

## SmallSAT Thermal Vacuum Systems

Introducing Dynavac's family of SmallSAT Thermal Vacuum Systems, the ideal test solution for small space-bound devices. Our systems ensure the survivability of your device through the most extreme conditions of flight, providing you with the confidence that your technology will perform flawlessly.

- **Vacuum Chambers:** Dynavac's renowned craftsmanship sets the highest quality standards for chamber construction, protecting your investment for years to come.
- **Robust Pumping Systems:** Our systems provide the most efficient and cost effective solutions for high vacuum pumping. Various combinations of mechanical pumps, turbopumps, and cryopumps ensure pressures down to  $1 \times 10^{-6}$  Torr.
- **Thermal Control:** With two options for thermal control, you can replicate low-earth orbit to the extreme temperatures of deep space. In combination with our shroud and platen designs, we provide an effective method for conditioning test articles.
- **Simplistic Operation:** Designed for ease of use, our systems require minimal setup to perform a complete thermal vacuum test with confidence.
- **Unmatched Quality and Performance:** Every system is backed by the Dynavac brand of quality and customer commitment, ensuring support when you need it.



### System Models:

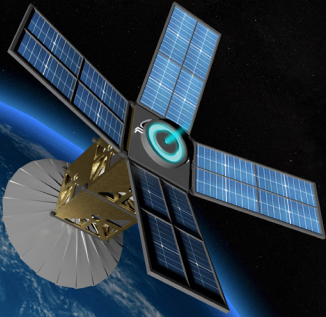
Dimensions (w x d x h)			
Model	Chamber Dimensions	Working Volume w/platen only	Working Volume w/platen & shroud
1200	12" x 12" x 12"	10" x 10" x 8"	N/A
2400	24" x 24" x 24"	24" x 24" x 20"	20" x 20" x 18"
3600	36" x 36" x 36"	36" x 36" x 30"	27" x 30" x 28"

Creating the environment for your mission success

*From Dynavac, the most respected name in space simulation systems*

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# SPECIFICATIONS



## Thermal Control Options

Liquid nitrogen with electric heaters (LN2 Models)	-180°C to 150°C
Closed loop chiller (MR-1 Models):	-70°C to 80°C
Closed loop chiller upgrade (MR-2 Models)	-70°C to 150°C

Vacuum Chamber	Stainless steel construction, hinged door with 4" viewport, supported on mobile frame
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Pumping system	Base Pressure: 1 x 10 <sup>-6</sup> Torr* w/ dry mechanical pump, turbomolecular pump, chamber repressurization system *Operation with optional scavenger panel
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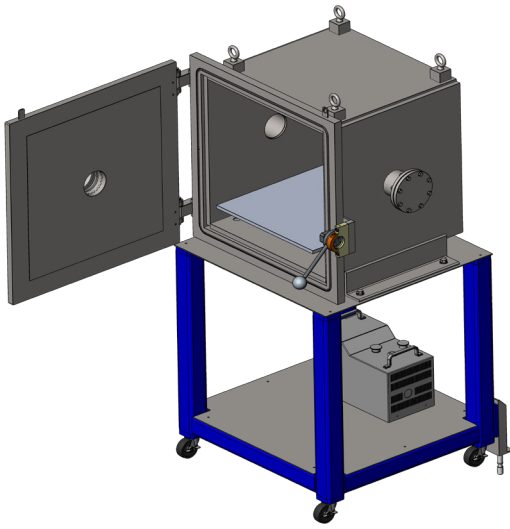
Platen	Aluminum construction with mounting holes
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Shroud	Aluminum construction, optically dense enclosure, interior painted with solar absorbing paint
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Spare ports	(2) ISO100 CF 2.75" Additional ports upon request
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System control	On-board controllers for pumping and thermal system operation <ul style="list-style-type: none"><li>Automatic system pumpdown</li><li>Thermal control with recipe profile capabilities</li><li>Thermal platen/shroud temperature readings</li></ul>
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Options and Upgrades	Cryopump Scavenger panel for enhanced water-vapor pumping TC Data Acquisition System Installation, startup, and training Annual maintenance contracts
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## Why Choose Dynavac?

With over 40 years of experience and a reputation for excellence, Dynavac thermal vacuum systems are trusted by aerospace organizations worldwide. Our commitment to innovation and quality ensures that you receive the best testing solutions for your spacecraft.



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