

# iFLOW-200<sup>™</sup>

**MEASURE THE THERMAL & HYDRAULIC PERFORMANCE OF COLD PLATES** 



## **FEATURES & BENEFITS**

- » **iFLOW-200**<sup>™</sup> measures a cold plate's inlet/outlet fluid temperature, surface temperature, coolant volumetric flow rate and pressure drop by providing different flow rates to the cold plate.
- » iFLOW-200<sup>™</sup> measures coolant temperature from 0-70°C with accuracy of +/-1°C, using K-type thermocouples. Distilled water is used as the reference coolant.
- » **iFLOW-200**<sup>™</sup> measures cold plate differential pressure up to 103,000 Pa (15 psi) with pressure measurement of +/-1% of full scale.
- » **iFLOW-200**<sup>™</sup> features a separate control box and hydraulics units with USB connections.
- » **iFLOW-200**<sup>™</sup> includes user-friendly **coolingVIEW**<sup>™</sup> application software that automates the testing of a cold plate by setting the required parameters.
- » iFLOW-200<sup>™</sup> software, coolingVIEW<sup>™</sup>, calculates thermal resistance and pressure drop of the cold plate as a function of flow rate for selected liquids other than distilled water.

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

The iFLOW-200<sup>™</sup> system measures the thermal and hvdraulic characteristics of a cold plate. It replaces the complex process of varying the volumetric flow rate of the coolant, and measuring the pressure drop and temperature of the cold plate. iFLOW-200<sup>™</sup> users simply set up the starting flow, ending flow, number of test points, dwell time, power applied to the cold plate and other parameters in the coolingVIEW™ software and run the application.

OVERALL DIMENSIONS (D x W x H) 365 mm x 425 mm x 120 mm

MAXIMUM VOLUMETRIC FLOW RATE 4.5 liter/min

FLOW TEMPERATURE RANGE 0 to 70 °C

SURFACE TEMPERATURE RANGE 0 to 200 °C

DIFFERENTIAL PRESSURE RANGE +/- 103,000 Pa(15 psi)

PRESSURE ACCURACY +/- 1% of full scale

TEMPERATURE ACCURACY +/- 1 °C

FLOW RATE ACCURACY +/-1% of full scale

SOFTWARE coolingVIEW™

#### FEATURES:



## FLUID LEVEL INDICATOR



## INLET/OUTLET OF THE COLD PLATE



**SENSOR PORTS** 



## COOLING SYSTEM FOR THE INTERNAL HEAT EXCHANGER

## **APPLICATION DOMAIN**

- » Evaluating and troubleshooting different cold plate models
- » Simulating different applications and conditions
- » Optimizing flow and thermal performance
- » Testing alternative liquids

#### » Free Lifetime Tech Support

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