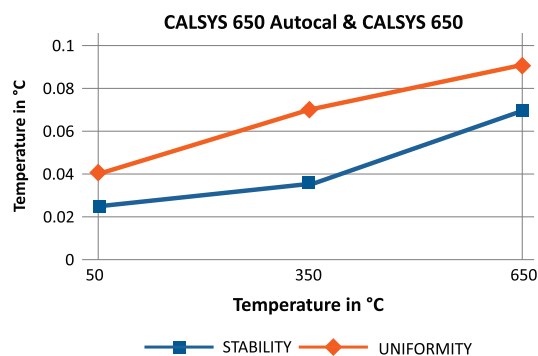


AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

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

CALIBRATION REPORT (TEMP MEASURING INST.)					
CUSTOMER				SERIAL No.	100881
INST. LOCATION			INST. NO.		
NAME			PORT NO.		
RANGE CALIBRATED	400.00	°C	LAB. CONDITION (TEMP. ± 25.0 ± 0.5 °C)		
DATE OF CALIBRATION	2015-06-24		ELECTRONICS DEPARTMENT		2015-06-24
SERIAL	STANDARD TEMP. °C	MASTER TEMP. °C	ACTUAL TEMP. °C	PROCESSING DEPT. NAME	REMARKS
1	400.00	400.20	250.00	3-1100	
2	410.00	407.82	250.00	3-1100	
3					
4					
5					

STABILITY & UNIFORMITY

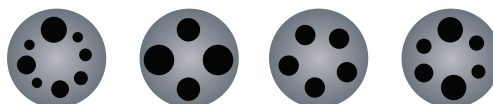


ACCESSORIES

Inserts for CALSYS 650 Autocal & CALSYS 650 models

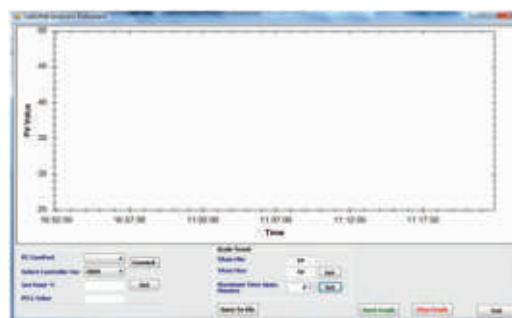
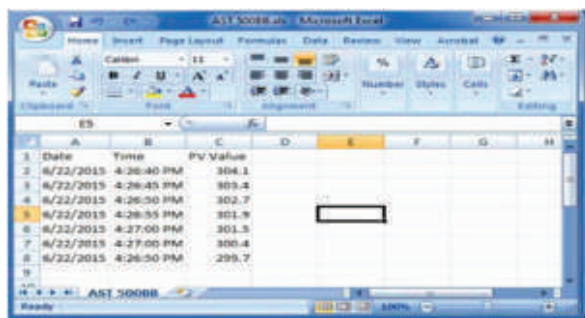
Inserts for CALSYS 650 Autocal & CALSYS 650 are made of Brass. All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements.

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.

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 $\pm 0.3^{\circ}\text{C}$ 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

CALsys 1200 Autocal



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



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 215mm 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

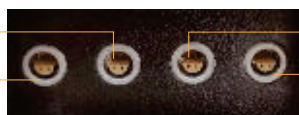
CALsys -1200 Autocal & CALsys 1200

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 tuned 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	13°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 generation 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.

Connection for First TEST Sensor
Connection for MASTER Sensor



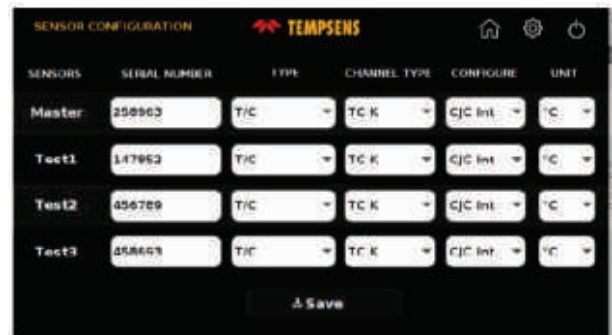
Connection for Second TEST Sensor
Connection for Third TEST Sensor

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 window also shows the ongoing process.

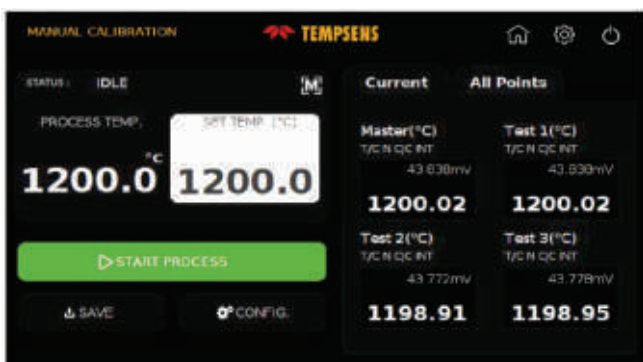


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD (PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

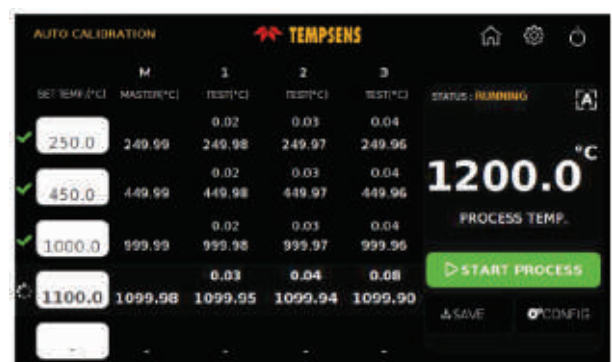


CALSYS 1200 Autocal have two operating modes i.e. Manual and Auto mode

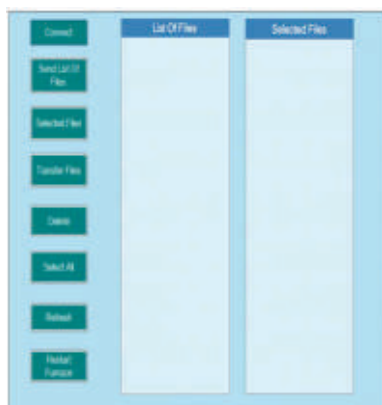
Manual Mode: In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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



AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- Tempsens can offer customized data saving option both for manual and Automode.
- After completion manual / Automode a u t o m a t i c calibration report can be generated at PC side based on predefined format.

