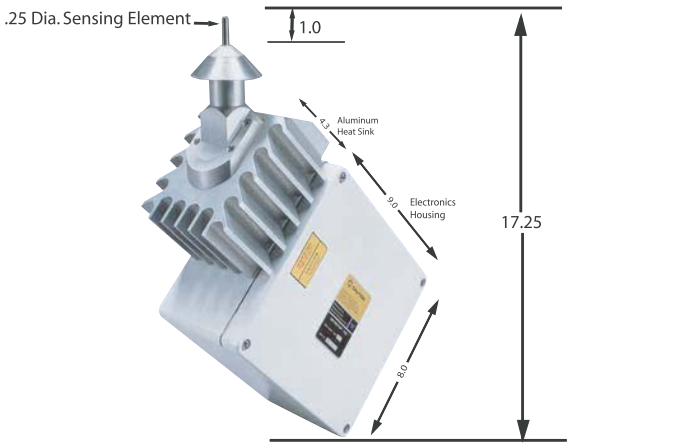
Ice Detector
Model 0872F1

The Goodrich Ice Detector measures precipitation transitions between liquid and solid states. The sensor is designed to measure the intensity and duration of ice storms and differentiates rain from freezing rain as temperatures approach freezing. Ice accumulations as low as 0.005 inches (0.13 mm) are detected.

This sensor is currently in use in weather research production programs such as the United States National Weather Service Automated Surface Observing System (ASOS), the Canadian Atmospheric Environmental Service automated weather station program, and various test programs in North America, Europe and Asia.



All dimensions in inches

The Goodrich Ice Detector provides real-time, fully automated weather icing data for surface observations. The electrical interface and communications protocol can be configured in a variety of formats.

Operational Benefits

The Goodrich Ice Detector provides field-proven performance in the most severe environmental conditions.

Sensing technology eliminates false signals
* vibrating probe measures actual ice mass
* only ice/freezing rain cause characteristic frequency shift

Advanced probe design
* collects icing water droplets regardless of wind velocity
* detects ice anywhere on the probe (360º sensitivity)

Self deicing/water shedding capability
* thermal deicing heaters in probe and strut
* sloped collar with grooves remove water from probe base

Repeatable measurement
* operates without periodic maintenance
* continuous built-in test verifies sensor functions
* sensor failures stored on non-volatile RAM for fault diagnostics

Applications

* automated surface weather stations
* back-up measurement for manned weather observation stations
* heated structure anti-icing control
  - broadcast communication towers
  - electrical power line utility poles
  - radomes
  - sidewalk heating
  - off-shore oil platforms

Specifications

Ice Signal Output Range:	Mass equivalent between 0.020 and 0.10 inches (0.5 mm and 2.5 mm)
Output Formats:	RS-232 or RS-232 Current loop (2400 baud)
Input Power Requirements:	115 VAC 60Hz
Power Consumption:	10 Watts in ice sensing mode 385 Watts in deicing mode
Sensor Mounting:	Optional mounting pole available

CAMPBELL SCIENTIFIC
CANADA CORP.
11564 - 149 street - edmonton - alberta - T5M 1W7
tel 780.454.2505 fax 780.454.2655
www.campbellsci.ca