

ATVS-2030TM AUTOMATIC TEMPERATURE AND VELOCITY SCANNNER

The ATVS-2030[™] Automatic Temperature & Velocity Scanner is a patented, multi-channel hot wire anemometer system for single or multi-point measuring of humidity, surface temperature, air temperature, and velocity.

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.

Great care is taken in the calibration process of each sensor. The system can accommodate up to 30 channels (sensors) for easy and accurate mapping of the velocity and temperature fields of the test domain, and features a humidity sensor port.

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 included stageVIEWTM software for intuitive data acquisition and reporting.



stageVIEW $^{\text{\tiny{TM}}}$ software for automated data aquisition and reduction





REAR



OVERALL DIMENSIONS (D x W x H)

28.5 cm x 37.4 cm x 10.9 cm (11.2" x 14.7" x 4.3")

TEMPERATURE RANGE

-20°C to 120°C (-4°F to 248°F) (±1°C)

FLOW RANGE

0 to 50 m/s (0 to 10,000 ft/min) (± 3%)

HUMIDITY

+/- 2% AT 55% RH

NUMBER OF CHANNELS

30 + 1 Humidity Sensor Channel

SOFTWARE

stageVIEW™

CONNECTIONS

USB, Wi-Fi, Ethernet

POWER

110V or 220V

WEIGHT

3.8 kg (8.4 lbs.)

FEATURES:

» Single Sensor Technology

The only system that can measure both temperature and air velocity with a single sensor at a single point

» Accuracy and Ease of Use

Offers research quality results with the ease of use of hand-held meter

>> Up to 30 Sensors

For single point measurement of air velocity & temperature. System accomodates all ATS sensors that measure these parameters (see second page)

» Humidity Sensor

Measures humidity and temperature at the location of humidity sensor

>> Ethernet Access

RJ45 ethernet port enables ethernet access when a USB connection is not possible

» Connection

Ethernet, USB, and Wi-Fi connection options

» stageVIEW™ Software

For automated data acquisition, seamless flow between configuration, set-up, and data acquisition

| Part Number | Number of Activated Sensor Ports |
|--------------|--|
| ATVS-2030-6 | 6 |
| ATVS-2030-10 | 10 |
| ATVS-2030-14 | 14 |
| ATVS-2030-18 | 18 |
| ATVS-2030-22 | 22 |
| ATVS-2030-26 | 26 |
| ATVS-2030-30 | 30 |





ATVS-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 eight different profiles and over a hundred variations in customization for its very selective and loyal instrumentation customers







Multi-Sensor in Plane



Multi-Sensor PBL



Hand-Held **Probe**



Hand-Held **Surface Probe**



Traversing Probe



Micro Sensor



Spot 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) |
| Hand Held Surface Probe HP 1000-SP | N/A | 6" (150 mm) | -10°C to 120°C | N/A |
| 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) |
| Spot Sensor SP 1000-20R1 | N/A | Custom | -20°C to 120°C | N/A |