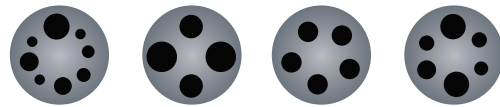
CALIBRATION REPORT (TEMP MEASURING INST.)					
Customer		Inst. No.		Temp	
Instrument Name		Inst. Brand			
Model		Model No			
Range Calibrated	400.00 - 1200.00 °C	Lab Condition (Temp)	25 ± 1 °C		
Date of Calibration	2022-04-04	Recommended Recalibration Interval	2500 Hours		
SL. NO	STANDARD TEMP (°C)	MASTER TEMP (°C)	ACTUAL TEMP (°C)	DIFFERENCE (°C)	REMARK
01	800.00	493.23	493.23	0.00	
02	1000.00	427.65	427.65	0.00	
03					
04					
05					
06					

ACCESSORIES

Inserts for CALsys 1200 Autocal & CALsys 1200 models

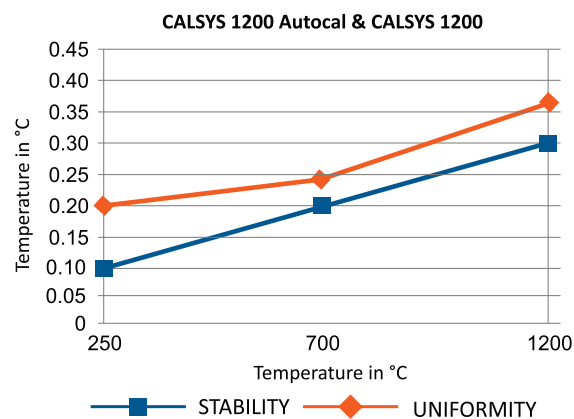
Inserts for Calsys 1200 Autocal & CALsys 1200 are made of special material. All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements.

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

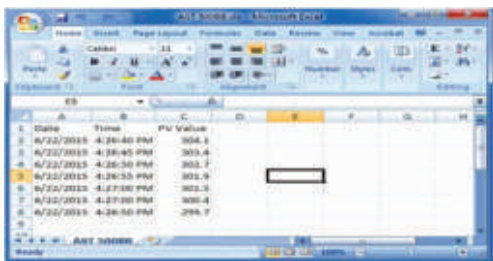


Customized Equalizing Block....Part No. EQ1

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.

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 $\pm 0.35^{\circ}\text{C}$ 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.

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 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.

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.

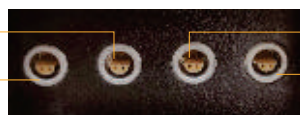
SPECIFICATIONS

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 tuned 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 generation 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)

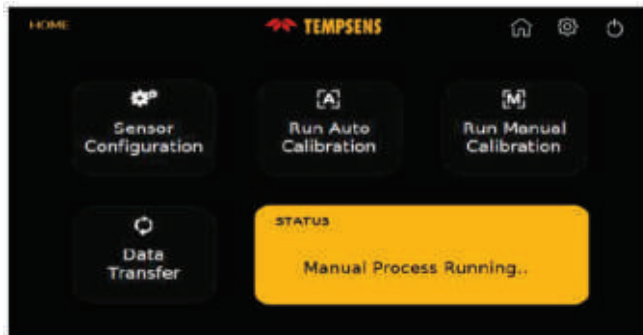
Connection for First TEST Sensor
Connection for MASTER Sensor



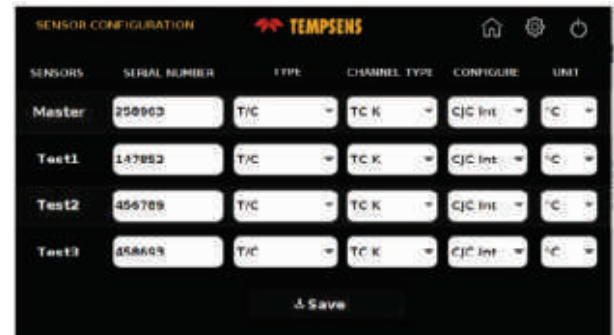
Connection for Second TEST Sensor
Connection for Third TEST Sensor

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.

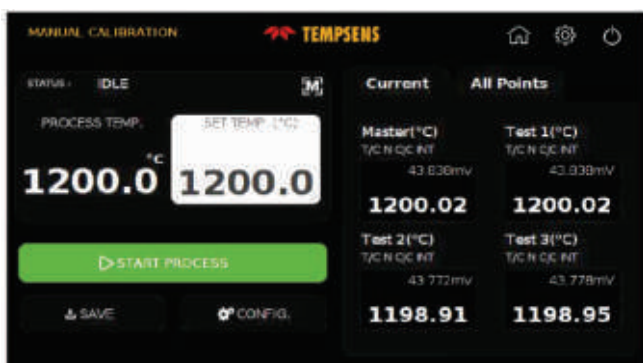


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD(PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

