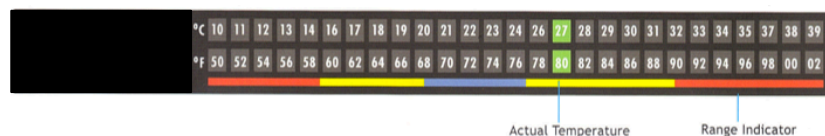


# Fiche technique

## Obturbateur à bande thermographique



### Application

The Upsite™ 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 Upsite 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.

### Instructions for Use

The Upsite Temperature Strip should be used with IT equipment where the potential for hotspots or other heat-related issues exists. Place the product on a flat surface as close as possible to the equipment air intake, without blocking the air flow into the intake.

The Upsite Temperature Strip can be attached to the front surface of a perforated door on an equipment cabinet. However, in the space between the cabinet door and equipment air intakes internal air circulations can result in higher IT equipment air-intake temperatures than those present on the front surface of the cabinet door. Thus, placement of the Upsite Temperature Strip on the outside perforated door of an equipment rack may result in a lower temperature reading than would be measured at the air intake of the IT equipment.

For more information, refer to the ASHRAE publication, *Thermal Guidelines for Data Processing Environments*, which offers specific instructions for measuring the air intake of IT equipment.

### Range

The Upsite Temperature Strip has both Celsius and Fahrenheit temperature scales.

- Celsius Scale: 10° C to 39° C in increments of 1° C
- Fahrenheit Scale: 50° F to 102° F in increments of 2° F

### Limits

- Blue: Optimal Operating Range based on recommendations from ASHRAE
- Yellow: Acceptable Operating Range based on equipment manufacturers' recommendations for Class 1 IT equipment
- Red: Outside acceptable operating range, indicates a definite hotspot above 32° C or 90° F or potential for condensation below 15° C or 59° F, either of which may result in equipment failure.

### Reading the Upsite Temperature Strip

The liquid crystal material in the Upsite 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 from ASHRAE
- Yellow: Acceptable Operating Range based on equipment manufacturers' recommendations for Class 1 IT equipment
- Red: Outside acceptable operating range, indicates a definite hotspot or potential for condensation, either of which may result in equipment failure.

Any air-intake temperature that is greater than 25° C or 77° F is considered a hotspot. Steps should be taken to provide colder air to this location to avoid the possibility of equipment failure.

Any air-intake temperature lower than 15° C or 59° F may pose a risk to equipment reliability because of condensation that may occur.

### Calibration

Each Upsite Temperature Strip is directly traceable to a Certificate of Conformance. The product is 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).

### Sensitivity

The Upsite Temperature Strip is accurate to within  $\pm 1^{\circ}\text{C}$ .

### Shelf Life

The acrylic adhesive has a shelf life of four years when stored in an office environment.

### Dimensions

Length	Width	Thickness
254 mm/10 inch	25.4 mm/1 inch	10 mm/0.39 inches