Leybold

UNIVEX S TC 600

Turnkey Thermal-Vacuum System Engineered for Space

Applications

- CubeSat (1U–3U) subsystem testing (e.g., power boards, antennas)
- Outgassing tests for materials, adhesives, and coatings (per ASTM E595)
- Thermal cycling of small electronic PCBs and sensors
- Vacuum bake-out of precision components prior to integration
- Testing optical assemblies like star tracker lenses or filters
- Development and validation of miniaturized thermal control systems
- IR sensor calibration or small detector array characterization

Target Industries

- Satellite Manufacturing & Aerospace
- Defense & National Labs
- Universities & Research Institutes
- Photonics & Optoelectronics
- Advanced Materials & Electronics
- Battery Manufacturing

UNIVEX S TC 600

Features

■ Chamber: 24" Cube 304 stainless steel vacuum chamber - (11) QF40 ports and (1) ISO LF100 Port.

■ Vacuum Pumps and Gauging:

■ High vacuum pump – TURBOVAC 950i: 1000 l/s turbomolecular pump |Oil-free hybrid bearing system

■ Fore-vacuum pump – ECODRY 35 Plus: Multistage roots pump | 35 m^3/h | Oil-free pump

■ HV pressure gauging – IONIVAC Combined Transmitter ITR 90: Dual filament system combining the hot cathode ionization and the Pirani sensor |Range: 1,000 mbar to 5 ×·10^{-10} mbar

■ Thermal Platen: top side with threaded holes for sample fixation (100 M5, 50 mm x 50 mm off center pattern) | Made of Stainless steel |Dimension: 560 x 550 mm | Temperature range: 150°C to -50°C

■ Electrical Cabinet: Contains the power supply stage along with the advanced PLC controls | Includes the Mains switch, enable function and the PLC with touchscreen HMI control.

■ iPC with Full System Control: Industrial PC (iPC) with fully integrated PLC controls |Includes a 160 GB hard drive, 4 GB DDR3-RAM, and a Windows 7 Professional operating system.

■ Software: Front end software is built upon the above iPC | Software includes consolidated display and control of the tools on the system, including the pumping system, pressure gauges, platen temperature | Supports remote diagnostics and troubleshooting

Leybold

Pioneering products. Passionately applied.