

## ► Advantages

- High Accuracy and Stability
- Fast Calibration
- Easy to Carry
- Intuitive Operation
- Two Year Warranty
- [Free Calibration Software](#)
- Innovative Patented Technology
- [Dynamic Load Compensation](#)
- [Accredited Certificates](#) (Optional)
- Plug & Play Reference Sensors
- [Application Specific Inserts](#)
- High Profile Design

|                   |       |
|-------------------|-------|
| -100°C            | 155°C |
| -90°C             | 125°C |
| -45°C             | 180°C |
| -45°C             | 155°C |
| -30°C             | 155°C |
| -25°C             | 155°C |
| -22°C             | 155°C |
| -30°C             | 165°C |
| -25°C             | 155°C |
| -10°C             | 125°C |
| Temperature Range |       |

| Internal Accuracy (°C) | External Accuracy (°C) | Stability (°C) | Resolution (°C) | Type    | Insert Diameter (mm) | Immersion Depth (mm) | External Ref. Sensor | Sensor Under Test Input* | Dynamic Load Compensation | Sanitary Sensor Calibration | Set Follows True | Autostep | Switch Test | Mains Variance Immunity | Patented Technology | Model |
|------------------------|------------------------|----------------|-----------------|---------|----------------------|----------------------|----------------------|--------------------------|---------------------------|-----------------------------|------------------|----------|-------------|-------------------------|---------------------|-------|
| 0.30                   | 0.06                   | 0.030          | 0.001           | Dry     | 29.7                 | 190                  | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | X,Y                     | RTC-159             |       |
| 0.30                   | 0.07                   | 0.030          | 0.01            | Dry     | 29.7                 | 190                  | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | X                       | PTC-125             |       |
| 0.10                   | 0.04                   | 0.005          | 0.001           | Dry     | 29.7                 | 160                  | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | Y                       | RTC-187             |       |
| 0.10                   | 0.04                   | 0.005          | 0.001           | Dry     | 29.7                 | 160                  | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | Y                       | RTC-157             |       |
| 0.10                   | 0.04                   | 0.005          | 0.001           | Dry     | 29.7                 | 160                  | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | Y                       | RTC-156             |       |
| 0.18                   | 0.06                   | 0.010          | 0.01            | Dry     | 25.8                 | 160                  | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | Y                       | PTC-155             |       |
| 0.18                   | 0.04                   | 0.010          | 0.001           | Dry/Wet | 63.5                 | 180                  | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | Y                       | RTC-158             |       |
| 0.14                   | 0.045                  | 0.010          | 0.001           | Dry/Wet | 63.5                 | 180                  | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | Y                       | RTC-168             |       |
| 0.30                   | 0.20                   | 0.040          | 0.1             | Dry     | 25.8                 | 120                  | ✓                    |                          |                           | ✓                           | ✓                | ✓        | ✓           |                         | CTC-155             |       |
| 0.50                   | —                      | 0.050          | 0.1             | Dry     | 12.5                 | 110                  |                      |                          |                           | ✓                           | ✓                | ✓        | ✓           |                         | CTC-125             |       |
| Specifications         |                        |                |                 |         |                      |                      |                      |                          |                           |                             |                  |          |             |                         |                     |       |
| Functions              |                        |                |                 |         |                      |                      |                      |                          |                           |                             |                  |          |             |                         |                     |       |
| Model                  |                        |                |                 |         |                      |                      |                      |                          |                           |                             |                  |          |             |                         |                     |       |

|                   |                |
|-------------------|----------------|
| 28°C              | 250°C          |
| 28°C              | 350°C          |
| 33°C              | 350°C          |
| 33°C              | 425°C          |
| 28°C              | 400°C          |
| 28°C              | INFRARED 400°C |
| 28°C              | 660°C          |
| 28°C              | 650°C          |
| 33°C              | 660°C          |
| 33°C              | 700°C          |
| 100°C             | 1205°C         |
| Temperature Range |                |

