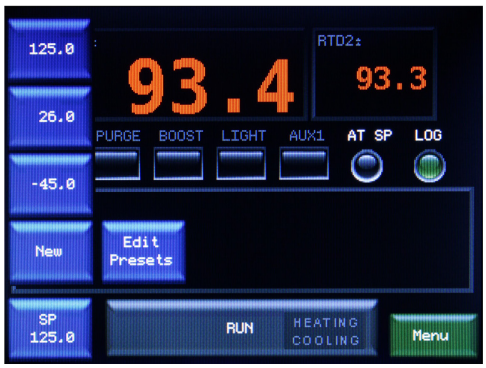
Sigma Systems

TS Series Temperature Controller

The TS Controller is a new control platform for Sigma Systems' cryogenically and mechanically cooled thermal chambers and plates. Testing of components, sensors, and PCBs typically involves temperature cycling from two to four points, which can be time consuming to setup and run. The TS Controller provides touch-screen and remote interfacing to set up and transfer thermal profiles, view data and trends, and log diagnostics.

CE approved, TS Series Controller:

- Optimizes test time – precisely controls and monitors DUT temperature, even during DUT power cycling
- Fast setup time – intuitive touch-screen programming
- Displays test status – real-time data and graph
- Built-in diagnostics – valve counts, ambient temp, equipment runtimes
- Protects DUT from thermal damage – independent fail-safe



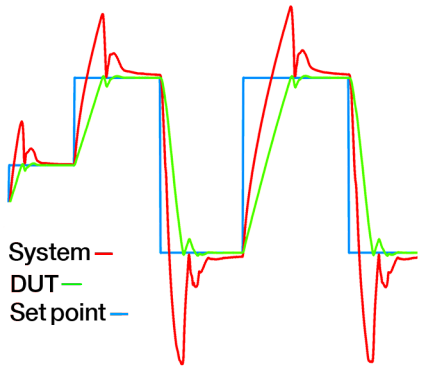
Monitor cycling and performance in real time.

About DUT Control

Device under test (DUT) control is a unique algorithm designed to minimize test time by maximizing ramp rates. This mode adjusts system temperature by monitoring actual DUT temperature. DUT control allows quick and precise stabilization to within 0.1°C.

DUT control is user selectable and customizable to match your thermal requirements based on mass, size, material, and heat dissipation.

This feature allows precise temperature control that cannot be achieved when DUT temperature is derived from chamber or platform temperature.



Sigma Systems

Specifications

Temperature Measurement	Range: -210° C to 680° C Accuracy: 1.0° C Resolution: 0.1 ° c full scale
User Interface	5.7" color touch-screen with temperature graphing and charting
Control Safety	Independent Fail-Safe Module (IFM) (optional) High High and low temperature limits
Diagnostics	Controller, chiller, & blower runtime hours Valve activation counts Controller enclosure temperature System performance log
Operating Environment	Temperature: 10 to 50° C Humidity: 10 to 50%
Temperature Inputs	RTD (500 Ohm) Thermocouple (type K)
Control Algorithms	Primary loop PID Dual loop, settable DUT control mode
Communication Interfaces	Ethernet 10/100, Telnet, HTML web server, USB-2.0, RS232 (optional) IEEE-488 GPIB (optional}
Power Requirements	Voltage: 100 to 250 VAC Frequency: 50/60 Hz Current: up to 30A (application based)
Physical Dimensions	Size: 8.5" x 6" x 13"
Program Compatibility	Supports C, CC3, CC3.5 and C4 functionality & command set

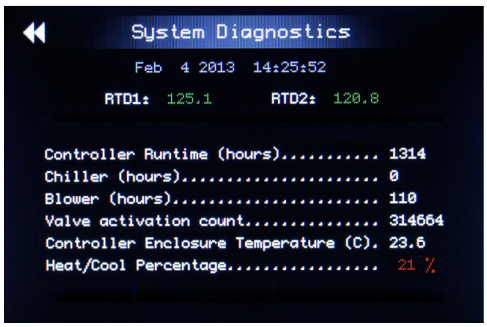
Notes

1. DUT control is a unique algorithm that directly controls device temperature, precisely, even during power cycling of the DUT.

2. Replacing C-type Controllers for older Sigma chambers and platforms:

A fully compatible form and fit replacement controller is now available for older systems including those with a built-in controller configuration (see TSR Controller data sheet).

Touch-screen operation makes programming and editing easy.



Real-time view of diagnostics helps ensure system uptime.

inTEST Thermal Solutions
an inTEST Company

www.intestthermal.com/sigmasystems

41 Hampden Road
Mansfield, MA 02048 USA

sales@intestthermal.com

+1.781.688.2300

Temptronic
Thermonics
Sigma Systems

ISO REGISTERED ITAR