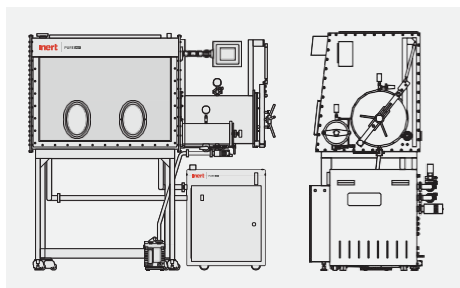




PureLab HE glovebox systems are our premium line, designed specifically for production and research applications.

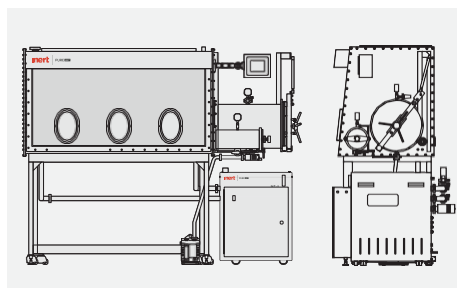
Built on a flexible platform, PureLab HE allows customization and integration of processes for maximum efficiency and protection from O<sub>2</sub> and H<sub>2</sub>O < 1ppm.

### PURELAB HE 2GB



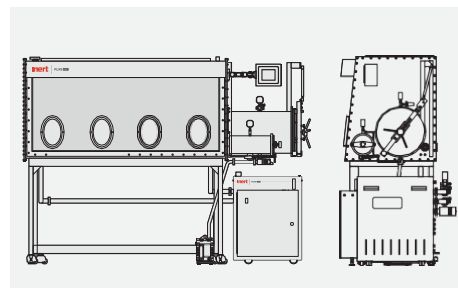
**Internal Dimensions:**  
1250 mm W x 780 mm D x 900 mm H  
**External Dimensions:**  
2000 mm W x 1067 mm D x 1921 mm H

### PURELAB HE 3GB



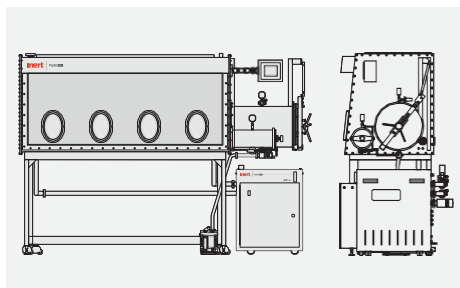
**Internal Dimensions:**  
1500 mm W x 780 mm D x 900 mm H  
**External Dimensions:**  
2315 mm W x 1067 mm D x 1921 mm H

### PURELAB HE 4GB 1800



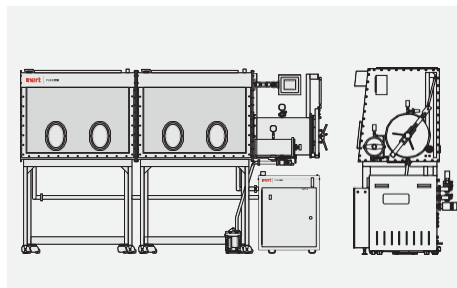
**Internal Dimensions:**  
1800 mm W x 780 mm D x 900 mm H  
**External Dimensions:**  
2595 mm W x 1067 mm D x 1921 mm H

### PURELAB HE 4GB 1950



**Internal Dimensions:**  
1950 mm W x 780 mm D x 900 mm H  
**External Dimensions:**  
2741 mm W x 1067 mm D x 1921 mm H

### PURELAB HE 4GB 2500



**Internal Dimensions:**  
2500 mm W x 780 mm D x 900 mm H  
**External Dimensions:**  
3218 mm W x 1067 mm D x 1921 mm H

### DESIGN OPTIONS

- Double Sided Access
- Left or Right Sided Antechambers
- Through Flow Antechambers
- Laminar Flow
- Circular Glove Ports
- Safety Glass Window
- Dry Vacuum Pump
- PureSolv MD Integration

