

Retrofit Solid Simulator & Air Probe

OVERVIEW

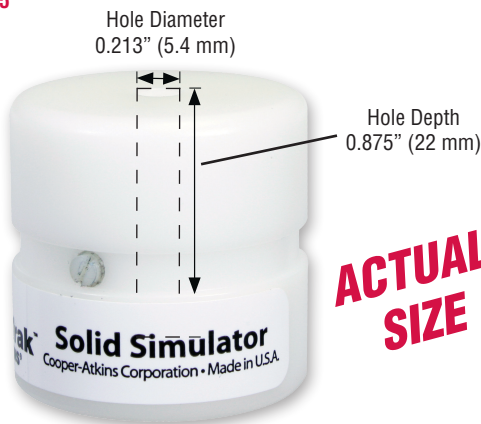
Air temperatures fluctuate when refrigerator doors are opened and closed, but the actual temperature of the item stored in the cabinet is not affected unless the door is left open for a significant period of time. In response to the need to represent the actual product temperature, Cooper-Atkins has developed a series of patented product simulators. Now you can turn your existing air probe into a product simulator probe with the Retrofit Solid Simulator. The #10185 is designed to fit tightly over the Cooper-Atkins #2033 Air Probe, thus insulating/buffering the probe tip from the frequent air temperature changes. The material composition and thickness of the wall provide accurate simulated product temperature during changing ambient conditions. By using the Retrofit Solid Simulator to monitor refrigeration or freezer cabinets, the ambient temperature of the product inside will be registered. Assembly is simple and directions are included with each Retrofit Solid Simulator.

**See back for test results*

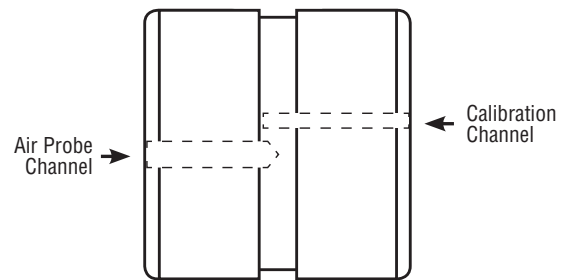
**U.S. Patent #9,470,587*

FEATURES	BENEFITS
<ul style="list-style-type: none"> • Can be installed on existing equipment • Simulates true product temperature • FDA approved solid simulator material • Durable casing 	<ul style="list-style-type: none"> • Simple and affordable • Higher accuracy than air temperature • No potential of leakage or evaporation • Impact resistant, ideal for high traffic areas
SPECIFICATIONS	
<p>#10185 Retrofit Solid Simulator</p> <ul style="list-style-type: none"> • Temperature Range: -25° to 180°F (-32° to 82°C) • Stabilization: Up to 2 hours • Material: FDA-approved Acetal • Dimensions: 1.5" x 1.5" (38 mm x 38 mm) • Weight: 2 oz (59 g) • Patent pending • 1-year warranty <p>RoHS</p>	<p>#2033 Air Probe</p> <ul style="list-style-type: none"> • Temperature Range: -25° to 180°F (-32° to 82°C) • Accuracy: ±0.4°F (±0.2°C) from 32° to 158°F (0° to 70°C) • Response Time: 40 sec in 5 m/sec airstream • Shaft Length: 0.5" (13 mm) • Cord Length: 6' (1.8 m) • Weight: 0.5 oz (14 g) • Traceable to Standards of NIST • 1-year warranty

Retrofit Solid Simulator #10185



**ACTUAL
SIZE**



Patented Retrofit Solid Simulator

Air Probe #2033



Retrofit Solid Simulator & Air Probe

SIMULATOR TEST

A test was conducted using an environmental chamber over a two hour time span in order to illustrate graphically how the #2033 Air Probe reacted to the changing ambient air temperature in comparison to the same Air Probe with the #10185 Retrofit Solid Simulator attached. Once both probes were allowed to stabilize at 41°F, the chamber door was opened for 5 minutes, then shut for an hour. This process was repeated once more and the probe readings were recorded every 5 minutes. The graph below shows how the Air Probe reacted immediately when the door was opened, rising 7-10 degrees, while the Retrofit Solid Simulator remained stable, rising only 4 degrees after 5 minutes.

Test: Air Probe vs. Retrofit Solid Simulator

