

## eATVS-2030™

### AUTOMATIC TEMPERATURE AND VELOCITY SCANNER

The eATVS-2030™ Automatic Temperature and Velocity Scanner is a portable, 8-channel hot wire anemometer system. Fully automated, this research-quality instrument takes accurate single- or multi-point measurements of air temperature, surface temperature, and velocity in complex environments, such as PCBs and electronics enclosures. When used as a temperature logger, it can measure both fluid and solid temperatures.

The unique, patented candlestick sensors are designed to be flexible, robust and low profile to minimize flow disturbance. They can be easily placed anywhere in the test domain. The use of a single sensor to measure both temperature and velocity at a single point eliminates errors introduced because of the flow being non-isothermal.

Its portable design and compact dimensions make it an ideal choice for various applications. The system requires a PC for operation and seamlessly interfaces with the stageVIEW™ software for intuitive data acquisition and reporting.



stageVIEW™ software for automated data acquisition and reduction



REAR



TEMPERATURE  
& VELOCITY  
SENSOR

**OVERALL DIMENSIONS (D X W X H)**  
23.5 mm x 13.4 mm x 6.4 cm  
(9.3" x 5.3" x 2.5")

**TEMPERATURE RANGE**  
-30°C to 150°C ± 1°C

**FLOW RANGE**  
0 to 51 m/s (0 to 10,000 FT/MIN) (± 3%)

**NUMBER OF CHANNELS**  
8

**SOFTWARE**  
stageVIEW™

**POWER**  
110V or 220V

**WEIGHT**  
2 kg (4 lbs.)

#### FEATURES:

- » **Accuracy and Ease of Use**  
Offers research quality results with the ease of use of hand-held meter
- » **Single Sensor Technology**  
The only system that can measure both temperature and air velocity with a single sensor at a single point
- » **High & Low Speed Calibration**  
Sensors are calibrated for either low (natural convection) or high velocity flows from 0 to 51 m/s (10,000 ft/min)
- » **Up to 8 Sensors**  
For single point measurement of air velocity & temperature. System accommodates all ATS sensors that measure these parameters (see second page)
- » **Remote Access**  
RJ45 ethernet port enables ethernet access when a USB connection is not possible
- » **Connection**  
Ethernet cable, USB 2.0 Mini, and WiFi connection options for connecting to a PC

- » **stageVIEW™ Software**  
For automated data acquisition, reporting and special thermal analysis module for quick evaluation of component temperature

#### APPLICATIONS:

- » **Solid/Liquid Temperature Measurement**
- » **Air Velocity Measurement**
- » **Heat Sink Characterization**
- » **PCB Testing**
- » **Heat Sink Comparison**
- » **Wind Tunnel Testing**
- » **Thermal Characterization Studies**



For further technical information, please contact Advanced Thermal Solutions, Inc. at **1-781-769-2800** or **ats-hq@qats.com**.



# eATVS-2030™ Compatible Sensors

## ATS-Patented Single-Sensor Technology

Advanced Thermal Solutions revolutionized the industry in the late 1990s with the introduction of its patented, single-sensor technology, which measures both temperature and velocity at a single point and eliminates errors attributable to non-isothermal air flow. It broke a second paradigm when it followed years later with the production of its Candlestick sensor, a 360° reading sensor, offering the least invasive profile in the test domain, thus ensuring the highest accuracy. Altogether, ATS presents six different profiles and over a hundred variations in customization for its very selective and loyal instrumentation customers.



**Candlestick  
Sensor**



**Multi-Sensor  
in Plane**



**Multi-Sensor  
PBL**



**Hand-Held  
Probe**



**Traversing  
Probe**



**Micro  
Sensor**

## Technical Comparison

Product	Base Diameter	Height/Length	Temperature Range	Velocity Range
Candlestick Sensor	0.4" (9.5 mm)	0.4", 0.5", 0.8" (9 mm, 12 mm, 20 mm)	-10°C to 120°C	0 to 50 m/s (10,000 ft/min)
Multi Sensor In Plane MS 1000-IP-20	0.60" (15.2 mm)	0.5", 0.7", 0.9" (13 mm, 18 mm, 23 mm)	-10°C to 120°C	0 to 50 m/s (10,000 ft/min)
Multi Sensor PBL MS 1000-PBL-20	0.6" (15.2 mm)	0.5", 0.7", 0.9" (13 mm, 18 mm, 23 mm)	-10°C to 120°C	0 to 50 m/s (10,000 ft/min)
Hand Held Probe HHP-A	N/A	24" (609.6 mm)	-10°C to 120°C	0 to 50 m/s (10,000 ft/min)
Traversing Probe TP 1000-20	N/A	6" (150 mm)	-10°C to 120°C	0 to 50 m/s (10,000 ft/min)
Micro Sensor MIC 1000-20	N/A	1.5" (38.1 mm)	-10°C to 120°C	0 to 50 m/s (10,000 ft/min)