| Internal Accuracy (°C) | External Accuracy (°C) | Stability (°C) | Resolution (°C) | Type    | Insert Diameter (mm) | Immersion Depth (mm) | External Ref. Sensor | Sensor Under Test Input* | Dynamic Load Compensation | Sanitary Sensor Calibration | Set Follows True | Autostep | Switch Test | Mains Variance Immunity | Patented Technology | Model |
|------------------------|------------------------|----------------|-----------------|---------|----------------------|----------------------|----------------------|--------------------------|---------------------------|-----------------------------|------------------|----------|-------------|-------------------------|---------------------|-------|
| 0.28                   | 0.07                   | 0.020          | 0.001           | Dry/Wet | 63.5                 | 180                  | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | Y                       | RTC-250             |       |
| 0.45                   | 0.25                   | 0.050          | 0.01            | Dry     | 25.7                 | 110                  | ✓                    |                          |                           | ✓                           | ✓                | ✓        | ✓           |                         | CTC-350A            |       |
| 0.20                   | 0.08                   | 0.020          | 0.01            | Dry     | 25.8                 | 140                  | ✓                    | ✓                        |                           | ✓                           | ✓                | ✓        | ✓           | Z                       | PTC-350             |       |
| 0.20/0.25              | 0.13                   | 0.020          | 0.01            | Dry     | 25.8                 | 150                  | ✓                    | ✓                        |                           | ✓                           | ✓                | ✓        | ✓           | Z                       | PTC-425             |       |
| 0.50                   | —                      | 0.150          | 0.1             | Dry     | Fixed                | 105                  |                      |                          |                           | ✓                           | ✓                |          |             |                         | ETC-400             |       |
| 0.50                   | —                      | 0.300          | 0.1             | Dry     | 36.0                 | —                    |                      |                          |                           | ✓                           | ✓                |          |             |                         | ETC-400R            |       |
| 0.85                   | 0.45                   | 0.080          | 0.01            | Dry     | 25.7                 | 110                  | ✓                    |                          |                           | ✓                           | ✓                | ✓        | ✓           |                         | CTC-660A            |       |
| 0.65                   | 0.45                   | 0.050          | 0.01            | Dry     | 25.7                 | 190                  | ✓                    |                          |                           | ✓                           | ✓                | ✓        | ✓           |                         | CTC-652             |       |
| 0.30                   | 0.15                   | 0.040          | 0.01            | Dry     | 24.8                 | 150                  | ✓                    | ✓                        |                           | ✓                           | ✓                | ✓        | ✓           | Z                       | PTC-660             |       |
| 0.29                   | 0.11                   | 0.020          | 0.001           | Dry     | 29.8                 | 200                  | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | Y,Z                     | RTC-700             |       |
| 2.00                   | 2.00                   | 0.100          | 0.01            | Dry     | 27.0                 | 137                  | ✓                    |                          |                           | ✓                           | ✓                | ✓        | ✓           |                         | CTC-1205            |       |
| Specifications         |                        |                |                 |         |                      |                      |                      |                          |                           |                             |                  |          |             |                         |                     |       |
| Functions              |                        |                |                 |         |                      |                      |                      |                          |                           |                             |                  |          |             |                         |                     |       |
| Model                  |                        |                |                 |         |                      |                      |                      |                          |                           |                             |                  |          |             |                         |                     |       |



### Dynamic Load Compensation

DLC function makes the homogeneity inde-

pendent 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.



### Sanitary Sensor Calibration – RTC-168 and RTC-156

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 and especially the RTC-168 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.

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|                   |       |
|-------------------|-------|
| -148°F            | 311°F |
| -130°F            | 257°F |
| -49°F             | 356°F |
| -49°F             | 311°F |
| -22°F             | 311°F |
| -13°F             | 311°F |
| -8°F              | 311°F |
| -22°F             | 329°F |
| -13°F             | 311°F |
| 14°F              | 257°F |
| Temperature Range |       |

| Internal Accuracy (°F) | External Accuracy (°F) | Stability (°F) | Resolution (°F) | Type    | Insert Diameter (in) | Immersion Depth (in) | External Ref. Sensor | Sensor Under Test Input* | Dynamic Load Compensation | Sanitary Sensor Calibration | Set Follows True | Autostep | Switch Test | Mains Variance Immunity | Patented Technology     | Model |
|------------------------|------------------------|----------------|-----------------|---------|----------------------|----------------------|----------------------|--------------------------|---------------------------|-----------------------------|------------------|----------|-------------|-------------------------|-------------------------|-------|
| 0.54                   | 0.11                   | 0.054          | 0.001           | Dry     | 1.17                 | 7.48                 | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | X,Y                     | <a href="#">RTC-159</a> |       |
| 0.54                   | 0.13                   | 0.054          | 0.01            | Dry     | 1.17                 | 7.48                 | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | X                       | <a href="#">PTC-125</a> |       |
| 0.18                   | 0.07                   | 0.009          | 0.001           | Dry     | 1.17                 | 6.30                 | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | Y                       | <a href="#">RTC-187</a> |       |
| 0.18                   | 0.07                   | 0.009          | 0.001           | Dry     | 1.17                 | 6.30                 | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | Y                       | <a href="#">RTC-157</a> |       |
| 0.18                   | 0.07                   | 0.009          | 0.001           | Dry     | 1.17                 | 6.30                 | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | Y                       | <a href="#">RTC-156</a> |       |
| 0.32                   | 0.11                   | 0.018          | 0.01            | Dry     | 1.02                 | 6.30                 | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | ✓                       | <a href="#">PTC-155</a> |       |
| 0.32                   | 0.07                   | 0.018          | 0.001           | Dry/Wet | 2.50                 | 7.09                 | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | Y                       | <a href="#">RTC-158</a> |       |
| 0.25                   | 0.081                  | 0.018          | 0.001           | Dry/Wet | 2.50                 | 7.09                 | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | Y                       | <a href="#">RTC-168</a> |       |
| 0.54                   | 0.36                   | 0.070          | 0.01            | Dry     | 1.02                 | 4.53                 | ✓                    |                          |                           | ✓                           | ✓                | ✓        | ✓           |                         | <a href="#">CTC-155</a> |       |
| 0.90                   | —                      | 0.090          | 0.1             | Dry     | 0.50                 | 4.33                 |                      |                          |                           |                             | ✓                | ✓        | ✓           |                         | <a href="#">CTC-125</a> |       |
| Specifications         |                        |                |                 |         |                      |                      |                      |                          |                           |                             |                  |          |             |                         |                         |       |
| Functions              |                        |                |                 |         |                      |                      |                      |                          |                           |                             |                  |          |             |                         |                         |       |
| Model                  |                        |                |                 |         |                      |                      |                      |                          |                           |                             |                  |          |             |                         |                         |       |

