



STANDARD GLOVEBOX WORKSTATIONS







The LABstar workstation is a ready to operate high quality glovebox system that meets your specific application requirements. The LABstar features an intelligent micro controller with color touch screen monitor, large main antechamber, adjustable shelving, and vacuum pump. Other standard features include a manual box purge valve, high vacuum feedthroughs, and an automatic regenerable oxygen and moisture single reactor column inert gas purification system that purifies the glovebox atmosphere to levels of less than 1 ppm oxygen and moisture. Optional *ECO* mode operation is available November 2013!

UNITab PLUS

WORKSTATION

The UNIIab PLUS workstation is the next step up from the LABstar workstation in the MBRAUN standard glovebox line. The UNIIab PLUS is a ready to operate high quality glovebox system that features a large main antechamber, vacuum pump, and an intelligent micro controller with a large color touch screen monitor. Other features include a manual box purge valve, integrated high vacuum feedthroughs, and an automatic regenerable oxygen and moisture inert gas purification systems with single or double reactor column purification of the glovebox atmosphere to levels of less than 1 ppm oxygen and moisture. Optional *ECO* mode operation is available.

UNI ab PRO

WORKSTATION

The UNIlab PRO workstation offers additional features compared to the UNIlab PLUS workstation. Features include a ready to operate high quality modular glovebox with a large main antechamber, vacuum pump, and an intelligent micro controller with large color touch screen monitor. Other standard features of the UNIlab Pro include a manual box purge valve, integrated high vacuum feedthroughs, and an automatic regenerable oxygen and moisture inert gas purification systems with single or double reactor column purification of the glovebox atmosphere to levels of less than 1 ppm oxygen and moisture. Optional *ECO* mode operation is available.

LABmaster PRO

WORKSTATION

The LABmaster PRO workstation offers additional features and benefits compared to the UNIIab and LABstar workstations. The LABmaster is the top of the line modular workstation featuring a modular workspace, large main antechamber, vacuum pump, and a PLC controller with large color touch screen monitor. Other features include an automated box purge valve, high vacuum feedthroughs, and an automatic regenerable oxygen and moisture gas purification systems with single or double reactor column purification of the glovebox atmosphere to levels of less than 1 ppm oxygen and moisture. Optional *ECO* mode operation is available.



LABstar Standard Features:

- Intelligent micro controller
- Color touch screen monitor
- Large main antechamber
- Three glovebox sizes available
- Vacuum pump
- Automatic regeneration H₂O/O₂ single column inert gas purifier
- · Integrated high vacuum feedthroughs
- · Stainless steel adjustable shelving
- Stainless steel piping



UNIIab PLUS Standard Features:

- Intelligent micro controller
- Color touch screen monitor
- Large main antechamber
- Three glovebox sizes available
- Vacuum pump
- Automatic regeneration H₂O/O₂ single (SP) (optional double (DP) column inert gas purifier)
- Manual box purge valve
- Integrated high vacuum feedthroughs
- · Stainless steel adjustable shelving
- Stainless steel piping



UNIIab PRO Standard Features:

- · A variety of modular glovebox sizes available
- Intelligent micro controller
- Color touch screen monitor
- · Large main antechamber
- Vacuum pump
- Automatic regeneration H₂O/O₂ single (SP) (optional double (DP) column inert gas purifier)
- Manual box purge valve
- · Integrated high vacuum feedthroughs
- · Stainless steel adjustable shelving
- Stainless steel piping



- Vacuum pump
- Automatic regeneration H₂O/O₂ single (SP) (optional double (DP) column inert gas purifier)
- Heat Exchanger
- Sensors
- Automated box purge valve
- Integrated high vacuum feedthroughs
- Stainless steel adjustable shelving
- · Stainless steel piping







