



# iQ-200™

## MEASURE TEMPERATURE, VELOCITY & PRESSURE WITH ONE SYSTEM

- » **iQ-200™** provides the user with the capability to **simultaneously** or **individually** measure all of the required thermal parameters with one system.
- » **iQ-200™** provides multiple channels of Temperature, Velocity and Pressure.
- » **iQ-200™** eliminates the need for having multiple systems or additional software to synchronize data collection of different parameters.
- » **iQ-200™** comes with the unique *LabVIEW™* - based operating software, **IQstage™**, eliminates data collection errors induced because of measurement time lapses or transience associated with the use of multiple systems.
- » **iQ-200™** provides a compact, portable and versatile system to minimize lab clutter and go where measurement is required.



### APPLICATION DOMAIN

**iQ-200™** is designed to be used wherever Temperature, Pressure and Velocity measurements are required, either simultaneously or individually.

*Some examples where iQ-200™ is used:*

- » Heat sink design and selection
- » PCB characterization
- » Card rack (ATCA, PICMG, 1U, etc.) characterization
- » Qualification testing in the environmental chamber, e.g., NEBS, Milspec, etc.
- » Mockup testing
- » Wind tunnel testing of cards, heatsinks, etc.

#### Data Port Panel



#### Back Panel



#### OVERALL DIMENSIONS (D x W x H)

43 cm x 34 cm x 12.6 cm  
(17" x 13.3" x 5")

#### NUMBER OF VELOCITY CHANNELS

16

#### FLOW RANGE

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

#### NUMBER OF THERMOCOUPLES

12 (J and K types)

#### NUMBER OF PRESSURE SENSORS

4 (Differential)

#### PRESSURE RANGE

0 to 0.15 psi

#### SOFTWARE

*IQstage™*

#### VOLTAGE INPUT

110V or 220V

#### WEIGHT

7.5 kg (15 lbs.)

### TEMPERATURE

- » 12 thermocouple ports supporting J and K types, with a range of -40 to 750°C.
- » 16 thermistor ports (also used for velocity measurement) with a range of -10 to 85°C.

### VELOCITY

- » 16 hot wire anemometer ports supporting ATS single sensor velocity measurement technology, (*requiring no need to change sensors when measuring different velocity ranges*).
- » Supports ATS unique, patented Candle Stick Sensor



*ATS Candle-Stick Sensor*

- » Standard range for velocity measurement is 0-6 m/s (1200 ft/min). With custom calibration, the range is 0-50 m/s (10,000 ft/min) – *no need to change sensors*

### PRESSURE

- » Four ports supporting differential or absolute pressure measurements with a range of 0-1,035 Pa (0-0.15 psi)

### DATA ACQUISITION

#### SOFTWARE - *IQstage™*

- » *IQstage™* manages incoming data from various sensors and provides a rich graphical presentation of the results
- » User-friendly *LabVIEW™* - based *IQstage™* is included with the system

**For further technical information, please contact Advanced Thermal Solutions, Inc. at 1-781-769-2800 or [www.qats.com](http://www.qats.com)**