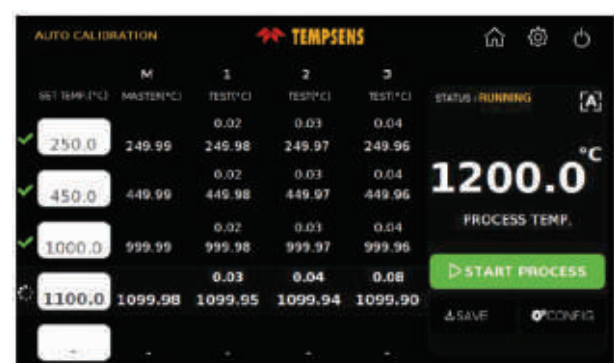


CALSYS 1200L Autocal have two operating modes i.e. Manual and Auto mode

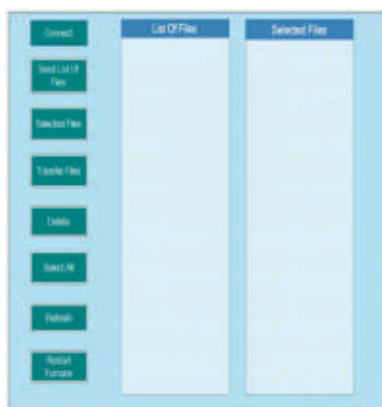
Manual Mode: In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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

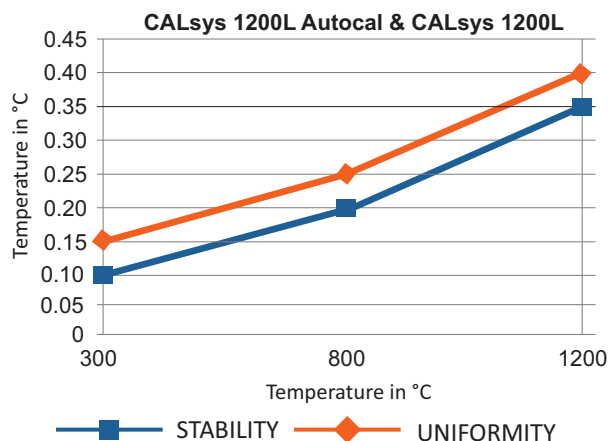


AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- 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 predefined format.

CUSTOMER			WARRANT No.	10029	
INST. NO.		TEST. NO.			
NAME		PHONE NO.			
RANGE CALIBRATED	400.00	°C	LAB CONDITION (TEMP. ± 25.0 ± 0.5 °C)		
DATE OF CALIBRATION	2015-08-01		TECHNICIAN'S CALIBRATION DATE	2015-08-01	
SERIAL	STANDARD TEMP. °C	MASTER TEMP. °C	ACTUAL TEMP. °C	PROCESSING POINT NUMBER	REMARK
1	400.00	400.20	200.04	1/100	
2	410.00	407.82	200.80	2/100	
3					
4					
5					

STABILITY / UNIFORMITY



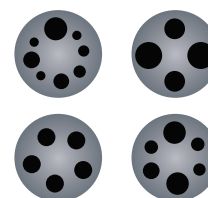
Insert construction

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

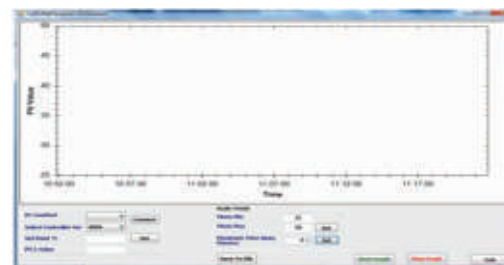
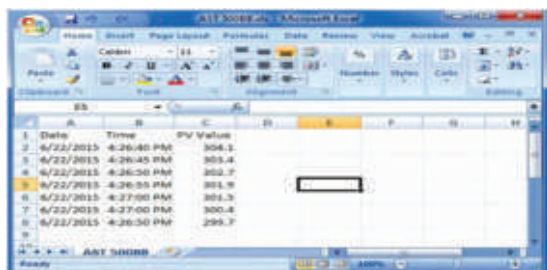
Inserts Model Description

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



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 $\pm 1.0^{\circ}\text{C}$ 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.

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 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.

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.

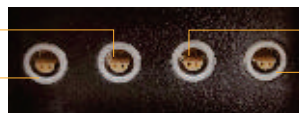
SPECIFICATIONS

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 tuned 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 generation 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)

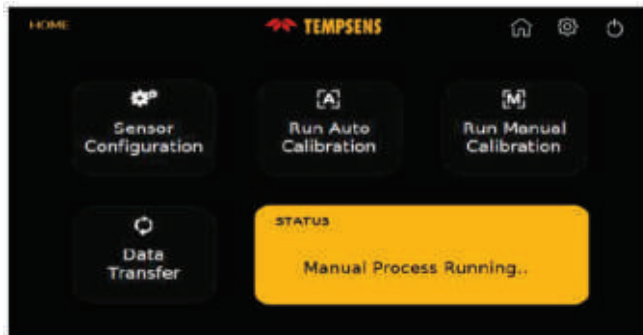
Connection for First TEST Sensor
Connection for MASTER Sensor



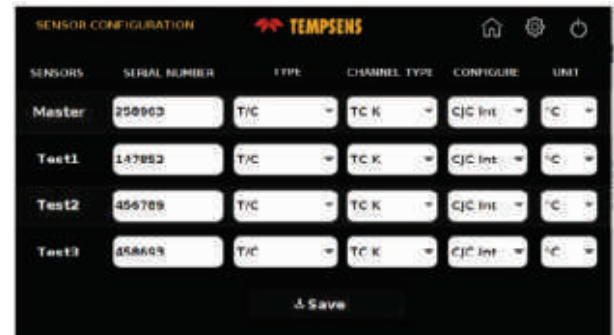
Connection for Second TEST Sensor
Connection for Third TEST Sensor

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.

