



## **TRACON MODEL GPT 130** SINGLE-POINT GENERAL PURPOSE HEAT-TRACE CONTROL

### THE GPT 130

Heat-Trace Control is a single-point microprocessor-based heat-trace control thermostat. It is ideal for applications which require Ground-Fault Equipment Protection (GFEP). Ideal uses include freeze protection, hot water temperature maintenance, grease line trace, tank heating, and other temperature monitoring and control applications.

The GPT 130 Heat-Trace Control operates from the heater's power source. A universal power supply allows the GPT 130 to operate from 100 V ac to 277 V ac, and control a resistive load up to 30 A.

### ADJUSTABLE TEMPERATURE SETPOINT AND ALARMS

The temperature setpoint is adjustable from  $-99.9^{\circ}\text{F}$  to  $999^{\circ}\text{F}$  ( $-73.3^{\circ}\text{C}$  to  $537.7^{\circ}\text{C}$ ) to a tenth degree resolution.

### SENSOR INPUTS

The GPT 130 comes with a 100K ohm thermistor temperature sensor with a 20 ft. jacketed cable. The included sensor has an operating range of  $-40^{\circ}\text{F}$  to  $230^{\circ}\text{F}$  ( $-40^{\circ}\text{C}$  to  $110^{\circ}\text{C}$ ). The GPT 130 can also use a 3-wire RTD sensor for systems requiring high-temperature sensing.

### PRECISION MONITORING AND CONTROL

The GPT 130 monitors temperature, load current, and ground leakage current. Alarms include high temperature, low temperature, high load current, low load current, ground fault, sensor fault, internal fault, and power fail. These alarms are easy to adjust and observe from the front panel. The GPT 130 can be set to energize or de-energize the heaters during a sensor fault.

### GROUND-FAULT EQUIPMENT PROTECTION

The GPT 130 Heat-Trace Control includes integral GFEP. This eliminates the extra

expenses associated with having to provide separate GFEP components in the circuit panel. The GPT 130 normally disconnects power immediately when ground fault current exceeds the set value. If it is set to Fire Protect mode, for critical fire protection systems, then it will generate the alarm but power will be maintained to prevent freezing.

### AUTOMATIC GFEP CIRCUIT SELF-TEST

To ensure continued safe operation, the GPT 130 performs a self-test of the GFEP circuit when power is first applied, along with a load ground fault test, and this repeats periodically thereafter at an adjustable interval.

For complete information describing its application, installation, and features, please contact Customer Service or check on the web at [networketi.com](http://networketi.com).

## SPECIFICATIONS

### GENERAL

Certifications UL 60730-1, UL 1053, CSA E60730-1:13

### ENVIRONMENTAL

Area of use Nonhazardous locations  
 Operating temperature range  $-40^{\circ}\text{F}$  to  $131^{\circ}\text{F}$  ( $-40^{\circ}\text{C}$  to  $55^{\circ}\text{C}$ )

### ENCLOSURE

Dimensions 8 1/8" (W) x 5 1/2" (H) x 4 3/8" (D)  
 207 mm (W) x 140 mm (H) x 112 mm (D)  
 Ingress protection NEMA 4X, IP66  
 Cover attachment Polycarbonate cover, plastic screws  
 Cable entries Two liquid-tight cable glands installed for sensor and alarm leads, cable diameter 0.08" to 0.24" (2 mm to 6 mm)  
 One 1.046" hole to accommodate a 3/4" conduit fitting for power wiring connection  
 Material Polycarbonate  
 Weight 2.7 lb. (1.22 kg)  
 Mounting Wall mount with flanges

### WIRING TERMINAL RATINGS

Power Barrier Strip Terminals for Line, Neutral, and Ground; use 10 AWG wires rated for at least  $194^{\circ}\text{F}$  ( $90^{\circ}\text{C}$ )  
 Sensors Terminal Block, rising cage clamp, 12-28 AWG leads  
 Alarm relay Terminal Block, rising cage clamp, 12-28 AWG leads

