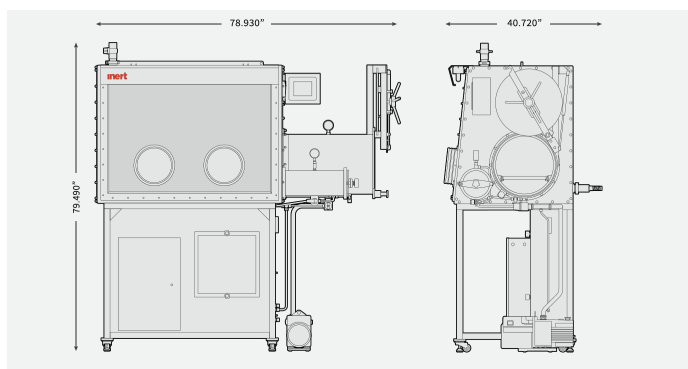




Inert's line of I-Lab glovebox Systems are designed as an economical solution for inert research applications. As with all our gloveboxes, I-Lab gloveboxes are manufactured using the industry's finest components from globally recognized manufacturers.

I-LAB 2GB



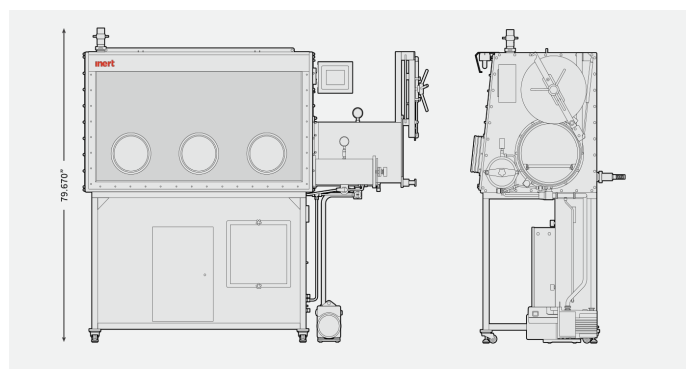
Internal Dimensions:

1213 mm W x 764 mm D x 897 mm H

External Dimensions:

2005 mm W x 1034 mm D x 2024 mm H

I-LAB 3GB



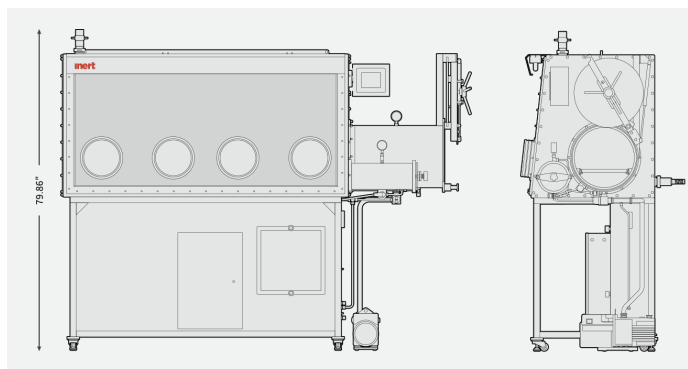
Internal Dimensions:

1524 mm W x 764 mm D x 897 mm H

External Dimensions:

2316 mm W x 1034 mm D x 2024 mm H

I-LAB 4GB



Internal Dimensions:

1803 mm W x 764 mm D x 897 mm H

External Dimensions:

2595 mm W x 1034 mm D x 2024 mm H

DESIGN OPTIONS

- Left Sided Antechambers
- Oval Glove Ports
- Safety Glass Window
- Dry Vacuum Pump
- PureSolv Integration

SPECIFICATIONS

Internal Finish: Type 304 stainless steel, #4

External surfaces: RAL 9011 (Graphite Black)

Wall thickness: 0.105" (2.6mm)

Feedthrough: 4 X DN 40 ISO-KF blank

Internal Power: 1 X electrical feedthrough, 1 X fuse protected 6 outlet power strip

Shelving: 2 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: 100-120 or 200-240 VAC 50/60 Hz 20 Amp

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

Non-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

Manual evacuate/refill valves

Leak rate: <10⁻⁵ mbar l/s

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

Manual evacuate/refill valves

Leak rate: <10⁻⁵ mbar l/s

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

circular glove ports

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

I-Lab Gas Management System:

Single column system purifiers, recirculates, and analyzers inert atmosphere

<1ppm O₂ and <1ppm H₂O purity level

O₂ capacity =43 L

H₂O capacity = 1800 g

Variable speed circulation blower: 60 cfm max flow rate blower

Siemens SIMATIC S7-1200 PLC control system

Siemens KTP400 4" (101.6 mm) color touch screen HMI

Automatic pressure control: (+/- 15 mbar)

Manual pressure control: Footswitch

Fully automatic regeneration sequence.

Manual purge valve

Vacuum pump: 10 cfm (17 m³/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: O₂ level adjusts blower speed

Approvals:



OPTIONS

- 0-1000ppm EOS-1 Analyzer
- 0-25% Zirconia Oxygen Analyzer
- 0-1000ppm Moisture Analyzer
- Auto Purge Valve
- Solvent Removal
- Rectangular Freezer : -35°C
Internal Volume = 20L (40L available)
- Coldwell
- Heat Exchanger
- Dry Scroll Pump
- Electrical Feedthroughs
- Fiberoptic Feedthroughs
- RS-232/USB/Ethernet Feedthroughs
- Heated antechamber
- BNC
- Solvent Purification Systems
- Microscope Systems-Internal and Window Mounted
- Vacuum/Gas Feedthroughs
- Custom Feedthroughs
- Numerous Glove Options - Material, Thickness, Hand Size
- Static Eliminator (Benchtop Style)

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