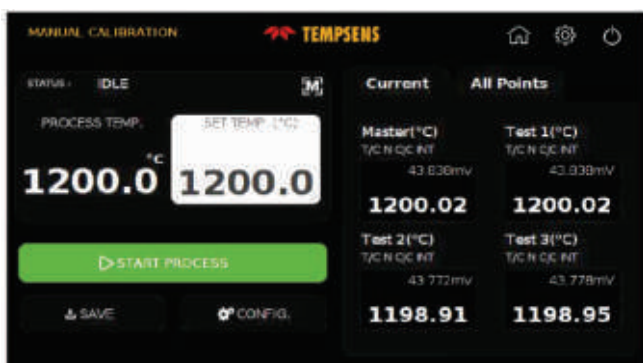


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD(PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

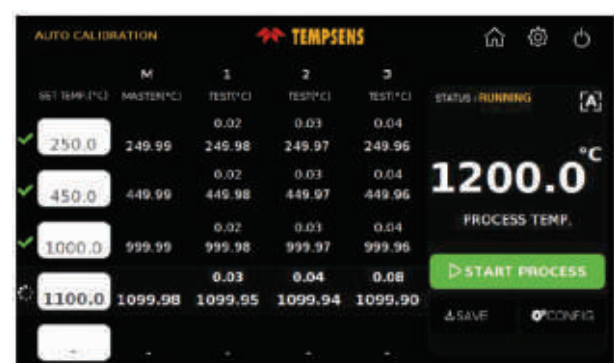


CALSYS 1500L Autocal have two operating modes i.e. Manual and Auto mode

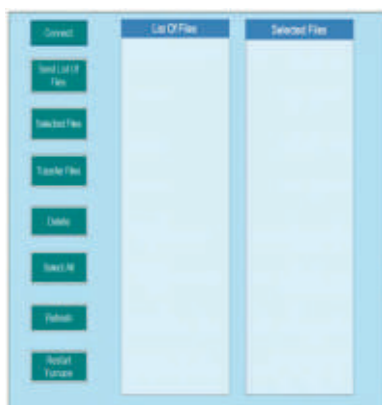
Manual Mode: In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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

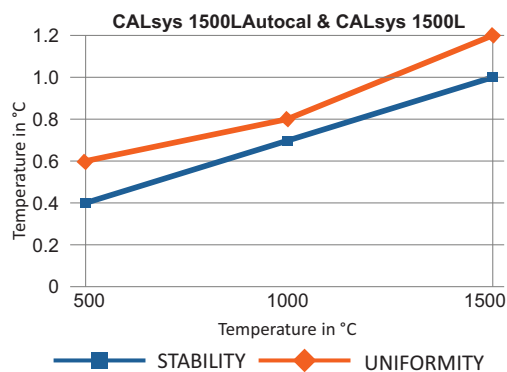


AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- 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 predefined format.

CUSTOMER			SENSENO	10000	
INST. NO. / DATE			TEST. NO. / DATE		
NAME			PRINT. NO.		
RANGE CALIBRATED	400.00 °C		RANGE CONDITION (TEMP. ± 25.0 ± 5 °C)		
DATE OF CALIBRATION	2015-06-24		RECOMMENDED CALIBRATION DATE	2015-06-24	
SER. NO.	STANDARD TEMP. °C	MASTER TEMP. °C	ACTUAL TEMP. °C	PROCESSING POINT NUMBER	REMARK
1	400.00	400.00	200.00	1-100	
2	410.00	407.00	200.00	2-000	
3					
4					
5					

STABILITY & UNIFORMITY



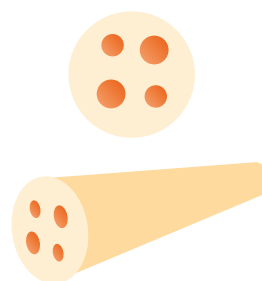
ACCESSORIES

Inserts for CALsys 1500L Autocal & CALsys 1500L model

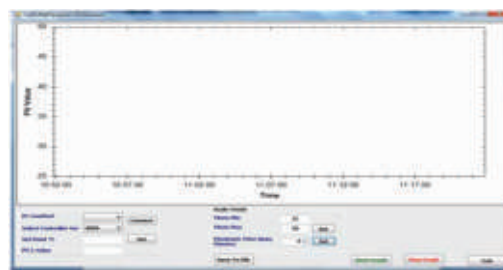
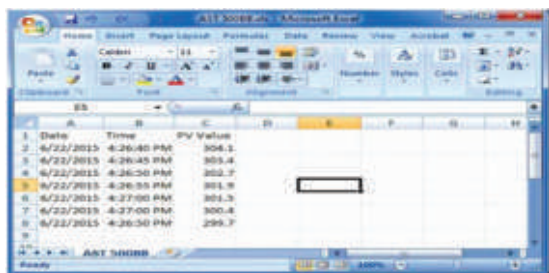
Inserts for CALsys 1500L are made of ceramic block. All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements

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. TCCR - 300 (Optional)



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

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 $\pm 1.5^{\circ}\text{C}$ 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.

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 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.

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.

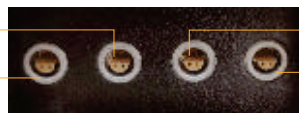
SPECIFICATIONS

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 tuned 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)

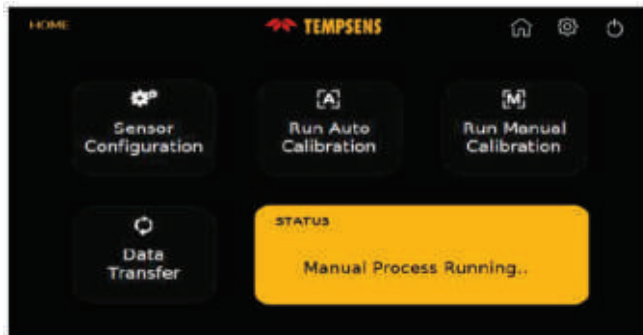
Connection for First TEST Sensor
Connection for MASTER Sensor



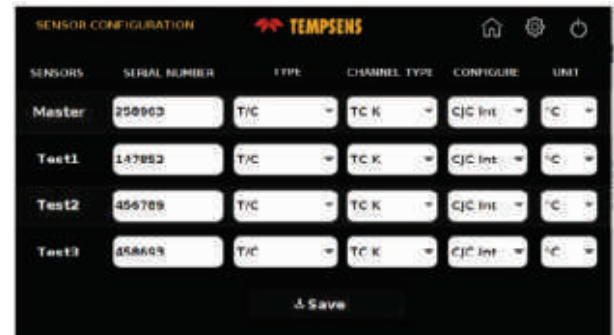
Connection for Second TEST Sensor
Connection for Third TEST Sensor

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.