### PARAMETER SETTINGS

Temperature setpoint heat ON Adjustable  $-99.9^{\circ}\text{F}$  to  $999^{\circ}\text{F}$  ( $-73.3^{\circ}\text{C}$  to  $537.7^{\circ}\text{C}$ ) Default  $38^{\circ}\text{F}$  ( $3.33^{\circ}\text{C}$ )  
 Temperature setpoint heat OFF Adjustable  $-99.9^{\circ}\text{F}$  to  $999^{\circ}\text{F}$  ( $-73.3^{\circ}\text{C}$  to  $537.7^{\circ}\text{C}$ ) Default  $40^{\circ}\text{F}$  ( $4.44^{\circ}\text{C}$ )  
 Low-temperature alarm threshold  $-99.9^{\circ}\text{F}$  to  $999^{\circ}\text{F}$  ( $-73.3^{\circ}\text{C}$  to  $537.7^{\circ}\text{C}$ ) Default  $35^{\circ}\text{F}$  ( $-1.7^{\circ}\text{C}$ ) Disabled  
 Low-temperature alarm delay 0 s to 3000 s Default 300 s  
 High-temperature alarm threshold  $-99.9^{\circ}\text{F}$  to  $999^{\circ}\text{F}$  ( $-73.3^{\circ}\text{C}$  to  $537.7^{\circ}\text{C}$ ) Default  $140^{\circ}\text{F}$  ( $60^{\circ}\text{C}$ ) Disabled  
 High-temperature alarm delay 0 s to 3000 s Default 300 s  
 Low-current alarm threshold 0.0 A to 10.0 A Default 0.1 A Enabled  
 Low-current alarm delay 0 s to 300 s Default 5 s Enabled  
 High-current alarm threshold 0.0 A to 55.0 A Default 30.0 A Disabled  
 High-current alarm delay 0 s to 600 s Default 300 s  
 Ground fault limit current 1.0 mA to 300.0 mA Default 30 mA  
 Self-test interval 1 h to 250 h Default 24 h Enabled  
 Temperature Unit  $^{\circ}\text{F}$  or  $^{\circ}\text{C}$  Default  $^{\circ}\text{F}$

### USER INTERFACES

Pushbuttons UP, DOWN, ENTER, TEST / RESET BACK  
 DIP switches Panel lockout

### REMOTE INTERFACE

Alarm relay Isolated SPDT 1 AMP Class 2 contact

### INDICATORS

Status indicator Power (Green)  
 Heater (Yellow)  
 Low Temperature (Blue)  
 Summary alarm (Red)  
 Display 2.7" OLED graphic 128x64 Low temperature  
 Summary alarm relay reporting Low temperature  
 High temperature  
 Low load current  
 High load current  
 High ground fault current  
 Stuck relay  
 Sensor fault  
 Internal fault

### CONTROL RATINGS

Temperature accuracy  $\pm 2^{\circ}\text{F}$  ( $1^{\circ}\text{C}$ )

### TEMPERATURE SENSORS

Temperature inputs (Included) Thermistor: 100k ohms at  $25^{\circ}\text{C}$ , range  $-40^{\circ}\text{F}$  to  $230^{\circ}\text{F}$  ( $-40^{\circ}\text{C}$  to  $110^{\circ}\text{C}$ ), 20ft Lead (25076)  
 RTD Sensor: Platinum, Alpha = 0.00385, ITS-90, 100 ohms at  $0^{\circ}\text{C}$   
 Input supports 3-wire connection  
 Sensor operates at 1 mA

### GFEP (GROUND-FAULT EQUIPMENT PROTECTION)

Operation Continuously tests ground fault current whenever the load is on; also manually and periodically tests equipment ground fault current with each self-test.  
 Range Adjustable 1 mA to 300 mA, Default 30 mA  
 Automatic self-test Verifies GFEP functionality every 24 hr. and whenever the load is energized

### POWER

Supply voltage 100 - 277 V ac 50/60 Hz  
 Controller power consumption 5 W maximum, 2 W idle  
 Load rating 30 A, 100 - 277 V ac resistive

## ORDERING INFORMATION

PART NUMBER	DESCRIPTION
25170	Tracon MODEL GPT 130 Single-Point General Purpose Heat-Trace Control
25076	Temperature Sensor
25239	TRACON MODEL GPT-130 Data Sheet (this document) available online at: <a href="http://networketi.com/product-manuals">networketi.com/product-manuals</a>

## LIMITED WARRANTY

ETI's two year limited warranty covering defects in workmanship and materials applies. Contact Customer Service for complete warranty information.

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