|                   |                |
|-------------------|----------------|
| 82°F              | 482°F          |
| 82°F              | 662°F          |
| 91°F              | 662°F          |
| 91°F              | 797°F          |
| 82°F              | 752°F          |
| 82°F              | INFRARED 752°F |
| 82°F              | 1220°F         |
| 82°F              | 1202°F         |
| 91°F              | 1220°F         |
| 91°F              | 1292°F         |
| 212°F             | 2201°F         |
| Temperature Range |                |

| Internal Accuracy (°F) | External Accuracy (°F) | Stability (°F) | Resolution (°F) | Type    | Insert Diameter (in) | Immersion Depth (in) | External Ref. Sensor | Sensor Under Test Input* | Dynamic Load Compensation | Sanitary Sensor Calibration | Set Follows True | Autostep | Switch Test | Mains Variance Immunity | Patented Technology      | Model |
|------------------------|------------------------|----------------|-----------------|---------|----------------------|----------------------|----------------------|--------------------------|---------------------------|-----------------------------|------------------|----------|-------------|-------------------------|--------------------------|-------|
| 0.50                   | 0.13                   | 0.036          | 0.001           | Dry/Wet | 2.50                 | 7.09                 | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | Y                       | <a href="#">RTC-250</a>  |       |
| 0.81                   | 0.45                   | 0.090          | 0.01            | Dry     | 1.01                 | 4.33                 | ✓                    |                          |                           | ✓                           | ✓                | ✓        | ✓           |                         | <a href="#">CTC-350A</a> |       |
| 0.36                   | 0.15                   | 0.036          | 0.01            | Dry     | 1.02                 | 5.51                 | ✓                    | ✓                        |                           | ✓                           | ✓                | ✓        | ✓           | Z                       | <a href="#">PTC-350</a>  |       |
| 0.36/<br>0.45          | 0.23                   | 0.036          | 0.01            | Dry     | 1.02                 | 5.91                 | ✓                    | ✓                        |                           | ✓                           | ✓                | ✓        | ✓           | Z                       | <a href="#">PTC-425</a>  |       |
| 0.90                   | —                      | 0.270          | 0.1             | Dry     | Fixed                | 4.13                 |                      |                          |                           | ✓                           | ✓                |          |             |                         | <a href="#">ETC-400</a>  |       |
| 0.90                   | —                      | 0.540          | 0.1             | Dry     | 1.42                 | —                    |                      |                          |                           | ✓                           | ✓                |          |             |                         | <a href="#">ETC-400R</a> |       |
| 1.53                   | 0.81                   | 0.140          | 0.01            | Dry     | 1.01                 | 4.33                 | ✓                    |                          |                           | ✓                           | ✓                | ✓        | ✓           |                         | <a href="#">CTC-660A</a> |       |
| 1.17                   | 0.81                   | 0.090          | 0.01            | Dry     | 1.01                 | 7.48                 | ✓                    |                          |                           | ✓                           | ✓                | ✓        | ✓           |                         | <a href="#">CTC-652</a>  |       |
| 0.54                   | 0.27                   | 0.072          | 0.01            | Dry     | 0.98                 | 5.91                 | ✓                    | ✓                        |                           | ✓                           | ✓                | ✓        | ✓           | Z                       | <a href="#">PTC-660</a>  |       |
| 0.52                   | 0.20                   | 0.036          | 0.001           | Dry     | 1.17                 | 7.87                 | ✓                    | ✓                        | ✓                         | ✓                           | ✓                | ✓        | ✓           | Y,Z                     | <a href="#">RTC-700</a>  |       |
| 3.60                   | 3.60                   | 0.180          | 0.01            | Dry     | 1.06                 | 5.39                 | ✓                    |                          |                           | ✓                           | ✓                | ✓        | ✓           |                         | <a href="#">CTC-1205</a> |       |
| Specifications         |                        |                |                 |         |                      |                      |                      |                          |                           |                             |                  |          |             |                         |                          |       |
| Functions              |                        |                |                 |         |                      |                      |                      |                          |                           |                             |                  |          |             |                         |                          |       |
| Model                  |                        |                |                 |         |                      |                      |                      |                          |                           |                             |                  |          |             |                         |                          |       |



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