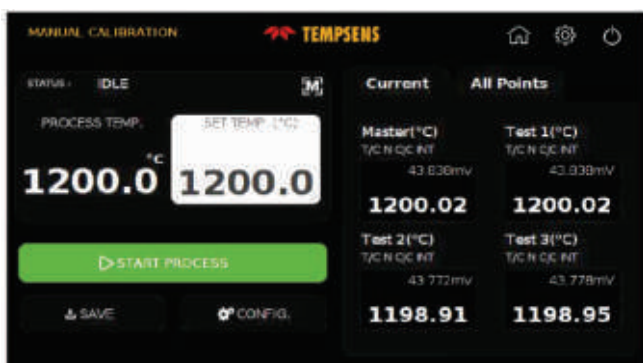


Sensor Configuration: In this screen user select the sensors Thermocouple (J, K, B, N, R, S, T type) / RTD(PT 100, PT 1000, PT50 etc.) for calibration with their serial number and temperature unit (C/F/K).

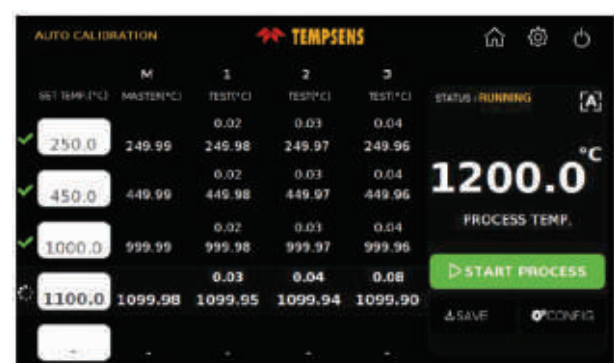


CALSYS 1700L Autocal have two operating modes i.e. Manual and Auto mode

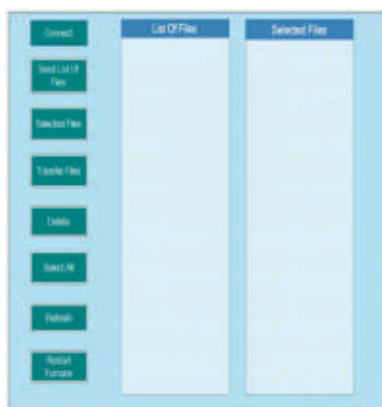
Manual Mode: In this screen user set the temp. Point for calibration and on clicking start process button the process of calibration starts



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

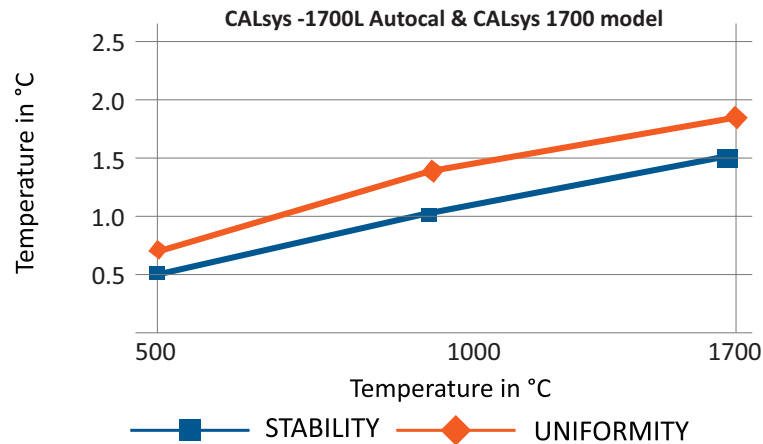


AUTOMATIC CALIBRATION REPORT GENERATION (Optional)

- 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 predefined format.

CUSTOMER			WARRANT No.	100294	
INSTRUMENT CODE :		INST. NO. :			
NAME		REF. NO.			
RANGE CALIBRATED	400.00	°C	LAB CONDITION (TEMP. : 25.0 ± 0.5 °C)		
DATE OF CALIBRATION	2020-08-01	TECHNICIAN'S CALIBRATION DATE :		2015-08-24	
SERIAL	STANDARD TEMP. °C	MASTER TEMP. °C	ACTUAL TEMP. °C	PROCESSING POINT NUMBER	REMARK
1	400.00	400.20	203.84	1/100	
2	410.00	407.82	203.80	2/100	
3					
4					
5					

STABILITY & UNIFORMITY



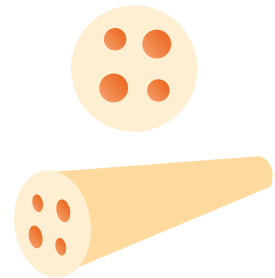
Insert construction

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

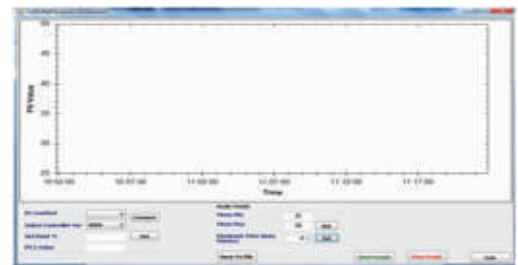
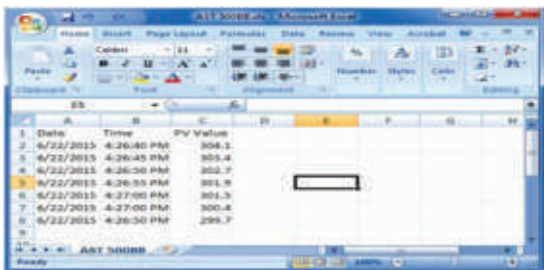
Inserts for CALsys 1700L are made of special material. All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements

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



CALSYS C-4004 PLUS

(With Autocalibration Facility)

Features:

- High stability
- High 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.

