

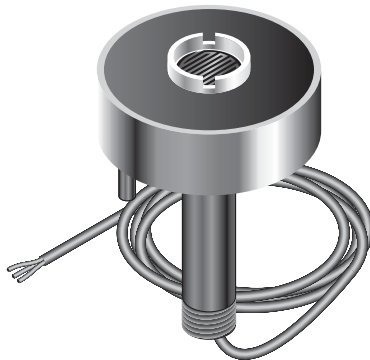
 **CIT-1, GIT-1, SIT-6E**  
SNOW AND ICE MELTING SENSORS

CIT-1 snow sensor, GIT-1 gutter sensor, SIT-6E pavement sensor

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**GIT-1**



**CIT-1**



**SIT-6E**

### PRODUCT OVERVIEW

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The ETI® CIT-1, GIT-1 and SIT-6E snow and ice melting sensors combine to reliably detect moisture and temperature for surface snow melting and roof and gutter de-icing applications. The CIT-1 sensor may be paired with either the GIT-1 sensor for gutter applications or the SIT-6E sensor for pavement applications. These sensors detect precipitation as snow at temperatures below 38°F (3.3°C). Control panels are signaled only if moisture occurs below this temperature, thus saving energy and ensuring reliable ice melting. They provide the industry's most versatile and cost effective automatic snow melting control when used with any APS or EUR series control panel.

Reliability and sensitivity are key features in the CIT-1, GIT-1 and SIT-6E sensors. The solid state design, combined with a rugged housing and epoxy potting, ensure many years of trouble free service. Precision precipitation and temperature sensing provide the sensitivity required for effective automatic control. All three are NEC Class 2 low voltage device which simplifies installation.

The CIT-1, GIT-1 and SIT-6E's unique microcontroller design frees their moisture sensors from ice bridging. Ice bridging happens if incomplete melting occurs near the heater or sensor leaving an air space. The air insulates thus preventing effective heater and sensor operation. Additional features prevent heater operation under conditions favorable to heater ice tunneling.

The CIT-1 aerial snow sensor detects falling or blowing precipitation before snow or ice begin to accumulate. This allows the control panel to begin managing the system. This sensor may be roof or mast mounted.

The GIT-1 mounts directly in gutters and down spouts sensing actual environmental conditions.

The SIT-6E accurately measures pavement temperature while reliably detecting snow and ice conditions on pavement surfaces. A built-in hold-on timer in the SIT-6E keeps heaters operating for an hour after snow stops to help ensure complete snow melting. Mounting these sensors close to the deicing heaters ensures that pavement and sensor become dry at about the same time.

An adjustable mounting system aligns the SIT-6E with the pavement surface. Six conduit locations add to installation flexibility. The sensor subassembly is field replaceable without disturbing the pavement.

## CIT-1, GIT-1, SIT-6E

Sensors are easy to install and may be mounted up to 2000 ft (609 m) from a control panel. A combination of up to six sensors may be used with a control panel to best match site performance requirements.

For complete information describing applications, installation and features, please contact your Pentair Thermal Management representative or visit our web site at [www.pentairthermal.com](http://www.pentairthermal.com).

### GENERAL

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#### Area of use

CIT-1	Gutters or pavement (in conjunction with GIT-1 or SIT-6E)
GIT-1	Gutters
SIT-6E	Pavement

#### Heater hold-on time

CIT-1	None
GIT-1	None
SIT-6E	1 hour

#### Activation temperature

38°F (3.37°C)

### CONNECTIONS

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Circuit type	NEC Class 2
Supply voltage	24 Vac (supplied by panel)
Output signal	Voltage drop
Bus wire type	3-wire jacketed cable
Lead length	Up to 2,000 ft (609 m) using 12 AWG 3-wire jacketed cable Up to 500 ft (152 m) using 18 AWG 3-wire jacketed cable

### ENVIRONMENTAL

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Operating temperature	-40°F to 160°F (-40°C to 71°C)
Storage temperature	-50°F to 180°F (-45°C to 82°C)

### ORDERING DETAILS

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Catalog number	Part number	Description
CIT-1	512289-000	CIT-1 Snow sensor
GIT-1	126795-000	GIT-1 Gutter sensor
SIT-6E	P000000112	SIT-6E Pavement snow sensor

### LIMITED WARRANTY

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ETI's two-year limited warranty covering defects in workmanship and materials applies.



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