# **Installation & Instruction Manual**

# RTS-800 Dough Temperature Monitoring System



W. H. Cooke & Co., Inc. 6868 York Rd Hanover, Pennsylvania 17331

Phone: 1-800-772-5151 website: www.whcooke.com

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Thank you for purchasing the Cooke model RTS-800 dough temperature monitoring system. The system utilizes a heavy duty type T thermocouple and a digital display that has been specially selected for this application and its ease of use.

#### **Installation:**

- **Mount** the control cabinet within 12 ft. of dough trough or mixer.
- **Plug** the 120 Volt line cord into a receptacle or remove it and hard wire the system to your 120 Volt power supply.
- **Insert** probe into dough and observe reading. You should see the probe fully respond within 30 seconds.
- Note: Should you believe that the display reading is not accurate, it is possible to recalibrate the system per the instructions below.

#### **Calibrating the System**

To modify the display reading, follow the instructions below.

• The keys used in calibrating the system:

SEL / V
Select Increment Decrement

- Locate the SEL key (the key on the far left of the control display).
- Press and hold this button continuously for approximately 7 seconds until **PUOF** appears on the display.
- Press the SEL key again once.
- Press up or down key until you reach the offset value you desire.
- Now continuously press and hold the SEL key until you see the red LED beside SV (set point) light up, then release.
- Press SEL again to read the corrected temperature.

#### **RT-811 Digital Temperature Display Specifications**

#### • Input Impedance for thermocouple

1 Megaohm or more

#### • Sensor Break Protection

Protection mode configurable (up or downscale)

#### • External Resistance

100 ohms max.

#### • Common Mode Rejection

140dB

#### • Sample Rate

10 times/second / adjustable

#### • Input power

85-264VAC.50/60 Hz

#### • Power consumption

Less than 5VA

#### • Protection

NEMA 4X / IEC IP66 (front panel)

### • Ambient operating temperature & humidity

 $-10 \text{ to } 50^{\circ}\text{C} / -14 \text{ to } 122 \,^{\circ}\text{F}$ 

0 to 90% RH (non-condensing)

#### • Fuse for display

Lamp fuse, Cooke part # P106

#### • Insulation

20M ohms min. (500 VDC)

#### • Weight

100 grams

## **Troubleshooting Guide**

<u>Symptoms</u>	<b>Probable Causes</b>	<u>Solutions</u>
LED display does not light	Instrument is not receiving power	<ul> <li>Check power supply for 120</li> <li>VAC @ terminals 13 &amp; 14</li> <li>Check fuse #13 in control box</li> </ul>
LED display reads "UUUU"	Input signal is not present, bad connection, or open sensor	<ul> <li>Check &amp; tighten all connections between sensor and terminal strip</li> <li>If problem persists, replace sensor</li> </ul>

• Note: It is normal for the "C" light to flash continuously while powered up

## Spare Parts:

- Cat# RT-888 replacement heavy duty dough temperature sensor .250" OD x 6" long with handle, 90 degree bend, 32" coiled cord (12 ft. when extended) with s.s. wire rope tether and hardware for securing probe to control box.
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- Cat# RT-888-BR bread temperature sensor .125" OD x 4" long with handle, light duty blue coiled cord (10 ft. when extended)
- Cat# RT-811 digital indicator only programmed for dough temp system