

# Smart IR<sub>t/c</sub><sup>TM</sup>

## Infrared Temperature Sensor

**EXERGEN**  
CORPORATION  
51 Water St. Watertown, MA 02472  
617.923.9900 (f) 617.923.9911  
www.exergen.com

### 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 where immediate "shut-off" is required. There are also applications where the controller cannot determine when the signal line is showing an error message and an independent line is required.

\* 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.

#### Option Specifications

<b>Alarm Pin Impedance</b>	10K ohms
<b>Maximum Time for Alarm Pin to Trigger</b>	One Response Time, 250 msec
<b>Pin Color</b>	Normally Yellow
<b>Alarm Level</b>	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

\*\*Six counts on one count off