MBRAUN GLOVEBOX WORKSTATIONS

LABstar Pro Workstation

MBRAUN GLC	DVEBOX WORKSTATIONS	LABstar Pro Workstation	
Glovebox	Sizes (Internal Workspace)	1200 mm (L) x 780 mm (D) x 920 mm (H) 1450 mm (L) x 780 mm (D) x 920 mm (H) 1950 mm (L) x 780 mm (D) x 920 mm (H)	
	• Controller	Intelligent Micro Controller w/ 7" Color Touch Screen Monitor	
	• Dust Filter (0.3 µm)	(1) Gas Inlet, (1) Gas Outlet, Class H13	
	Operation	Closed Loop Recirculation	
	• Gloves	⁽¹⁾ Butyl .4 mm Thick	
	Glove Port (Oval Ports Available)	POM 220 mm Diameter	
	Box Light	Fluorescent Front Mounted Lamp	
	Stainless Steel Shelving	(3) 1000 mm Length x 220 mm Depth	
	Feedthroughs	DN 40 KF Ports and Electrical Ports	
	Leak Rate (Oxygen method according to ISO 10648-2)	⁽³⁾ <0.05 vol%h Typical (Class 1)	
Large Antechamber	• Type	(4) Cylindrical w/ Stainless Steel Sliding Tray	
	Size (Inside Dimensions)	390 mm Diameter x 600 mm Length	
	Evacuation & Refill	Manual Operation	
	Leak Rate	<10 ⁻⁵ mbar l/s	
Inert Gas Purification	Inert Gas Purification	Single Column Gas Purifier Unit	
	Attainable Purity	H ₂ O < 1 ppm, O ₂ < 1 ppm	
	Vacuum Pump (Dry Pump Available)	⁽⁵⁾ 10 cfm Rotary Vane Pump (12 m³/h)	
	Regeneration	Auto Regeneration	
	Capacity Per Reactor	$^{(5)}$ 14 l O $_2$ Removal & 700 g H $_2$ O Removal	
	Box Pressure	Automatic Box Pressure Control w/ Foot Switch (+15 mbar, -15 mbar)	
	Flow Rate	⁽⁵⁾ up to 22 m³/h	
	• Piping	Stainless Steel 1.4301 (US Type 304)	
Optional Features	Freezer or Box Cooling	Available	
	Oxygen, Moisture, and Solvent Sensors	Available	
	Solvent Vapor Removal (Internal and External)	Available	
	Regenerable Solvent Vapor Removal	Not Available	
	Double Purifier (DP) Reactor Columns	Not Available	
	• ECO Mode Operation	Available November 2013!	
	Mini Antechamber	Available	
	Timed Control Antechamber Purge	Available	
	Fully Automatic Antechamber Purge	Not Available	
	Automatic Antechamber Doors	Not Available	
	Antechamber Door Interlock	Not Available	
	Auto Box Purge Valve	Available	
	Recirculation Chiller	Not Available	
	Heat Exchanger	Not Available	
	• (2) Box Operation	Not Available	
	Data Logging	Available	
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(1.) A variety of gloves (Hypalon, Neoprene and Butyl) and thickness sizes are available upon request. (2.) Double sided gloveboxes include 2 hanging shelves. Additional shelving options are available. (3.) < 0.05 vol%/h at negative pressure



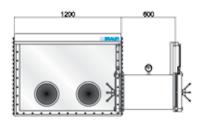


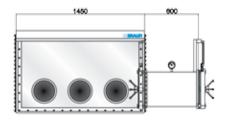


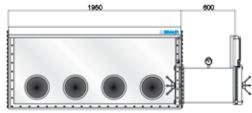
UNIIab PRO Workstation LABmaster PRO Workstation

