



#### ► 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	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	✓	✓	✓	✓	✓	✓	✓	Y	CTC-155	
0.50	—	0.050	0.1	Dry	12.5	110	✓	✓	✓	✓	✓	✓	✓	Y	ETC-125	

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	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	✓	✓	✓	✓	✓	✓	✓	Z	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	✓	✓	✓	✓	✓	✓	✓	Z	ETC-400
0.50	—	0.300	0.1	Dry	36.0	—	✓	✓	✓	✓	✓	✓	✓	Z	ETC-400R
0.85	0.45	0.080	0.01	Dry	25.7	110	✓	✓	✓	✓	✓	✓	✓	Z	CTC-660A
0.65	0.45	0.050	0.01	Dry	25.7	190	✓	✓	✓	✓	✓	✓	✓	Z	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	✓	✓	✓	✓	✓	✓	✓	Y,Z	CTC-120S

\* RTD, TC, mA active, mA passive and switch    † At 33 to 350°C / At 350 to 425°C

#### 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.

#### 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

Model	RTC-159	PTC-125	RTC-187	RTC-157	RTC-156	PTC-155	RTC-158	RTC-168	CTC-155	ETC-125
Internal Accuracy (°F)	0.54	0.11	0.054	0.001	Dry	1.17	7.48			
External Accuracy (°F)	0.54	0.13	0.054	0.01	Dry	1.17	7.48			
Stability (°F)	0.18	0.07	0.009	0.001	Dry	1.17	6.30			
Resolution (°F)	0.18	0.07	0.009	0.001	Dry	1.17	6.30			
Type	Insert	Diameter (in)	Immersion Depth (in)	External Ref. Sensor	Sensor Under Test Input*	Dynamic Load Compensation	Sanitary Sensor	Set Follows True	Autostep	Switch Test
Insert Diameter (in)										X,Y
Immersion Depth (in)										X
External Ref. Sensor	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Sensor Under Test Input*	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Dynamic Load Compensation										Y
Sanitary Sensor										
Set Follows True										
Autostep										
Switch Test										
Mains Variance Immunity										
Patented Technology										

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

Model	RTC-250	CTC-350A	PTC-350	PTC-425	ETC-400	ETC-400R	CTC-660A	CTC-652	PTC-660	RTC-700	CTC-1205
Internal Accuracy (°F)	0.50	0.13	0.036	0.001	Dry/Wet	2.50	7.09				
External Accuracy (°F)	0.81	0.45	0.090	0.01	Dry	1.01	4.33				
Stability (°F)	0.36	0.15	0.036	0.01	Dry	1.02	5.51				
Resolution (°F)	0.36 / 0.45	0.23	0.036	0.01	Dry	1.02	5.91				
Type	Insert	Diameter (in)	Immersion Depth (in)	External Ref. Sensor	Sensor Under Test Input*	Dynamic Load Compensation	Sanitary Sensor	Set Follows True	Autostep	Switch Test	Mains Variance Immunity
Insert Diameter (in)											Y
Immersion Depth (in)											
External Ref. Sensor	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Sensor Under Test Input*	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Dynamic Load Compensation											Z
Sanitary Sensor											
Set Follows True											Z
Autostep											
Switch Test											
Mains Variance Immunity											
Patented Technology											

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