# Temptronic

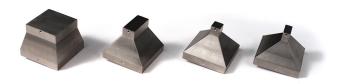
## Temptronic® ThermoSpot® DCP-201 Bench Top Temperature Forcing System

For IC characterization, test, and failure analysis with 40W capacity at -40°C

The ThermoSpot Model DCP-201 benchtop temperature forcing system provides a highly responsive, thermally conductive path to quickly induce temperatures to the DUT. This highly reliable system – without thermoelectric modules - uses a thermal probe designed with an interchangeable ThermoBridgeTM to mate directly to your IC or other device under test. Using proprietary, robust refrigeration technology, ThermoSpot can perform thermal cycling without the worry of cooling degradation so common with thermoelectric modules employed in competitive systems.



User-programmable temperatures, graphing, and data logging are established through the controller's touch-screen or remote communications. The system provides fast and precise transitions of temperature at the IC, even with variations in device power, and can be used with Temptronic's proven DUT Control technology using an imbedded diode or external thermocouple.



A ThermoBridge<sup>TM</sup> provides the thermal interface to match the area of your IC package.

#### **FEATURES:**

- High reliability thermal cycling without thermoelectric modules
- Temperature Range: -55 to 175°C
- Cooling Power: 40W at -40°C
- 25 to -40°C <1.5 min.
- Easy and secure thermal connection to in-circuit or test socketed DUT
- Communications: Ethernet, USB (optional IEEE, RS232)





#### **ThermoSpot DCP-201 Specifications** System Model ThermoSpot DCP-201 Range: -55 to 175°C @ 23°C ambient, Accuracy: ±1.0°C; Stability: ±0.4°C Temperature Performance<sup>1</sup> Cooling Power<sup>1</sup> 40W @ -40°C Transition Rates<sup>1</sup> 25 to -40°C, <1.5 min. Temperature Sensors Main sensor: RTD, DUT sensors: K thermocouple, Diode, 100Ω RTD, Analog **Temperature Calibration** Software calibrated Ethernet (TCP/IP), USB / Optional IEEE488, RS232 Communications Interface Maximum Force Allowable 980.6 N (220.4 Lbf) on Thermal Head **DUT Dimensions** From 2 x 2mm to 50 x 50mm (0.079" x 0.079" to 2.0 x 2.0") 5.25" color touch-screen, programmable with 0.1°C resolution, Preset temperatures, ramp, Operator Interface soak, cycle. Ramp rate control, Graphing and data logging, Web server, Offset calibration. Analog temperature inputs Thermal Head 89mm (3.5") diameter Thermal Head Hose 1.8 meters (70") long, optional 3.0 meters (118") long Frost Free Thermal Head Low flow dry air or nitrogen purge 0.05cfm, -70°C (-94°F) dew point controlled automatically 445mm D x 356mm W x 299mm H (17.5"D x 14.0"W x 11.75"H) Physical Dimensions System Weight 27.2 Kg (60.0 lbs.) Noise Level 55 dBA Power Requirements 115 VAC (±10%), 15 amp, 60Hz, 208/230 VAC (±10%), 10 amp, 60Hz Purge Dry Air Supply User supplied, regulated, -70°C (-94°F) air or nitrogen, 0.1cfm at 0.2 BAR Operating Environment Temperature: 5 to 35°C (40 to 95°F), Humidity: 20 to 95% RH Compliance CE | RoHS | EU 517/2014 | designed to meet UL61010

### **Optional Positioning and Alignment Accessories**

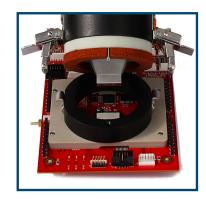


<sup>1</sup>as measured at thermal head

Boom Stand:
The Boom Stand provides X,
Y, Z positioning of the Thermal
Head over the DUT.
(P/N SA214350)



Bench Stand:
Free-motion stand and boom
provide manually positioning of the
Thermal Head over the DUT.
(P/N SA214360)



DUT Interfacing:
Test Socket Alignment - latches and
guide pins provide easy and secure
connections to the test socket.
Soldered Component Alignment customized interfaces to accommodate
PCB layout and chip geometry.

