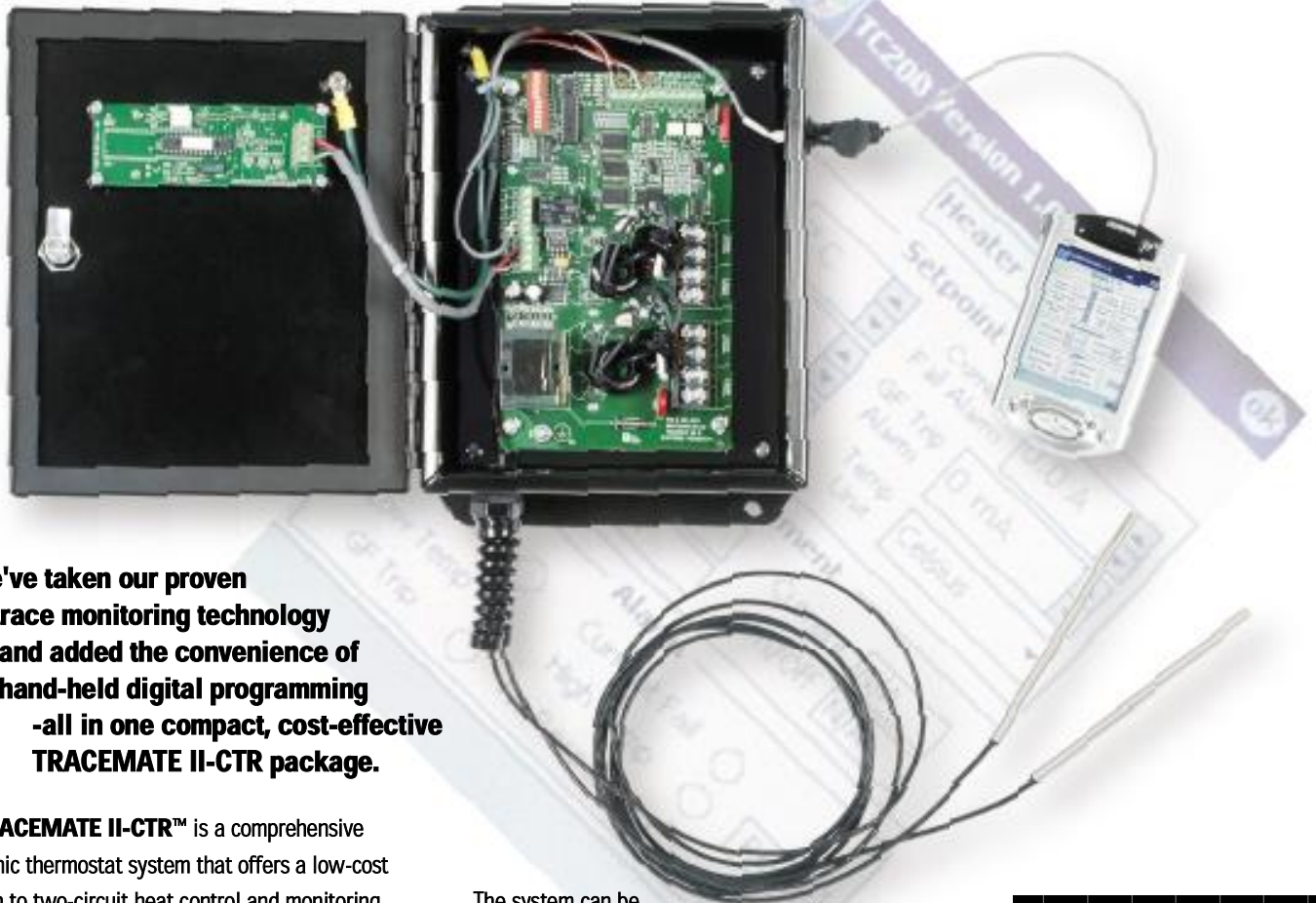


# Introducing the **TRACEMATE II-CTR™**

## The **ULTIMATE** in two-circuit heat trace monitoring and hand-held digital programming control



**We've taken our proven heat trace monitoring technology and added the convenience of hand-held digital programming -all in one compact, cost-effective TRACEMATE II-CTR package.**

The **TRACEMATE II-CTR™** is a comprehensive electronic thermostat system that offers a low-cost solution to two-circuit heat control and monitoring, while also monitoring your heat process for current and ground leakage. The system is designed for indoor or outdoor use in non-hazardous or Class 1, Division 11, Groups A, B, C, D or Zone 11 hazardous areas.

Based on the outstanding reliability of Nextron's proven technology, the TRACEMATE II-CTR™ offers advanced monitoring features including an LCD display along with convenient programming capabilities. The system uses a Personal Digital Assistant (PDA) for programming the unit through a RS-232 connection. Specialized software is downloaded into the PDA for field communication to the thermostat unit, or for laptop programming.

The system can be easily customized to meet your specific system requirements. It is self-contained, easy to configure and easy to install. When combined with hand-held digital programming control, the TRACEMATE II-CTR™ combines convenience with the ultimate in performance.



