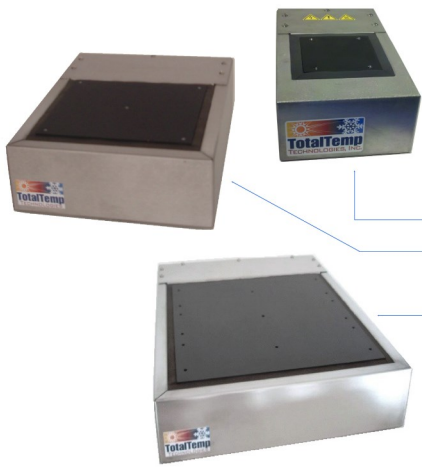
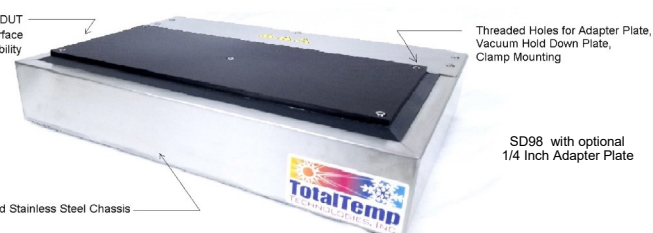


Cryogenic Thermal Platforms

Standard Range -100°C to +200°C (-148°F to 392°F)



Model	Useable Surface Area	
	Inch	Centimeter
SD14	3.75 x 3.75	9.5 x 9.5
SD49	6.5 x 7.5	16.5 x 19
SD98	6.5 x 15	16.5 x 38.1
SD144	12 x 12	30.5 x 30.5
SD288	12 x 24	30.5 x 61
SD450	18 x 25	45.7 x 63.5




Excellent Access to DUT
Hard Anodized Surface
for Durability

Threaded Holes for Adapter Plate,
Vacuum Hold Down Plate,
Clamp Mounting

SD98 with optional
1/4 Inch Adapter Plate

Rugged Stainless Steel Chassis



SD288 with optional
Programmable Safety LEDs

Cost Efficient, Fast and Accurate Temperature Cycling Just Got a Lot Easier

TotalTemp provides complete thermal testing systems featuring extremely accurate temperature control and minimal thermal gradients at set-point. **TotalTemp** has truly created the next generation in performance at a competitive price!

Coolant choices

L-N₂ -100°C , High or Low Pressure

L-CO₂ -60°C , High or Low Pressure

**Optional Refrigeration Compressor or
Recirculating Fluid Cooling**

Options & Accessories

Dual Zone Dual Temperature Controllers w/Failsafe in 19 Inch Rack



Probing Cover



DUT Sensors



Failsafe System with Valve, Economy Controller



Dual Remote Cryogenic Valve Box



Purge Flow & Pressure
Regulator



VJ Hose (Vacuum Jacketed)



- Purge box, Probing covers
- Custom Covers
- Dry Nitrogen Purge Regulator
- Quiet Exhaust muffler
- DUT Clamp, Light or Heavy Duty
- Extended Temperature Ranges
- Advanced Logging/Plotting
- Failsafe System with Valve
- Independent Safety Controller
- Adapter Plates
- Cryogenic Delivery Hoses
- Choice of DUT Sensors/Probes
- DUT Sensor Terminal Blocks
- Electrically Conductive Surface
- Hot /Cold Programmable LEDs
- Remote Valve Box
- 19 Inch Rack Mount

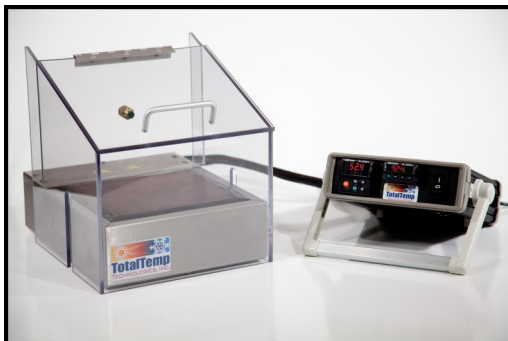
“Best in Test” Award Winning Temperature Controller The Synergy Nano 5th Generation Control

- Color LCD Touch Screen
- Thumb Drive Compatible or USB Mouse
- Dual Platform Control, Capable of Running Two Plates
- Ethernet 10/100, Serial Port and Optional GPIB
- Logging, Graphing, Printing and E-mail
- Expandable for Multiple External Sensors
- Selectable Resume Control Functions



The Award Winning Synergy Series was built from collaboration with OEMs, test labs, re-furbishers and end-users. Fully equipped with features and available options that are now an industry standard. It has enhanced the overall efficiency of environmental testing. **Synergy Nano Controllers** are tasked with thermal cycling, conditioning, thermal shock, vacuum testing and they provide dual-zone control. Continuous innovation has produced the ultimate Controller for mission-critical environmental test

Economical, Reliable Watlow Controller with Thermal Platform Systems



**Watlow EZ Zone PM Controller,
SD49 with Cover**

- Great Functionality at an Affordable Price
- PID Controller With a Large Display
- Programmable EZ (shortcut) Button
- Communication Protocol Options
- Built in Failsafe and Limit Features

The **Watlow EZ Zone PM Temperature Controller** is ideally suited for those applications where precise control and accuracy is still needed, but a simpler more cost effective solution is sufficient for the task.

— Either controller can be configured as an upgrade for other manufacturers systems —

Light Duty Single Point DUT Clamp System



Heavy Duty Clamp (HDC) Systems The Ultimate in Thermal Transfer Efficiency

The more tightly clamped two surfaces are together, the better heat transfer. It is especially important when transferring large amounts of heat from one device to another. The chart shows the thermal resistance decreases when an increase of pressure is applied.

Heavy Duty Clamp System

**1000 Pounds of
Transfer Force**



**Duty Two Point DUT
Clamp System**



Thermal Conductivity Improves With Force