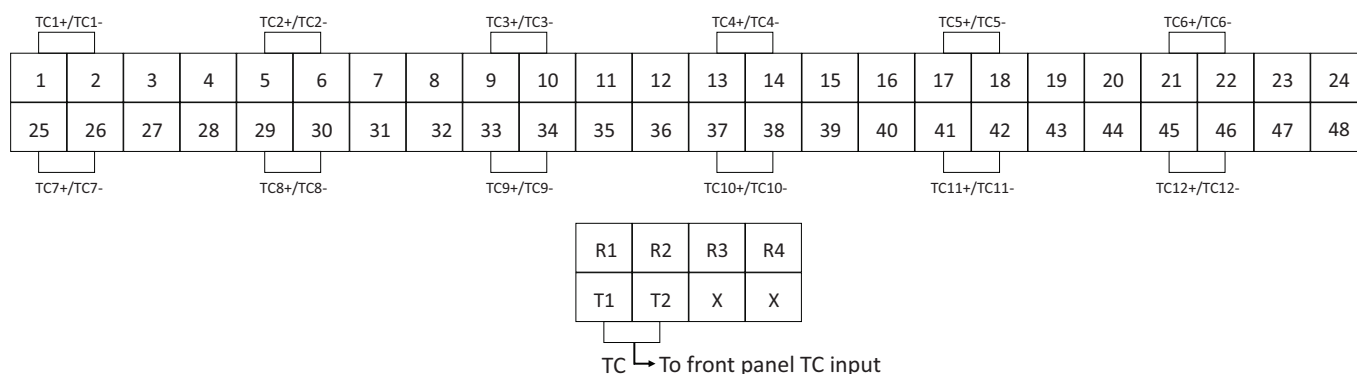
Autocalibration facility of multiple channel using a PC software.



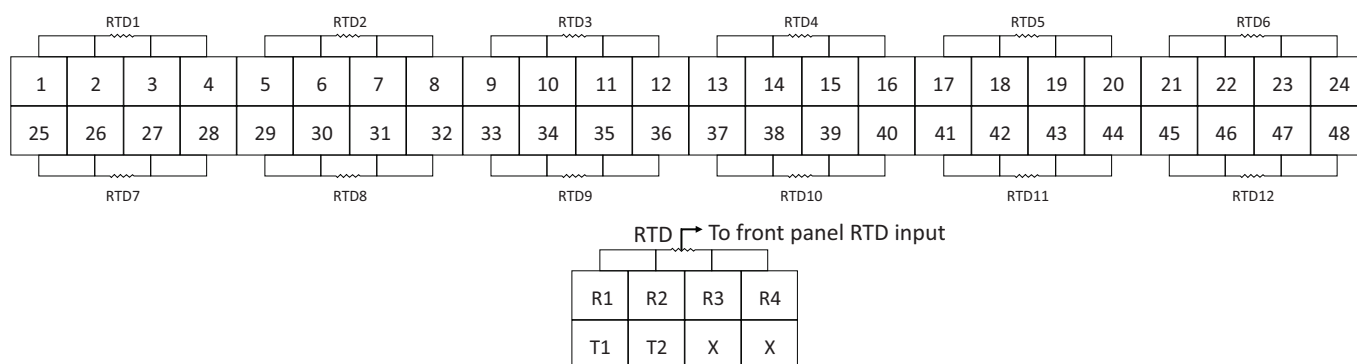
Configuration Mode

It has three modes of configuration.

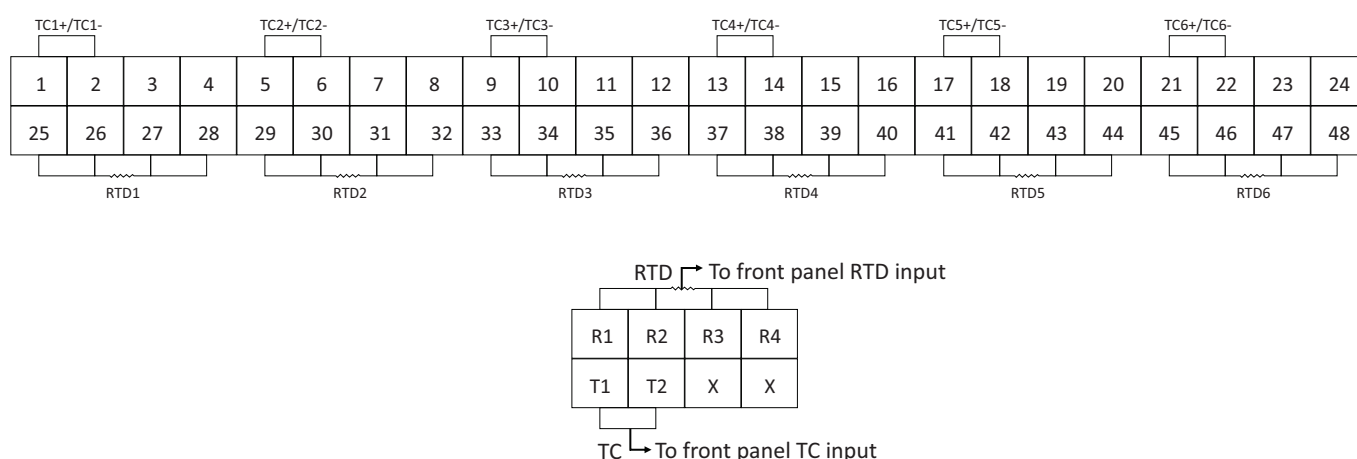
1. Only Thermocouple Mode : User can connect 12 thermocouple input at a time. When using this multiplexer module, user will have to connect TC Probe from rear panel connector pins T1 & T2 to the front panel input channel A or input channel B of the TC input channel.



