



HotLok[®] Temperature Strip

Part Number

10009



Temperature Strip - Part No. 10009

Applications

The HotLok Temperature Strip is a liquid crystal thermometer with an acrylic self-adhesive backing that quickly and accurately measures the air-intake temperature of IT equipment. The Temperature Strip indicates if the air temperature is within acceptable limits based on standards established by the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) and equipment manufacturers.

Reading the Temperature Strip

The liquid crystal material in the HotLok Temperature Strip shows temperatures in ranges of green, brown, and blue. The actual temperature is indicated when the liquid crystal material is green. If green is not visible on the Temperature Strip, the actual temperature will be the number between the brown and blue colors.

The colored range indicators denote the following:

- Blue: Optimal Operating Range based on recommendations as updated in ASHRAE's 2008 Environmental Guidelines for Datacom Equipment
- Yellow: Acceptable Operating Range based on equipment manufacturers' recommendations for Class 1 IT equipment
- Red: Outside acceptable operating range—indicates a definite hotspot above 90°F (32°C) or potential for condensation below 59°F (15°C), either of which may result in equipment failure

Features

- Range in both Celsius and Fahrenheit temperature scales
- Fahrenheit Scale: 50°F to 102°F in increments of 2°F
- Celsius Scale: 10°C to 39°C in increments of 1°C
- Accurate to within +/- 1°C.
- Directly traceable to a Certificate of Conformance
- Calibrated in accordance with the American Society for Testing and Materials (ASTM) Standard E 1061-94 using equipment
- Traceable to the National Institute of Standards and Technology (NIST).
- The acrylic adhesive has a shelf life of four years when stored in an office environment

Benefits

- Identifies hot and cold spots within minutes of application and at a glance thereafter
- Improves uptime by early identification of trouble areas
- Color-code based on ASHRAE standards indicates potential hot spots in a glance
- Supports airflow management practices resulting in improved capacity and reduced operating expenses

Specifications

Dimensions	Inches	Millimeters
Part No. 10009 - Overall size (length x height)	10" x 1"	254 x 25.4mm

Instructions for Use

HotLok® Temperature Strips most accurately show IT air intake temperatures when placed as close to IT equipment air intakes as possible. Place them inside the IT cabinet whenever possible without obstructing server intake airflow.

- Since the highest temperatures are typically found at the top of cabinets, place the Temperature Strip near the highest server or piece of equipment.
- Air must be allowed to flow between the strip and the panel to ensure accurate readings.
- To get the most accurate reading, peel the paper to reveal the adhesive on the ends of the temperature strip. Apply the strip so it bends slightly with the middle section not touching any surface. (See Picture)
- The box around temperature number on the HotLok® Temperature Strip will turn green, brown, and blue. The actual temperature is indicated when the liquid crystal material is green. If green is not visible on the strip, the actual temperature will be the number between the brown and blue.
- Temperature Strips can also be placed on highly perforated doors. Keep in mind that blanking panels are necessary to insure exhaust air doesn't circulate from back of the cabinet through open spaces to IT equipment intakes.

Any intake air temperature greater than 27° C or 80.6° F is considered a hot spot. Steps should be taken to provide more conditioned air to this location to increase IT equipment reliability.

Any intake air temperature lower than 15° C or 59° F is considered a cold spot. Steps should be taken to increase air intake temperatures to improve equipment reliability.



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