

TSR Series Temperature Controller

Fully-compatible replacement controller for Sigma Systems' chambers and platforms.

The TSR Series Controller was specifically designed by Temprotronic to replace C, CC3, CC3.5 and C4 Controllers used in Sigma Systems' thermal chambers and platforms. It has the same physical dimensions permitting easy mounting for all applications including built-in. Compatible syntax allows use of existing programs. Moreover, the TSR delivers dramatic time savings and enhanced functionality.

TSR Series Controller

- ▶ Fully compatible with older controllers — no need to rewrite programs
- ▶ Intuitive setup — touch-screen programming
- ▶ Settable DUT Control mode — gets device to temperature faster
- ▶ Real-time performance — numerical and graphical temperatures
- ▶ Added communications — Ethernet & USB
- ▶ Built-in diagnostics — valve counts, ambient temp, controller/blower runtimes & more



Monitor cycling and performance in real time.



TSR Added Features		
Function	C3/C4	TSR
Touch-screen Setup		✓
Local Program Storage	1	8
Ethernet Capable		✓
Real-time Trend		✓
Device Under Test (DUT) Control		✓
Built-in Diagnostics		✓
Dual Power		✓

Specifications

Fully Compatible Replacement

Migration to the new controller is easy. The TSR Series Controller provides the functionality of older Sigma controllers in addition to touch control, local storage, Ethernet, and diagnostics. Why repair older controllers when you can enjoy state-of-the-art design, more benefits, and extended support.

Availability

The TSR Controller is available for shipping. For more information call +1-781-688-2300 or email sales@intestthermal.com.

Temperature Measurement Capabilities	Range: -210°C to 680°C Accuracy: 1.0°C Resolution: 0.1°C full scale
User Interface	3.2" color touch-screen with temperature graphing and charting
Control Safety	Compatible with Precision Fail-Safes (PFS) High and low temperature limits
Compliance	RoHS Designed to meet UL 61010 and CE
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 Sensors	RTD (500 Ohm)
Control Algorithms	Primary loop PID Dual loop, settable DUT control mode*
Communication Interfaces	Ethernet 10/100 USB-2 RS232 IEEE-488 GPIB
Power Requirements	Voltage: 100 to 250 VAC Frequency: 50/60 Hz Current: up to 30A (application based)
Physical Dimensions	Size: 11" x 3 5/8" x 5 5/16" Compatible with C, CC3, CC3.5, and C4 controllers
Compatibility	Supports C, CC3, CC3.5 and C4 functionality & command set

*DUT control is a unique algorithm that directly controls device temperature, precisely, even during power to DUT.



Touch-screen operation makes programming and editing easy – no need to look up cryptic codes



Real-time view of diagnostics helps maintain proper operation of equipment



The inTEST Thermal family includes three temperature-related corporations: Temptronic, Sigma Systems, and Thermonics.