UNITAD PLUS WORKStation	UNIIAD PRO WOLKStation	LABINASIEI PRO WORKSIALION
1200 mm (L) x 780 mm (D) x 920 mm (H) 1450 mm (L) x 780 mm (D) x 920 mm (H) 1950 mm (L) x 780 mm (D) x 920 mm (H)	Lengths: 1250 mm, 1500 mm, 1800 mm, 2000 mm Depths: 780 mm, 1000 mm, 1200 mm Height: 900 mm	Lengths: 1250 mm, 1500 mm, 1800 mm, 2000 mm Depths: 780 mm, 1000 mm, 1200 mm Height: 900 mm Modular Sizes
Intelligent Micro Controller w/ 7" Color Touch Screen Monitor	Intelligent Micro Controller w/ 7" Color Touch Screen Monitor	PLC Controller w/ 7" Color Touch Screen Monitor
(1) Gas Inlet, (1) Gas Outlet, Class H13	(1) Gas Inlet, (1) Gas Outlet, Class H13	(1) Gas Inlet, (1) Gas Outlet, Class H13
Closed Loop Recirculation	Closed Loop Recirculation	Closed Loop Recirculation
⁽¹⁾ Butyl .4 mm Thick	⁽¹⁾ Butyl .4 mm Thick	⁽¹⁾ Butyl .4 mm Thick
POM 220 mm Diameter	POM 220 mm Diameter	POM 220 mm Diameter
Fluorescent Front Mounted Lamp	Fluorescent Front Mounted Lamp	Fluorescent Front Mounted Lamp
(3) 1000 mm Length x 220 mm Depth	(2)(3) 1000 mm Length x 220 mm Depth	⁽²⁾ (3) 1000 mm Length x 220 mm Depth
DN 40 KF Ports and Electrical Ports	DN 40 KF Ports and Electrical Ports	DN 40 KF Ports and Electrical Ports
⁽³⁾ <0.05 vol%h Typical (Class 1)	⁽³⁾ <0.05 vol%h Typical (Class 1)	⁽³⁾ <0.05 vol%h Typical (Class 1)
⁽⁴⁾ Cylindrical w/ Stainless Steel Sliding Tray	(4) Cylindrical w/ Stainless Steel Sliding Tray	(4) Cylindrical w/ Stainless Steel Sliding Tray
390 mm Diameter x 600 mm Length	390 mm Diameter x 600 mm Length	390 mm Diameter x 600 mm Length
Manual Operation	Manual Operation	Manual & Optional Push Button
<10 ⁻⁵ mbar l/s	<10 ⁻⁵ mbar l/s	<10 ⁻⁵ mbar l/s
Single Purifier (SP) / Double Purifier (DP)	Single Purifier (SP) / Double Purifier (DP)	Single Purifier (SP) / Double Purifier (DP)
H ₂ O < 1 ppm, O ₂ < 1 ppm	H ₂ O < 1 ppm, O ₂ < 1 ppm	H ₂ O < 1 ppm, O ₂ < 1 ppm
⁽⁵⁾ 10 cfm Rotary Vane Pump (12 m³/h)	⁽⁵⁾ 10 cfm Rotary Vane Pump (12 m³/h)	⁽⁵⁾ 10 cfm Rotary Vane Pump (12 m³/h)
Auto Regeneration w/ Auto Restart Feature	Auto Regeneration w/ Auto Restart Feature	Auto Regeneration w/ Auto Restart Feature
⁽⁵⁾ 36 I O ₂ Removal & 1300 g H ₂ O Removal	⁽⁵⁾ 36 I O₂ Removal & 1300 g H₂O Removal	⁽⁵⁾ 36 I O ₂ Removal & 1300 g H ₂ O Removal
Automatic Box Pressure Control w/ Foot Switch (+15 mbar, -15 mbar)	Automatic Box Pressure Control w/ Foot Switch (+15 mbar, -15 mbar)	Automatic Box Pressure Control w/ Foot Switch (+15 mbar, -15 mbar)
⁽⁵⁾ up to 88 m³/h	⁽⁵⁾ up to 88 m³/h	⁽⁵⁾ up to 88 m³/h
Stainless Steel 1.4301 (US Type 304)	Stainless Steel 1.4301 (US Type 304)	Stainless Steel 1.4301 (US Type 304)
Available	Available	Available
Not Available	Not Available	Available
Not Available	Not Available	Available
Available	Available	Available
Available	Available	Available
Available	Available	Included
Available	Available	Available
Available	Available	Available
of 10 mbar at constant temperature (4.) Square antechamber, L-chamber and T-c	hamber designs are available. (5.) Technical Note: Dependent upon operating condition	n. For details refer to http://www.mbraun.com/knowledge center

LABSTATION WORKSTATION







1200 mm (L) x 780 mm (D) x 920 mm (H)

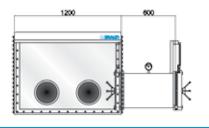
1450 mm (I) x 780 mm (D) x 920mm (H)

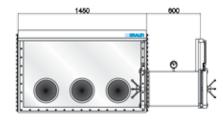
1950 mm (L) x 780 mm (D) x 920 mm (H)

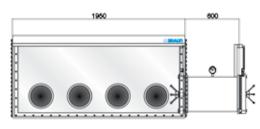
Weight = 400 kg / 600 kg

UNITAD PLUS

WORKSTATION







1200 mm (L) x 780 mm (D) x 920mm (H)

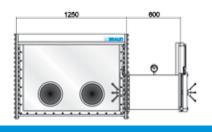
1450 mm (L) x 780 mm (D) x 920mm (H)

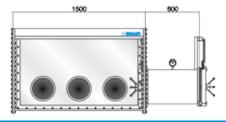
1950 mm (L) x 780 mm (D) x 920 mm (H)

