TC SERIES

PORTABLE & ACCURATE TEMPERATURE CALIBRATION MADE EASY

FREE SOFTWARE!

Like most temperature calibrators you'll find in this catalog, the TC Series generates true thermal references, not electronically-simulated ones. The TC Series' lightweight, compact design makes them ideal for calibrating your temperature sensors on-site. All Tek Know calibrators come with interchangeable inserts that can be drilled with single or multiple immersion chambers to meet the specifications of your sensors.

Programmable in either Celsius or Fahrenheit, the two-button operation allows for easy programming. And with the TC Series, obtaining true reference temperatures has never been easier. Simply place the sensor to be tested inside the well and set the temperature. The dual line display will show both the true and set temperature; once stabilization occurs, read the temperature and recalibrate the process or sensor. Tek Know calibrators may be used for calibration of thermocouples, thermistors and RTD sensors, or complete temperature loops.



KEY FEATURES

- **True Calibration**
  Provides true temperature references, not simulated ones
- **Compact Design**
  Makes it highly portable and ideal for field use
- **Communications Port**
  RS-232 interface is standard, with FREE Windows™-based software for semi-automatic calibration
- **Thermal Switch Test**
- **Easy-To-Use 2-Button Operation**
- **All Kits Include:**
  Probe inserts, thermal switch leads, calibration certificate, instruction manual, industrial strength carrying case and SC200 Software

TC125 & TC150 These calibrators can generate both an ice point reference and a boiling point reference in one portable unit, making it the optimal choice for food, dairy and biotechnology requirements.

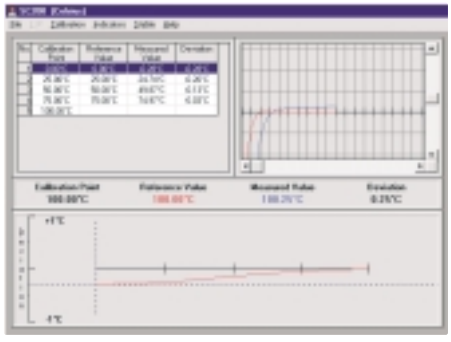
TC400 & TC650 For higher temperature applications, in particular calibration of J and K thermocouples up to 650°C (1192°F).

TC600M This calibrator can maintain high accuracy and stability under the most severe conditions, and is therefore the popular choice for offshore rigs and leading ship owners. As the TC600M was designed for the demanding needs of the marine industry, it is also ideal for field use in power utilities, petro chemical processing and the automotive industry.

SC200 Temperature Calibration Software

The SC200 software package is a calibration tool which allows for fully-automatic or semi-automatic calibration, as well as a calibration management database. This software is useful in creating and maintaining the extensive documentation required by ISO and QS 9000. It contains databases for storing calibration programs, last calibration date, and company information; as well as true values and deviations, both in percentages and absolute values.

The software can also be used to completely automate your calibration process. Used in conjunction with our SM300 Signal Master, you can eliminate the need to watch over your calibration while it runs. Just set it up and come back later to print out the certificate.



- **Communications**
  Communicates with SM300 and TC calibrators using RS232 serial ports. Drivers available for other instruments, including Beamex and Honeywell
- **Storage**
  Stores calibrations and calibration setups
- **Display**
  Shows on screen settling response at each calibration point. Up to 20 points
- **Three modes**
  Can be used in manual, semi- or fully-automatic mode

SPECIFICATIONS

	TC125	TC150	TC400	TC600M	TC650
TEMPERATURE RANGE	-40°C* to 125°C (257°F)	-40°C* to 150°C (302°F)	50°C (122°F) to 400°C (752°F)	50°C (122°F) to 600°C (1112°F)	50°C (122°F) to 650°C (1202°F)
ACCURACY	±0.3°C	±0.3°C	±0.3°C	1°C	±0.5°C
STABILITY	±0.03°C	±0.03°C	±0.03°C	0.1°C	±0.05°C
RESOLUTION	0.01°	0.01°	0.01°	0.01°	0.01°
COOLING TIME AMBIENT TO MINIMUM	<20 min.	<20 min.			
HEATING TIME AMBIENT TO MAXIMUM	<10 min.	<15 min.	<18 min.	<18 min.	<20 min.
THERMAL SWITCH TEST	Yes	Yes	Yes	Yes	Yes
WELL DIMENSIONS	3/4" x 4.4"	3/4" x 4.4"	1" x 6"	1" x 6"	1" x 6"
OUTPUT	RS232	RS232	RS232	RS232	RS232
WEIGHT	15 lbs.	15 lbs.	16 lbs.	16 lbs.	16 lbs.
CALIBRATOR DIMENSIONS	8" x 5" x 11.5"	8" x 5" x 11.5"	8" x 5" x 11.5"	8" x 5" x 11.5"	8" x 5" x 11.5"
POWER	110V or 240 VAC	110V or 240 VAC	110V or 240 VAC	110V or 240 VAC	110V or 240 VAC
INSERT FOR O.D. PROBE	1/8" & 3/16"	1/8" & 3/16"	1/4" & 3/16"	3/16"	1/4" & 3/16"

** below ambient*

TC SERIES

Included in standard delivery: RS-232 interface, test cable for thermostats, 2-piece insertion tube, 1/8" & 3/16 ", (1-1/8" insert only for TC600M) calibration certificate, carrying case, 1 pc tool for changing insertion tubes, instruction manual, mains cable

TC125	Temperature Calibrator TC125, -40°C below ambient to 125°C (257°F)
TC150	Temperature Calibrator TC150, -40°C below ambient to 150°C (302°F)
TC400	Temperature Calibrator TC400, Ambient to 400°C (752°F)
TC600M	Temperature Calibrator TC600M, Ambient to 600°C (1112°F)
TC650	Temperature Calibrator TC650M, Ambient to 650 C°(1202°F)
TC-INS-H-B	Insert for TC400/TC600M/TC650, undrilled
TC-INS-H-18	Insert for TC400/TC600M/TC650, 1/8"
TC-INS-H-316	Insert for TC400/TC600M/TC650, 3/16"
TC-INS-H-14	Insert for TC400/TC600M/TC650, 1/4"
TC-INS-H-38	Insert for TC400/TC600M/TC650, 3/8"
TC-INS-H-12	Insert for TC400/TC600M/TC650, 1/2"
TC-INS-H-1814	Insert for TC400/TC600M/TC650, 1/8" + 1/4"
TC-INS-H-1414	Insert for TC400/TC600M/TC650, 1/4" + 1/4"
TC-INS-L-B	Insert for TC125/TC150, undrilled
TC-INS-L-18	Insert for TC125/TC150, 1/8"
TC-INS-L-316	Insert for TC125/TC150, 3/16"
TC-INS-L-14	Insert for TC125/TC150, 1/4"
TC-INS-L-38	Insert for TC125/TC150, 3/8"
TC-INS-L-12	Insert for TC125/TC150, 1/2"
TC-INS-L-1814	Insert for TC125/TC150, 1/8" + 1/4"
TC-INS-L-1414	Insert for TC125/TC150, 1/4" + 1/4"
TC-OIL	Oil kit for TC125/TC150 cooling calibrators
CAL-TC125	NIST calibration, TC125
CAL-TC150	NIST calibration, TC150
CAL-TC400	NIST calibration, TC400
CAL-TC600M	NIST calibration, TC600M
CAL-TC650	NIST calibration, TC650