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.



CAL fast



- High Accuracy
- Wide Temperature Range
- Highly Stable Temperature Calibrator for Industrial Field Uses

Dry Block Calibrators

Wide Temperature Range

CAL FAST offer a wide temperature range from 50 °C to 350 °C

Lightweight & portable

The CAL FAST block is ideal for Industrial/ Laboratory field use. It only weights about 1.5kg, and it is small enough to carry around.

Speed

The CAL FAST extremely quick to reach various temperatures, i.e. it cools down to 100 °C in 15 minutes and heats up from room temperature to 350°C in 10 minutes. This saves time and increases productivity.

Accuracy and performance

The CAL FAST is an easily portable unit that also provides excellent calibration accuracy with stability $\pm 0.05^{\circ}\text{C}$ (15 min)

Accredited calibration

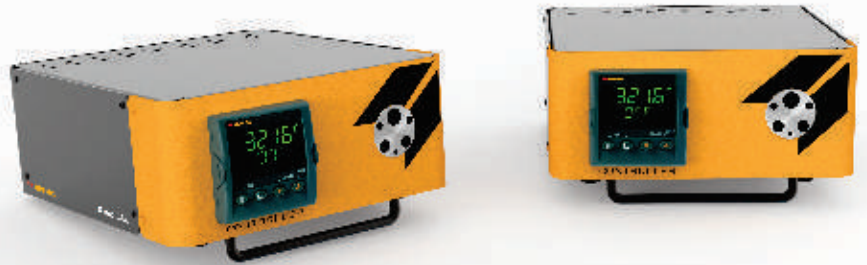
Each CAL FAST is delivered with an accredited calibration certificate.

Computer Interface

The communication port (RS-232) enables communication with selected CAL FAST calibrators for automation calibration and documentation thus it made documentation easy.

CAL FAST 350

Portable, Dry Block Temperature Calibrator for Industrial/ Laboratory Field Use



CAL FAST offers medium temperature range from 50 to 350°C. It is a highly stable standard furnace for calibrating thermocouples/ RTD/Pyrometer. The comparison volume is a metallic block of aluminum, which has diameter of 27mm and 120mm long. The temperature of the calibrator is set and controlled by a self tuned PID controller with automatic super fine adjustment

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.

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

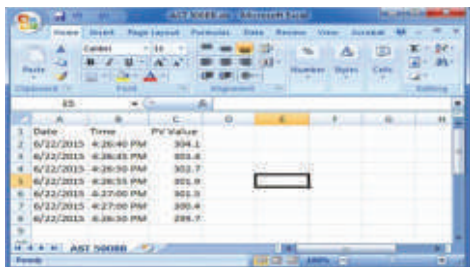
Temperature range	50 to 350°C
Temperature Resolution	0.1°C
Stability (15 min)	±0.05°C
Radial Uniformity	±0.2°C
Time to Reach Max. Temperature	10 Mins
Time to Reach Mini Temp	15 Mins (Max to 100°C)
Controlling Sensor	RTD (Pt 100)
Method of Control	Digital self tuned PID Controller
Insert Construction	Dia 27 x 120 mm long with 3 holes of 6.5 x100 mm insertion depth
BB Cavity Aperture	25 mm
BB Cavity Emissivity	0.97 (±0.02)
Computer Interface	RS - 232 (Optional)
Operating Temperature	20 to 45°C
Power Requirement	230 VAC, 500 W
Dimensions	80(H) x 120(W) x170(D) mm
Instrument Weight	1.5 Kg (without packing)

ACCESSORIES

STANDARD ACCESSORIES

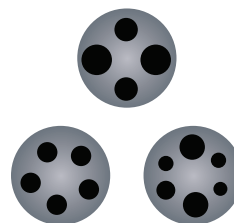
SOFTWARE (Optional)

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



OPTIONAL ACCESSORIES

- Customized Equalizing Block....Part No. EQ1



Customized Equalizing Block....Part No. EQ1

MASTER SENSOR

- Reference Standard Thermocouple
Part No. TTCK-300



- NABL accredited calibration certificate (Optional)
- Operational Manual

CARRY CASE (Optional)



- Tempens makes customized carry case is a rugged, safe perfectly designed to carry our new CAL FAST calibrator and different accessories.

Dry Block Calibrators

Wide Temperature Range

CAL FAST offer a wide temperature range from -10°C to 120 °C @23°C Amb.

Lightweight & portable

The CAL FAST block is ideal for Industrial/ Laboratory field use. It only weights about 2kg, and it is small enough to carry around.

Speed

The CAL FAST extremely quick to reach various temperatures, i.e. it cools down to -5 °C in 15 minutes and heats up from room temperature to 120°C in 10 minutes. This saves time and increases productivity.

Accuracy and performance

The CAL FAST is an easily portable unit that also provides excellent calibration accuracy with stability $\pm 0.05^{\circ}\text{C}$ (15 min)

Accredited calibration

Each CAL FAST is delivered with an accredited calibration certificate.

Computer Interface

The communication port (RS-232) enables communication with selected CAL FAST calibrators for automation calibration and documentation thus it made documentation easy.

CAL FAST 120

Portable, Dry Block Temperature Calibrator for Industrial/ Laboratory Field Use



CAL FAST offers medium temperature range from -5°C to 120°C. It is a highly stable standard furnace for calibrating thermocouples / RTD. The comparison volume is a metallic block of aluminum, which has diameter of 6.5mm and 8.5mm and 100mm long. The temperature of the calibrator is set and controlled by a self tuned PID controller with automatic super fine adjustment

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.

