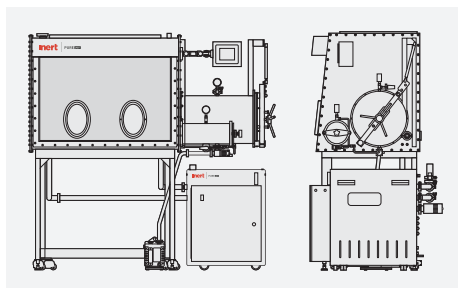# inert

QUALITY YOU CAN COUNT ON.

PureLab High Efficiency (HE) is our premium line of gloveboxes, designed specifically for production and research applications.
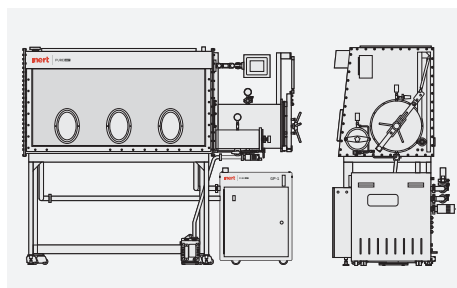
Time management and maximum efficiency are crucial, so this line is fully automated and is our most flexible platform, allowing for easy integration of OEM equipment.
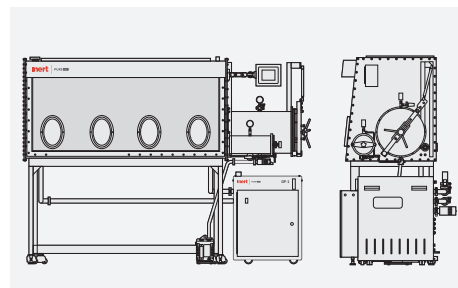
PURELAB HE 2GB

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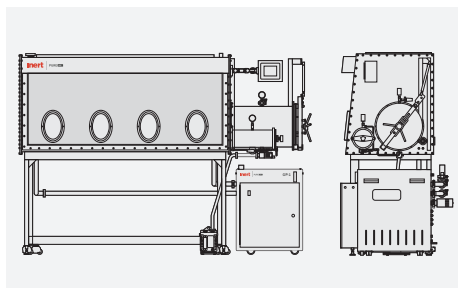**External Dimensions:**
2000 mm W x 1067 mm D x 1921 mm H

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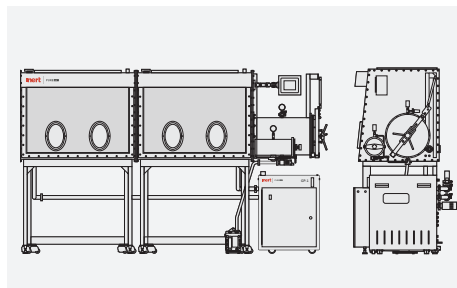
Internal Dimensions:
2500 mm W x 780 mm D x 900 mm H
External Dimensions:
3218 mm W x 1067 mm D x 1921 mm H

DESIGN OPTIONS

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

SPECIFICATIONS

Internal Finish: Type 304 stainless steel, #4

External surfaces: RAL 7035

Wall thickness: 0.105" (2.6 mm)

Feedthrough: DN 40 ISO-KF blank and 3/8" compression bulkhead

Internal Power: Electrical feedthrough

Internal Power: 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 Fluorescent light

Power: 100-120 or 200-240 VAC 50/60 Hz 20 Amp

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

Modular box design

Large Antechamber, 15" (381 mm) internal diameter x 24" (609 mm) 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: $< 10^{-5}$ mbar l/s

Small Antechamber, 6" (152 mm) internal diameter x 17.3"(441 mm) internal length
    Internal tray: 304 stainless steel #4 surface finish
    Manual evacuate/refill valve
    Leak rate: $< 10^{-5}$ mbar l/s

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

Oval glove ports: Black Delrin, 8" glove port
    Internal glove port cover
    0.015" (0.4mm) thick butyl rubber gloves, hand size 9.75

PureLab HE Gas Management System
    Purifies, recirculates, and analyzes inert atmosphere, available as single and dual column system, with and without external solvent removal

<1ppm O_2 and <1ppm H_2O purity level
    O_2 capacity = 43 L per purifier column
    H_2O capacity = 1800 g per purifier column

Variable speed circulation blower: 120 cfm max flow rate blower

Siemens SIMATIC S7-1200 PLC control system

Siemens KTP700 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_2 Level, Timer or manually controlled

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

Integrated oxygen analyzer: Range 0-1000 ppm
    EOS-2 analyzer

Integrated moisture analyzer: Range 0-1000 ppm

Eco Mode Features
    Vacuum pump timer: Shuts pump off for energy reduction
    Automated Blower speed control: O_2 level adjusts blower speed

Approvals:
CE ETL SA

OPTIONS

- 0-1000 ppm EOS-1 Analyzer
- 0-25% Zirconia Oxygen Analyzer
- 0-1000ppm Moisture Analyzer
- 0-25% Helium in Argon Aanalyzer
- 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
- Heat Exchanger
- Dry Scroll Pump
- Vacuum Ovens
- Solvent Purification Systems
- Microscope Systems
- Custom Shelving
- Electrical Feedthroughs
- Fiberoptic Feedthroughs
- RS-32/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
- Polycarbonate Window
- Evaporation System Integration
- Quick Release Window System
- Gloveport Covers
- 250°C Hot Plates
- Static Eliminator - Benchtop Style
- Inkjet Printers
- Probe Stations
- UV Ozone Cleaners
- Static Eliminator - Ceiling Mounted
- Optical View Ports for Laser Spectroscopy
- Binding Posts

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