HFC-100™

HEAT FLUX CONTROLLER

The Heat Flux Controller™ is a high heat flux chip simulator capable of measuring and controlling the amount of heat in a resistive element. The HFC-100 comes with a chip simulator capable of dissipating 1k /cm2. The design of the heater block insures minimal heat loss to the ambient, hence a more accurate thermal resistance determination of either heat sinks or cold plates.

This system features ATS proprietary fluxSTAGE™, a LabView™ application, which automates the use of the system and allows the user to choose multiple heat loads at a specific dwell time. The program calculates the thermal resistance of the cold plate for desired cooling of the die and measures the simulated junctions temperature.

Illustration of the HFC-100 Heat Flux Controller with simulated chip capable of dissapating 1 kW of heat over 1 cm^2.

OVERALL DIMENSIONS (L X W X H)
55.9 cm x 42.5 cm x 8.8 cm
(22" x 16.7" x 3.5")

OUTPUT POWER
Up to 1 kW

OUTPUT VOLTAGE
Up to 40 VDC

INPUT POWER
115 VAC

PC CONNECTION
USB

SOFTWARE
USB

FEATURES:

» **Automated Calculation**
Automatically calculates the total thermal resistance of heat sink, cold plate or ot cooling device

» **High Heat Flux Chip Simulator**
Simulated chip is capable of dissapating 1 kW of over 1 cm^2

» **Versatile Measurement**
Capable of transient steady state and transient measurements

» **Up to 8 Sensors**
Can accomodate up to eight thermocouple sensors for precise temperature measurement

» **Dynamic Control**
Features dynamic control of the simulated chip's power dissapation

» **Dynamic Measurement**
Dynamically measures the resistance of the heating element for accurate dissapation calculation

» **fluxSTAGE™ Software**
Features ATS' fluxSTAGE application which automates the use of the system and allows the user to choose multiple heat loads at a specific dwell time

» **Automatic Shut-off**
Automaticall shuts if the heater temperature rises above the user defined protocol

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