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

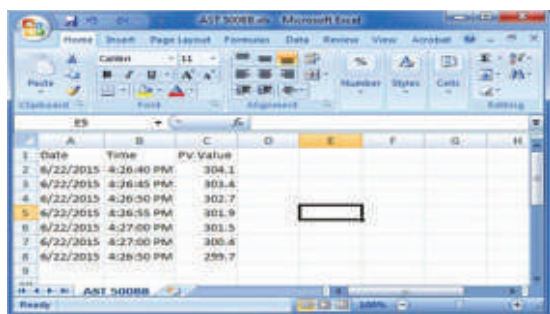
Temperature range	-10°C to 120°C@23°C Amb
Temperature Resolution	0.1°C
Stability (15 min)	±0.05°C
Radial Uniformity	±0.2°C
Time to Reach Max. Temperature	10 Mins
Time to Reach Mini Temp	15 Mins
Controlling Sensor	RTD (Pt 100)
Method of Control	Digital self tuned PID Controller
Insert Construction	Fixed insert with 2 holes of 6.5 x100 mm and one hole 8.5x100mm
Computer Interface	RS - 232 (Optional)
Power Requirement	230 VAC, 500 W
Dimensions	110(H) x 120(W) x170(D) mm
Instrument Weight	2 Kg (without packing)
Power Supply	24 VDC (Standard)
	230 VAC (Optional), 50Hz

ACCESSORIES

STANDARD ACCESSORIES

SOFTWARE (Optional)

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



Date	Time	PV Value
6/22/2015	4:26:40 PM	304.1
6/22/2015	4:26:45 PM	303.8
6/22/2015	4:26:50 PM	303.7
6/22/2015	4:26:55 PM	303.9
6/22/2015	4:27:00 PM	303.5
6/22/2015	4:27:00 PM	303.6
6/22/2015	4:28:50 PM	299.7

MASTER SENSOR

- Reference Standard RTD
Part No. TTCK-300

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

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



Dual Black Body Temperature Calibrator



- High Stability
- High Uniformity
- Highly Stable Temperature Calibrator for Industrial Field Uses

Dual Dry Block Calibrator

Wide Temperature Range

Calsys -25/650 offer a wide temperature range from -25 °C to 650 °C

Lightweight, portable

The Calsys -25/650 block is ideal for Industrial/ Laboratory field use. It only weights about 20 kg, and it is small enough to carry around

Speed

The Calsys -25/650 extremely quick to reach various temperatures, i.e. it Heats down to -25 °C in 30 minutes and heats up room temp to +650 °C in 30 minutes. This saves time and increases productivity

Accuracy and performance

The Calsys -25/650 is an easily portable unit that also provides excellent calibration accuracy with stability ± 0.02 °C for lower temperature and ± 0.03 °C for higher temperature.

Accredited calibration

Each Calsys -25/650 is delivered with an accredited calibration certificate.

Computer Interface

The communication port(RS-232/USB) enables communication with selected Calsys -25/650 calibrators for automation calibration and documentation thus it made documentation easy.

Calsys -25/650

Portable, Lightweight, highly accurate Dual Dry Block Calibrator for Industrial/ Laboratory field use



Calsys -25/650 offers easy to use portable dual block temperature calibrator with temperature range from -25 to 650°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 37mm and 160mm long. Dual dry block temperature furnace based on thermoelectric cooling circuitry for low temperature and heater for high temperature. This model provides special design with dual dry block isothermal enclosure which can calibrator and covers the temperature range lower to higher -25 °C to 650 °C. Temperature of the calibrator is set and controlled by a self tuned PID controller with automatic super fine adjustment. Our newly designed Calsys -25/650 model offers better esthetic design and performance wise upgraded to next level.

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.

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

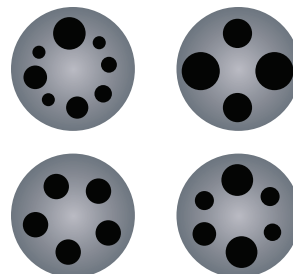
Parameter	Low Temperature Block	High Temperature Block
Temperature range at 25°C	-25 °C to 140 °C	Ambient to 650 °C
Stability	±0.02°C	±0.03°C Upto 100°C ±0.05°C above 100°C
Immersion depth	160 mm	
Insert OD dimensions	6 holes having Diameter of 4.5 to 9.5 mm	
Method of Control	Self tuned PID controller	
Heating time	30 Min	30 Min
Cooling time	15 Min	90 Min
Resolution	0.01°C	
Display	LCD, °C or °F user-selectable	
Size (H x W x D)	383(H) x 461(W) x 316(D) mm	
Weight	20Kg	
Power requirements	230 VAC, 500 W(50 Hz)	
Computer interface	RS - 232	
Calibration	Accredited calibration certificate provided	
Environmental operating conditions	5 °C to 25 °C, 0 % to 90 % RH (non-condensing)	
Specifications valid in environmental conditions	5°C ... 25°C	

ACCESSORIES

Inserts for Calsys -25/650 models

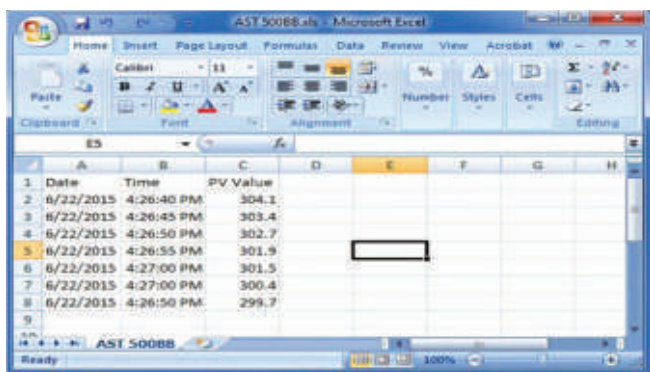
Inserts for Calsys -25/650 are made of aluminum for low temperature and brass for high temperature. All specifications on hole size based on outer diameter of the sensor under test. We also offer customized hole size based on Customer requirements.

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 RTD Part no. TPRT- A- 300.



- NABL accredited calibration certificate - 3 point
- Operational Manual

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