A QUALITY COMPANY



ISO 9001 REGISTERED

### **TRACEMATE II-CTR™ FEATURES**

- **2-circuit monitoring and control**
- **2 RTD sensing**
- **Liquid Crystal Display (LCD)**
- **PDA and Laptop programming**

# TRACEMATE II-CTR™

## FEATURES AND BENEFITS

### Temperature Control

0°C to 511°C / 0°F to 511°F setpoint  
Non-ambiguous,  
digital temperature setpoint  
100-ohm platinum RTD sensor  
3-wire, lead resistance compensation

### System Fault Alarms

Breaker off or tripped  
Heater continuity or low current  
Ground fault trip  
Low temperature  
High temperature  
Sensor fault

### Early Warning

TraceCheck exercises dormant systems every 24 hours for early warning for shutdown prevention  
Status indicators show cause of alarms  
Separate fail-safe local and remote alarms

### Remote Monitoring

DC or AC alarm output for PLC or remote alarm indication  
Form C dry contact alarm output  
LCD display on the front door

### Hazardous / Non-hazardous Area Usage

CSA and FM approved for non-hazardous or Class I, Division II, Groups A, B, C, D / Zone II hazardous area  
Operating range  
-40°C to +50°C / -40°F to +122°F  
30 Amps @ 120/277 VAC rating  
Weatherproof, Nema-4X enclosure  
Easy retrofit replacement for mechanical thermostat

### Low Installed Cost

Competitively priced  
Self contained, no control panel to build  
Ground fault trip eliminates expensive ground fault circuit breaker  
Standard model simplifies spare parts stocking

## TEMPERATURE RANGE

Range -50°C to 500°C, -58°F to 932°F  
Hysteresis ±2°C, ±3.2°F  
Absolute Accuracy 2.5°C, 4.5°F  
Repeatability ±1°C, ±1.8°F  
RTD 100-ohm platinum, 3-wire  
20 ohms maximum lead resistance

## HEATER SWITCHING

Configuration Single-pole, one SCR per heater  
Ratings 120/277 VAC @ 30 Amps  
250 Amp 1/2 cycle inrush  
Line Frequency 50 or 60 HZ

## CONTROL POWER

Power Control power from heater voltage  
Requirements 120/277 VAC, 10VA  
Protection Control power from heater voltage protected by 2A fuse  
MOV transient protection and RC snubber

## USER INTERFACE

Heater Setpoint 12 position dip switch  
Reset/Heater Test Dip switch  
Panel Indicators Power on  
Heater on  
Low temperature alarm  
High temperature alarm  
Current fail alarm  
Ground fault trip alarm  
RTD fail alarm  
LCD Display Heater status and setpoint values  
RS232 Port PDA and Laptop programming

## ENVIRONMENT

Approvals CSA NRTL / C and FM  
Class I, Division II, Groups A, B, C, D  
Class I, Zone II, Groups IIC  
Operating Range 120/277V: -40°C to +50°C / -40°F to +122°F  
(LCD display: -20°C to +50°C / -4°F to +122°F)  
Heater current derated

## USER-DEFINABLE OPTIONS

Heater Setpoint  
Low Temperature Alarm Setpoint:  
High Temperature Alarm Setpoint:  
0°C to 511°C, 1°C steps  
0°F to 511°F, 1°F steps  
Temperature Units 0°C or °F  
Current Fail Alarm Setpoint 0.0 A - 30.0A, 0.1 A steps  
Ground Fault Trip Alarm Setpoint 0mA - 511mA, 1mA steps

## ENCLOSURE

Type Nema-4X steel, powder coated painted (black)  
Size 10"H x 8"W x 4"D  
Features Quick release latches to open door  
One 1.687" conduit knockout for power and  
Two 0.843" conduit knocks for RTD wiring  
One 0.875" conduit knocks for signal wiring  
One 0.610" conduit knocks for RS232 communication

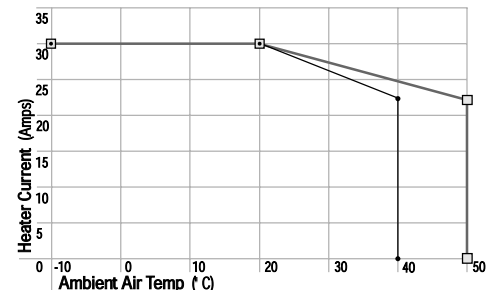
## ALARMS

Low Temperature Actual temperature < low temperature alarm setpoint  
High Temperature Actual temperature > high temperature alarm setpoint  
Current Fail Heater current < current fail alarm setpoint  
Switch Shorted  
Ground Fault Trip Ground fault current > Ground fault trip alarm setpoint  
RTD Fail RTD Open, RTD Short  
Hardware No incoming voltage  
TraceCheck Switch Shorted  
Current Fail Alarm  
Configuration NC Contacts  
Alarm Output AC Contact: 12-240 VAC @ 0.5A maximum  
DC Contact: 30VDC/0.1A, 500mW maximum  
LED Indicator: 6VDC/50mA  
Form C Contact: 12-277 VAC/0.5A, 30VDC/0.1A

## ALARM FUNCTION

Temperature Low Temperature Alarm  
High Temperature Alarm  
Current Current Fail Alarm  
Ground Fault Ground Fault Trip  
Hardware RTD Open, RTD Short, Switch Shorted

## HEATER CURRENT RATING 2 Pole Switching



Manufactured by

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