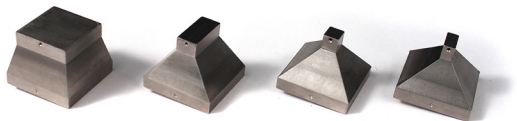


## Temptronic® ThermoSpot® DCP-202 bench top temperature forcing system

For IC characterization, test, and failure analysis with 55W capacity at -40°C

The ThermoSpot Model DCP-202 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 ThermoBridge™ 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™ provides the thermal interface to match the area of your IC package.

### Features

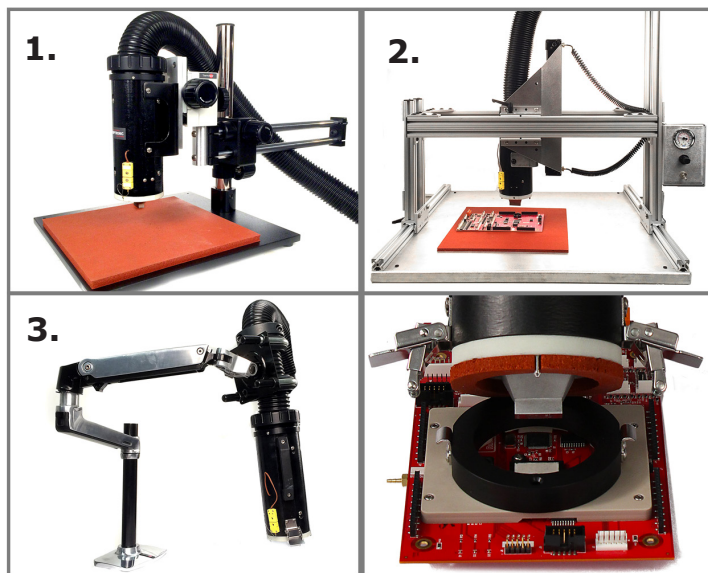
- High reliability thermal cycling without thermoelectric modules
- Temperature Range: -65 to 175°C
- Cooling Power: 55W at -55°C , 125W at -40°C
- 25 to -40°C <35 sec.
- Easy and secure thermal connection to in-circuit or test socketed DUT
- Communications: Ethernet, USB (optional IEEE, RS232)



## ThermoSpot DCP-202 Specifications

<b>System Model</b>	ThermoSpot DCP-202
<b>Temperature Performance<sup>1,2</sup></b>	Range: -65 to 175°C @ 23°C ambient Accuracy: ±1.0°C Stability: ±0.3°C
<b>Cooling Power<sup>1</sup></b>	55W @ -55°C 125W @ -40°C 250W @ 0°C
<b>Transition Rates<sup>1</sup></b>	25 to -40°C <35 sec, 25 to +125°C <1.5 min.
<b>Temperature Sensors</b>	Main sensor: RTD, DUT sensors: K thermocouple, Diode, 100Ω RTD, Analog
<b>Temperature Calibration</b>	Software calibrated
<b>Communications Interface</b>	Ethernet (TCP/IP) and optional USB, IEEE488, RS232 communications
<b>DUT Pressure Force</b>	2 to 100 Kg/Force (depending on interface)
<b>DUT Dimensions</b>	From 2x2mm to 100x100mm (0.078" to 3.937")
<b>Operator Interface</b>	5.25" color touch-screen, programmable with 0.1°C resolution Preset temperatures, ramp, soak, cycle. Ramp rate control, Graphing and data logging, Web server, Offset calibration Analog temperature inputs
<b>Thermal Head</b>	89mm (3.5") diameter
<b>Thermal Head Hose</b>	1.8 meters (69") long
<b>Frost Free Thermal Head</b>	Low flow dry air or nitrogen purge 0.05cfm, -70°C (-94°F) dew point Controlled automatically
<b>Physical Dimensions</b>	610mm D x 445mm W x 445mm H (24"D x 17.5"W x 17.5"H)
<b>System Weight</b>	66 Kg (145lbs.)
<b>Noise Level</b>	55 dBA
<b>Power Requirements</b>	100/115/120 VAC (±10%), 15 amp, 60Hz 220/230 VAC (±10%), 10 amp, 60Hz
<b>Purge Dry Air Supply</b>	User supplied, regulated, -70°C (-94°F) air or nitrogen, 0.1cfm at 0.2 BAR
<b>Operating Environment</b>	Temperature: 5 to 35°C (40 to 95°F), Humidity: 20 to 95% RH

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



### Positioning and Alignment

- 1. Boom Stand:** provides X, Y, Z positioning of thermal head. (p/n SA214350)
- 2. Pneumatic Stand:** provides X, Y, Z, positioning and measured downward force to DUT. (p/n SA214920)
- 3. Bench Stand:** free-motion stand and boom to manually position the thermal head over DUT. (p/n SA215310)

### 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.

The inTEST Thermal family includes three temperature-related corporations: Temptronic, Sigma Systems, and Thermonics. Products include thermal chambers and plates, temperature forcing systems, and process chillers. Specifications subject to change.