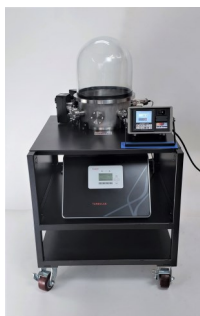




## PRODUCT DATA SHEET

# VmSD49-N



THERMAL PLATFORM VACUUM CHAMBER USED FOR PRECISION TEST (TVAC System)

INCLUDES: Complete Turbo Cart with vacuum release valve and user ports



### DESCRIPTION

TVAC systems increase understanding of how components and materials respond in a space simulated environments.

### PRODUCT INFORMATION

<b>Surface Dimensions / Area</b>	6.5 x .7.5 inch (16.5 x 19 cm)	49 Sq. Inches (315 Sq.cm)
<b>Surface Material</b>	Aluminum 6061 with no finish	Qty (5) 10-32 Threaded Holes
<b>External Dimensions / Max. Height</b>	Cart 30 x 28 x 30 Inches (L x W x H)	With Bell Jar Approx. 49 Inches overall
<b>Chassis Material / Finish</b>	Steel Cart / Stainless Steel Chamber	Powder Coat / Mechanically Polished
<b>Approximate Weight</b>	350 lbs. (159kg)	Packed in a crate
<b>Ultimate Pressure</b>	1x10 <sup>-6</sup> Torr	Pump Speed 290 Liters Per Second
<b>Temperature Range</b>	-65 to 175°C	Extended Range and Hot Only available
<b>Heating Rate</b>	6 - 30 °C/Min Wattages Varies	Wattage can be specified
<b>Cooling Rate</b>	8 - 30°C/Min	Coolant can be specified
<b>Temperature Controller Options</b>	<a href="#">Synergy Nano</a> Color Touchscreen	<a href="#">Watlow PM6</a> Alternate Economy Model

### FACILITY REQUIREMENT

Power requirements may vary. Most common heater arrangement requires a dedicated 120 Volt 15 Amp circuit.

Coolant: High Pressure L-N<sub>2</sub> 75-125 psi is the standard coolant supplied using Dewars. Low Pressure L-N<sub>2</sub> is available upon request.

L-CO<sub>2</sub> 300 psi or 900 psi is available upon request, recommended for infrequent cooling requirements.

For information on models that are cooled using mechanical refrigeration, please consult the factory.

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## Space Simulation Options, Accessories & Replacement Parts



Pyrex Bell Jar



Bell Jar Cage

L Gasket for Bar Jar Seal



Vacuum Rated Grease



Copper O Rings & Related Hardware

Greatly reduces the noise level of coolant being spent by a Thermal Platform



Custom Vacuum Capable **SD49**  
6.5" x 7.5" Test Surface  
There are other Sizes Available



14-0010 **Super Quiet Muffler (SQM)**

Comes with six feet of exhaust hose



**Coolant Delivery Hoses** For Use With Cryogenic Fluids Pressure Relief Valve for added safety



Ultra High Vacuum CF Flanged Feed Thru with



28-00101 **Data logger** with 16 Channel Type T Thermocouple Temperature Sensors

## Temperature Controller Choices

The (A) Synergy Nano Benchtop chamber controller has a Color LCD touch screen Easy to use, with on-screen graphing capability, logging, multi sensor, multi conditional outputs, very descriptive menus, GPIB optional and free drivers. [More on the Synergy Nano](#)

(B) Watlow PM6 is a very robust, economical temperature controller

More on TotalTemp [Technology Controllers](#) and [Controller Accessories](#)



(A)



(B)

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