



Sensata High Power iQ-Phase Thermal Forcing System

Precision, Wide temperature range, Portable

Sensata's iQ-Phase Thermal Management System is designed with performance and flexibility in mind, allowing for customization to suit different package and interface variations. The system allows for temperature forcing across a wide range of device sizes and types, whether socketed or soldered down.

The well-proven, thermal head methodology coupled with liquid-less phase change heat transfer technology creates a very quiet, portable and fast stabilization thermal control environment. The pneumatically driven vertically actuating thermal heads makes direct contact with your IC providing for superior power handling and precision control over other thermal control methods.

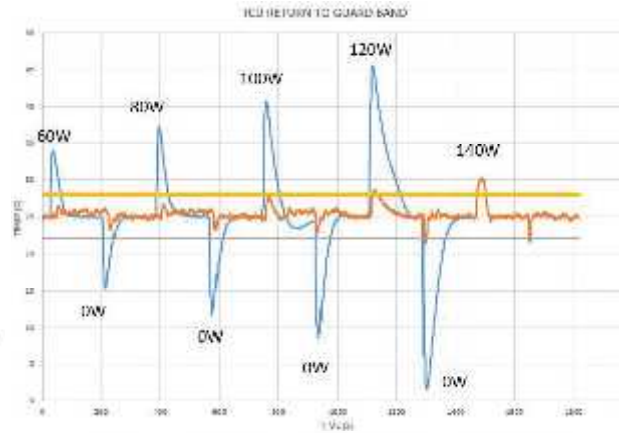
Features

- -60°C to +150°C
- Completely self-contained liquid free operation
- Adapts to most IC test applications
- Very quiet operation
- Highest heat density control (7 W/cm²)
- Portable
- No greases or thermal interfaces required
- ECO Friendly

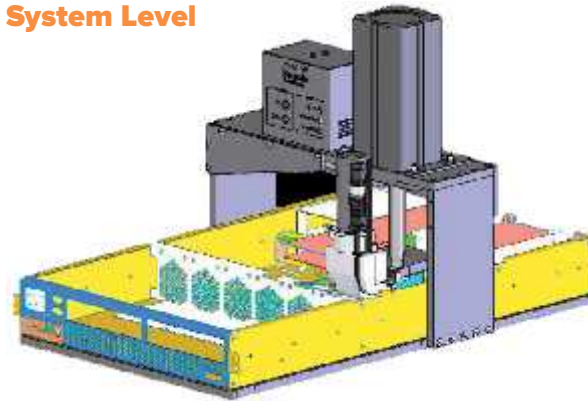
Applications

- DUT Level Thermal Management
- Thermal Stream Replacement
- Handler Integrations
- ATE Test
- Bench Testing
- System Level Testing

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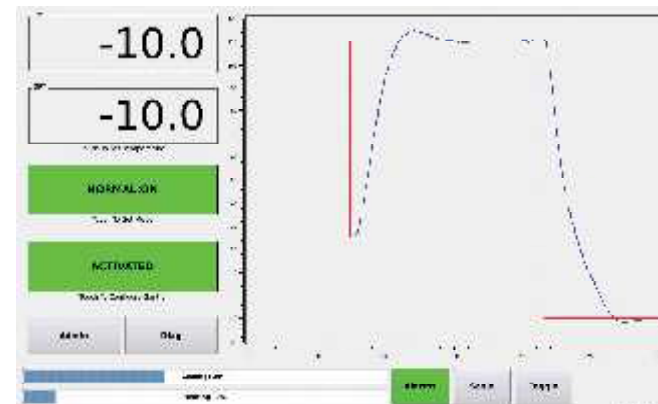
System Level



Thermal Management Rating:

- 250W @ -10°C
- 600W @ 25°C
- Full temperature range -60°C to +150°C

Total power handling is function of the device power dissipation and ambient influences on the device inclusive of the PCB heat load at temperature. For example at -40°C, the device power plus the heat gain, due to the difference in temperature between the device and ambient, is higher than just the device power and can influence full temperature range.



SYSTEM SPECIFICATIONS

Operating

Temperature Range	-60°C to +150°C
Accuracy	+/-0.3°C
Transition Rate	Up to 70°C/min (Ramp rate controllable)
Actuation Type	Z-Axis Pneumatic Actuation
Actuation Force	Up to 300kg
Remote Sensor Types	Type K Thermocouple Ports, Thermal Diode, Analog, Remote Programming

Mechanical

Controller Weight	Approx. 25kg
Thermal Head Size (D)	80mm x 50mm x 80mm (W x H x D)
Thermal Head Weight	Approx. 2kg
Controller to Thermal Head Distance	Approx. 2.5m

Data/Communications

USB	Type B
Ethernet TCP/IP	RJ-45
Touch Screen Display	Ruggedized LCD

Environment/Facilities

Operating Temperature	-10°C to +45°C (non-condensing)
Power	200V-240V AC 50/60Hz 10A MAX
Plug	C19
Compressed Dry Air	<1cfm @ 90psi (-70°C Dew Point) ¼" Industrial Quick Disconnect

FACILITIES REQUIREMENTS

Electric

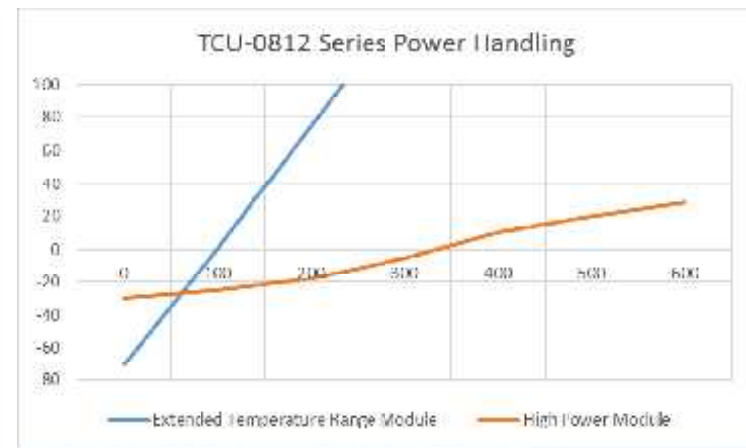
AC Power:	200-240V Single Phase 50-60 Hz 10A MAX
Cable/Plug Type	C13 to NEMA 5-15P C13 to NEMA L6-20P

Compressed Air

Line 1	<1 cfm max 90 psi 1/4" Industrial Standard Connection Clean Dry Air -70°C Dewpoint Filtered 10um
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Communication

USB	Type B
Ethernet	RJ-45



Proper facility setup ensures the device under test (DUT) is kept moisture and frost free during the entire temperature spectrum. Introduction of moist surrounding air to the device will cause moisture, while the equipment is protected from improper facilities the DUT and other peripheral items could get damaged.



SUPPORT

Sensata has offices Worldwide for Sales and Technical Support

- US
- Europe
- Japan
- Korea
- Taiwan
- China
- Singapore
- Malaysia
- Israel

WARRANTY

Sensata warrants this product to be free from defects in material and workmanship for a period of one (1) year after the original date of delivery. During this period, Sensata will, at its option, either repair the defective product with new parts, or replace it with a new product at no charge.