## SPECIFICATIONS

**Internal Finish:** Type 304 stainless steel, #4

**External surfaces:** RAL 9011 (Graphite Black)

**Wall thickness: 0.105" (2.6mm)**

**Feedthrough:** DN 40 ISO-KF blank and 3/8" compression bulkhead, 1 each 2GB, 3GB, and 2 each 4GB

**Internal Power:** Electrical feedthrough, fuse protected 6 outlet power strip

**Shelving:** 3 x Height adjustable 304 stainless steel #4 finish

**Plumbing:** 304 stainless steel tubing

**Filters:** 1 x Inlet/ 1 x Outlet HEPA (99.99% vs 0.3 micron MPPS)

**Lighting:** External LED light

**Power requirements:** 100 VAC 50/60 Hz, 110-120 VAC 60 Hz, 200-240 VAC 50 Hz

**Overall System Leak Rate:** <0.05 vol%/h (ISO 10648-2)

### Modular box design

**Large Antechamber, 15" (381mm) internal diameter x 24" (609mm) internal length**

**Bolt on left or right side**

**Internal tray:** 304 stainless steel #4 surface finish

**Automatic control:** Evacuate/refill 1-9 Cycles

**Leak rate:** <10<sup>-5</sup> mbar l/s

**Small Antechamber, 6" (152mm) internal diameter x 17.3" (441mm) internal length**

**Internal tray:** 304 stainless steel #4 surface finish

**Manual evacuate/refill valve**

**Leak rate:** <10<sup>-5</sup> mbar l/s

**Polycarbonate window 3/8" (9.5 mm) thick.**

**Oval glove ports:** Black Delrin, 8" glove port

Internal glove port cover

0.0015" (0.4mm) thick butyl rubber gloves, hand size 9.75

### PureLab HE Gas Management System

Purifier, recirculates, and analyzes inert atmosphere, available as single and dual column system, with and without external solvent removal

**<1ppm O<sub>2</sub> and <1ppm H<sub>2</sub>O purity level**

O<sub>2</sub> capacity = 43 L purifier column

H<sub>2</sub>O capacity = 1800 g per purifier column

**Variable speed circulation blower:** 60 cfm max flow rate blower

**Siemens SIMATIC S7-1200 PLC control system**

**Siemens KTP800 7" (177.8 mm) color touch screen HMI**

**Automatic pressure control:** (+/- 15 mbar)

**Manual pressure control:** Footswitch

**Fully automatic regeneration sequence.**

**Auto Purge valve:** O<sub>2</sub> level, Timer or manually controlled

**Vacuum pump:** 10 cfm (17 m<sup>3</sup>/h) rotary vane pump with oil mist eliminator & oil return kit

**Integrated oxygen analyzer:** Range 0-1000 ppm  
EOS-2 analyzer, Electrochemical

**Integrated moisture analyzer:** Range 0-1000 ppm

### Eco Mode Features

**Vacuum pump timer:** Shuts pump off for energy reduction

**Automated Blower speed control:** O<sub>2</sub> level adjusts blower speed

**Approvals:**



## OPTIONS

- 0-1000ppm Zirconia EOS-1 Analyzer
- 0-25% Zirconia Oxygen Analyzer EOS-3
- 0-25% Electrochemical Oxygen Analyzer EOS-4
- 0-1000ppm Moisture Analyzer
- 0-25% Helium in Argon Analyzer
- 0-25% Helium in Nitrogen Analyzer
- Vacuum Pumps
- Solvent Removal
- Rectangular Freezer: -35°C  
Internal Volume = 20L (40L available)
- Custom Coldwell
- Numerous Antechamber Options
- Thermoelectric Box Cooling System +  
air conditioner
- Heat Exchanger
- Dry Scroll Pump
- Vacuum Ovens
- Solvent Purification Systems
- Microscope Systems
- Custom Shelving
- Electrical Feedthroughs
- Fiberoptic Feedthroughs
- RS-232/USB/Ethernet Feedthroughs
- Quartz Window for Solar Simulator Testing
- Optical View Ports for Laser Spectroscopy
- Vacuum/Gas Feedthroughs
- Custom Feedthroughs
- Door Interlocks
- Automated Doors
- Vacuum Cleaner
- Safety Glass Window
- Evaporation System Integration
- Quick Release Window System
- Glove port Covers
- Static Eliminator- Benchtop Style
- Static Eliminator- Ceiling Mounted
- Binding Posts/BNC
- Anti-vibration Table

## SYSTEM APPLICATIONS

- Additive (3D) Manufacturing
- Aerospace
- Automotive
- Chemistry
- Lamp Manufacturing
- Lithium Ion Battery
- Medical Device
- Nuclear
- OLED
- Pharmaceutical
- Semiconductor
- Solar
- Specialty Chemical
- Thin Film
- Many other applications