## Temperature Calibrator

### Overview

**Advantages**

- **High Accuracy and Stability**
- **Trade Calibration**
- **Easy to Carry**

**Functions**

- **Intuitive Operation**
- **Innovative Patented Technology**
- **Dynamic Load Compensation**
- **Plug & Play Reference Sensors**
- **Application Specific Inserts**
- **High Profile Design**

**Specifications**

<table>
<thead>
<tr>
<th>Temperature Range</th>
<th>Accuracy (°C)</th>
<th>Resolution (°C)</th>
<th>Type</th>
<th>Insert Diameter (mm)</th>
<th>Stability (°C)</th>
<th>Specified Load Compensation</th>
<th>S/N Ratio (dB)</th>
<th>Auto Step</th>
<th>Mains Variance Immunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>-10°C - 250°C</td>
<td>0.20/0.25</td>
<td>0.020/0.010</td>
<td>Dry</td>
<td>2.58</td>
<td>0.10</td>
<td>Fixed</td>
<td>63.5</td>
<td>Y</td>
<td>Y, Z</td>
</tr>
<tr>
<td>25°C - 250°C</td>
<td>0.28</td>
<td>0.050</td>
<td>Dry/Wet</td>
<td>36.5</td>
<td>0.10</td>
<td>Fixed</td>
<td>0.30</td>
<td>29.8</td>
<td>Y, Z</td>
</tr>
<tr>
<td>25°C - 350°C</td>
<td>0.45</td>
<td>0.100</td>
<td>Dry</td>
<td>25.7</td>
<td>0.10</td>
<td>Fixed</td>
<td>100</td>
<td>63.5</td>
<td>Y, Z</td>
</tr>
<tr>
<td>33°C - 350°C</td>
<td>0.50</td>
<td>0.050</td>
<td>Dry</td>
<td>25.7</td>
<td>0.10</td>
<td>Fixed</td>
<td>0.30</td>
<td>29.8</td>
<td>Y, Z</td>
</tr>
<tr>
<td>35°C - 10°C</td>
<td>0.20</td>
<td>0.050</td>
<td>Dry</td>
<td>25.7</td>
<td>0.10</td>
<td>Fixed</td>
<td>0.50</td>
<td>29.8</td>
<td>Y, Z</td>
</tr>
<tr>
<td>33°C - 425°C</td>
<td>0.50</td>
<td>0.500</td>
<td>Dry</td>
<td>25.7</td>
<td>0.10</td>
<td>Fixed</td>
<td>0.50</td>
<td>29.8</td>
<td>Y, Z</td>
</tr>
<tr>
<td>35°C - 425°C</td>
<td>0.50</td>
<td>0.500</td>
<td>Dry</td>
<td>25.7</td>
<td>0.10</td>
<td>Fixed</td>
<td>0.50</td>
<td>29.8</td>
<td>Y, Z</td>
</tr>
<tr>
<td>45°C - 120°C</td>
<td>0.50</td>
<td>0.500</td>
<td>Dry</td>
<td>25.7</td>
<td>0.10</td>
<td>Fixed</td>
<td>0.50</td>
<td>29.8</td>
<td>Y, Z</td>
</tr>
</tbody>
</table>

**Temperature Calibrator Models**

- **CTC-350**
- **RTC-350**
- **PTC-400**
- **RTC-400**
- **RTC-450**
- **RTC-500**
- **RTC-550**
- **RTC-600**
- **RTC-650**
- **RTC-700**
- **RTC-750**
- **RTC-800**

**Dynamic Load Compensation**

DLC function makes the homogeneity independent of the different loads of the insert. The DLC sensor improves the homogeneity even more by controlling the homogeneity not only in the well, but also inside the insert, where the sensors-under-test are placed during calibration.

**Free Calibration Software**

JOFRACAL is our highly versatile calibration software that is supplied with the calibrator. The software ensures easy calibration of various temperature sensors, such as RTD’s, thermocouples, transmitters and thermo switches. It integrates with all our calibration instruments.

**Clamp Sensor Calibration**

Most of the temperature sensors used for measurement within the food industry have to be approved for sanitary applications. Therefore, the temperature sensors have been designed in such a way that only a minimal number of germs or contaminants can conceal themselves on the sensors. Unfortunately, a side effect of these designs is that the sensors cannot be calibrated in a standard calibrator. The RTC-156 overcomes that problem by using a specially designed clamp insert together with our short and flexible STS-102 reference sensor.

**MIW - Mains Variance Immunity**

The cycling of supply power can cause the temperature regulator to perform inconsistently, leading to both inaccurate readings and unstable temperatures. Our MIW system eliminates errors from unstable mains power.

**Patented Technology**

- **X** The cooling/heating technology used in our ultra coolers makes it possible to cover a very broad temperature range from -100 to 135°C.
- **Y** The DLC technology increases the temperature homogeneity and documents it in the display.
- **Z** The cooling speed of our heater calibrators for the RTC and PTC Series, is improved by using a special insulation.
Advantages

- High Accuracy and Stability
- Fast Calibration
- Easy to Carry

Intuitive Operation
Two Year Operation
Free Calibration Software

Innovative Patented Technology
Dynamic Load Compensation
Plug & Play Reference Sensors

High Profile Design
Application Specific Inserts

Temperature Calibrator Overview

Temperature Range

-48°F - 311°F
-40°F - 311°F
-13°F - 311°F
14°F - 311°F

Specifications

-48°F 311°F
-40°F 311°F
-13°F 311°F
14°F 311°F

Functions

-48°F 311°F
-40°F 311°F
-13°F 311°F
14°F 311°F

Model

RTC-159
RTC-171
RTC-172
RTC-156
RTC-155
RTC-158
RTC-159
RTC-155
RTC-125

Dynamic Load Compensation

DLC function makes the homogeneity independent of the different loads of the insert.

The DLC sensor improves the homogeneity even more by controlling the homogeneity not only in the well, but also inside the insert, where the sensors-under-test are placed during calibration.

Free calibration software

JOFRACAL is our highly versatile calibration software that is supplied with the calibrator. The software ensures easy calibration of various temperature sensors, such as RTD’s, thermocouples, transmitters and thermo switches. It integrates with all our calibration instruments.

Clamp Sensor Calibration

Most of the temperature sensors used for measurement within the food industry have to be approved for sanitary applications. Therefore, the temperature sensors have been designed in such a way that only a minimal number of germs or contaminants can conceal themselves on the sensors.

Unfortunately, a side effect of these designs is that the sensors cannot be calibrated in a standard calibrator. The RTC-156 overcomes that problem by using a special designed clamp insert together with our short and flexible STS-102 reference sensor.

MVI - Mains Variance Immunity

The cycling of supply power can cause the temperature regulator to perform inconsistently, leading to both inaccurate readings and unstable temperatures. Our MVI system eliminates errors from unstable mains power.

Patented Technology

X) The cooling/heating technology used in our ultra coolers makes it possible to cover a very broad temperature range from -100 to 155°C.

Y) The DLC technology increases the temperature homogeneity and documents it in the display.

Z) The cooling speed of our heater calibrators for the RTC and PTC Series, is improved by using a special insulation.