Smart IRt/cTM



Infrared Temperature Sensor

Alarm Pin Option

Option Description

The Alarm Pin provides the user with an independent line that goes high (~ 5V) whenever the unit is in an error state.* This feature is useful in applications were immediate "shut-off" is required. There are also applications were the controller cannot determining when the signal line is showing an error message and an independent line is required.

Option Specifications

| Alarm Pin Impedance | 10K ohms |
|-------------------------------|-----------------------------|
| Maximum Time for Alarm Pin to | One Response Time, 250 msec |
| Trigger | |
| Pin Color | Normally Yellow |
| Alarm Level | 5V on all models |

Applying a voltage above 5.4V may cause the unit to freeze or malfunction, restarting without the high voltage present should reset the unit. Pulling the pin significantly high can cause permanent damage.

Graphs and Supporting Data

| ERROR MESSAGES | | | | | | | |
|-----------------------------|----------|---------------|------------|------------|-------------|-----------------|--|
| Condition | Priority | LED Display | 0-5V | 0-10V | 4-20mA | RS-232 | |
| Low Power | 1 | OFF | Under 0.1V | Under 0.1V | Under 4mA | Not Implemented | |
| Hardware Internal Errors | 2,13 | Uniform Flash | Over 4.9V | Over 9.8V | Over 19.7mA | Not Implemented | |
| Vsig-Offset High | 3 | Uniform Flash | Over 4.9V | Over 9.8V | Over 19.7mA | Not Implemented | |
| Vsig-Offset Low | 4 | Uniform Flash | Over 4.9V | Over 9.8V | Over 19.7mA | Not Implemented | |
| EMI | 5 | Uniform Flash | Over 4.9V | Over 9.8V | Over 19.7mA | Not Implemented | |
| Range Error | 6 | Uniform Flash | Over 4.9V | Over 9.8V | Over 19.7mA | Not Implemented | |
| High Ambient | 7 | Long Flash** | Over 4.9V | Over 9.8V | Over 19.7mA | Not Implemented | |
| Low Ambient | 8 | Short Flash* | Over 4.9V | Over 9.8V | Over 19.7mA | Not Implemented | |
| Too Much Heat Flow | 9 | Long Flash** | Over 4.9V | Over 9.8V | Over 19.7mA | Not Implemented | |
| Too Little Heat Flow | 10 | Short Flash* | Over 4.9V | Over 9.8V | Over 19.7mA | Not Implemented | |
| High Target | 11 | Long Flash** | Over 4.9V | Over 9.8V | Over 19.7mA | Not Implemented | |
| Low Target | 12 | Short Flash* | Over 4.9V | Over 9.8V | Over 19.7mA | Not Implemented | |

^{*}Six counts off one count on

^{*} If the error is that the user is holding the output pin high, the alarm pin may switch between 0 and 5 volts, since the unit will be trying to correct its output.

^{**}Six counts on one count off