

Candlestick Sensor™



ATS ADVANCED
THERMAL
SOLUTIONS, INC.
Innovations in Thermal Management®

Measures temperature and air velocity
with minimal flow disturbance

The Candlestick Sensor from Advanced Thermal Solutions, Inc., is a flexible, robust, base-and-stem design sensor that measures both temperature and air velocity for characterizing thermal conditions in electronic systems.

The Candlestick Sensor is narrow and low profile to minimize the disturbance of the heat flow in the test domain. It features a flexible, plastic-sleeved stem, which facilitates installation and repositioning during the testing process.

Sensors are calibrated for low (natural convection) and high velocity flows. They are capable of temperature measurements ranging from -30° to $+150^{\circ}\text{C} \pm 1^{\circ}\text{C}$. Velocity measurements range from 0 to 50 m/s (10,000 ft/min) $\pm 2\%$, depending on the particular model of sensor.

The use of a single sensor to measure both temperature and velocity eliminates errors that can occur when airflow is non-isothermal. Multiple Candlestick Sensors can be easily installed to thoroughly map a system's thermal and airflow conditions. Their robust nature allows for continuous repositioning and reading.

Note: Sensor models are specific to particular ATS instrument systems. Please contact a sales representative for details.



HEIGHT

9 mm, 12 mm, 20 mm

BASE DIAMETER

9.5 mm

SENSOR STEM DIAMETER

0.5 mm

SENSOR BEAD DIAMETER

1.1 mm

VELOCITY MEASUREMENTS

0 to 6 m/s or 0 to 50 m/s

TEMPERATURE MEASUREMENTS

-30° TO $+150^{\circ}\text{C} \pm 1^{\circ}\text{C}$

- » Offers the most accurate reading in Hot Wire Anemometry
- » Ideal for conditions where rapid measurement or flow control is required
- » Can be placed anywhere in the testing domain
- » Measures both temperature and velocity in a single package
- » Pre-calibrated sensors
- » All plastic design prevents shorting of electronics
- » Double-sided adhesive makes sensors easy to mount on any surface
- » Available in 9, 12 and 20mm heights
- » Can be used in flow measurements up to, and beyond, 10,000 feet per minute (50 meters per second)
- » Compatible with most ATS instrument systems including: ATVS-2020, eATVS-4/8, ATVS-NxT, WTC-100, ISD, ISD-9

For further technical information, please contact Advanced Thermal Solutions, Inc. at **781-769-2800** or www.qats.com

RoHS Compliant