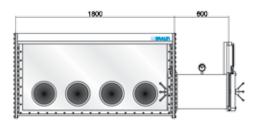
Weight = 400 kg / 600 kg

UNI ab PRO

MODULAR WORKSTATION







1250 mm (L) x 780 mm (D) x 900 mm (H)

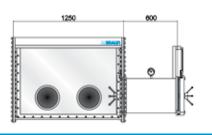
1500 mm (L) x 780 mm (D) x 900 mm (H)

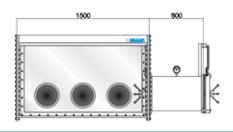
1800 mm (L) x 780 mm (D) x 900 mm (H)

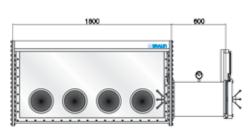
Weight = 400 kg / 600 kg

LABmaster PRO

MODULAR WORKSTATION



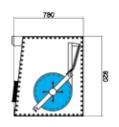




1250 mm (L) x 780 mm (D) x 900 mm (H)

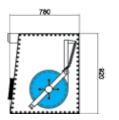
1500 mm (L) x 780 mm (D) x 900 mm (H)

1800 mm (L) x 780 mm (D) x 900 mm (H)



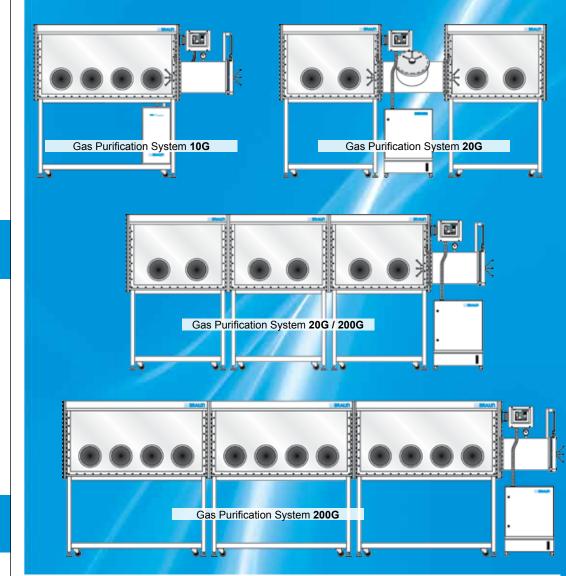
Volume:

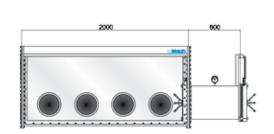
 $1250 (L) = 0.8 \text{ m}^3$ $1450 (L) = 1.0 m^3$ 1950 (L) = 1.4 m^3



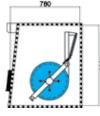
Volume:

 $1250 (L) = 0.8 \text{ m}^3$ 1450 (L) = 1.0 m³1950 (L) = 1.4 m³





2000 mm (L) x 780 mm (D) x 900 mm (H)



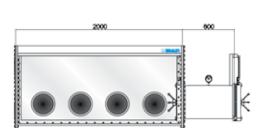
Volume:

Volume:

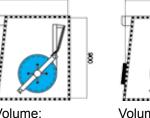
 $1250 (L) = 0.8 \text{ m}^3$ 1250 (L) = 1.0 m³ 1500 (L) = 1.0 m^3 1500 (L) = 1.2 m^3 1800 (L) = 1.2 m³ $1800 (L) = 1.5 \text{ m}^3$ 2000 (L) = 1.4 m^3 2000 (L) = 1.8 m^3

Volume:

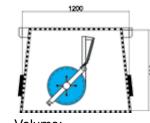
1250 (L) = 1.2 m^3 1500 (L) = 1.5 m^3 1800 (L) = 1.8 m³ 2000 (L) = 2.1 m^3



Volume:



Volume:



Volume:

1250 (L) = 0.8 m^3 1250 (L) = 1.0 m³1250 (L) = 1.2 m³ $1500 (L) = 1.5 \text{ m}^3$ 1500 (L) = 1.0 m³ $1500 (L) = 1.2 \text{ m}^3$ 1800 (L) = 1.2 m^3 $1800 (L) = 1.5 m^3$ 1800 (L) = 1.8 m^3 2000 (L) = 1.4 m³2000 (L) = 1.8 m³ $2000 (L) = 2.1 \text{ m}^3$

2000 mm (L) x 780 mm (D) x 900 mm (H)

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