

## UNIIabpro

#### **INERT GAS GLOVEBOX WORKSTATION**



- Stainless steel enclosure with polycarbonate window
- Modular box design for easy extension
- Removal of oxygen and moisture, <1 ppm</li>
- PLC M. Braun controller with large color touch panel
- Simultaneous purification and regeneration with DP version
- Closed loop recirculation
- Negative and/or positive pressure operation
- Large antechamber with sliding tray
- Foot pedal switch for temporary pressure adjustment
- ECO Mode operation feature available
- Live monitoring of your glovebox data with myMBRAUN Application
- Optional control and safety features available

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#### **GLOVEBOXES AND ACCESSORIES**







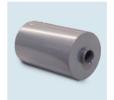
Feedthroughs



Microscopes



Oxygen, moisture and solvent sensor



Internal solvent vapor



Mini-antechamber



External solvent vapor removal, regenerable

GLOVEBOX TECHNICAL	DATA
Type of construction	Modular box with screwed in flanged side panels
Material	Stainless steel (US 304, 1.4301)
Inside lengths	1250 / 1500 / 1800 / 2000 mm
Inside depth	Single sided: 780mm, Double sided: 1000 or 1200 mm
Inside height	900 mm
Leak rate	< 0.05 Vol%/h
Inside surface	Brushed finish Ra 1.2 $\mu$ m
Outside surface	Coated, white (RAL 9003)
Window	Scratch resistant polycarbonate window
Glove ports	POM, 220 mm diameter, O-ring sealed
Gloves	Butyl, thickness 0.4 mm
Light	Fluorescent lamp
Feedthroughs	4 / 5 DN40KF flanges (depending on the box depth)
Electrical feedthrough	1
Dust filter	HEPA H13 in/out
Shelves	3 modular shelves rear side or hanged (length: depending on box length)

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Cold well

Safety glass window

Large choice of feedthroughs for signals, gas, liquids

A variety of gloves (Hypalon, Neoprene and Butyl) and thickness sizes are available

Specific shelves and storage arrangements..

MAIN ANTECHAMBER TECHNICAL DATA		
Туре	Cylindrical	
Material	Stainless steel	
Dimensions	390 x 600 mm (D x L)	
Inside surface	Brushed finish	
Outside surface	Coated, white (RAL 9003)	
Leak rate	< 10E-4 mbar l/s	
Sliding tray	Stainless steel	
Dimensions of sliding tray	575 x 290 mm (L x W)	
Doors	Aluminum, anodized, thickness 10 mm	
Door lock	Door closing mechanism with spindle handle for one hand operation	
Pressure gauge	Analog display	
Vacuum / Refill process	Manual operation via hand valves	
Valves	Hand valves (DN40 vacuum line / DN8 refill line)	

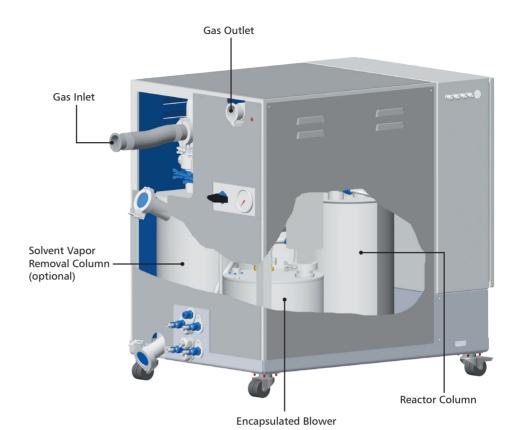
OPTIONAL		
Time controlled antechamber operation		
Round mini antechambers (side or bottom mounted)		
Rectangular square antechamber		
L-shaped square antechamber		
Round T-shaped antechamber		
Square T-shaped antechamber		

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#### **GAS PURIFIER UNIT**



PLC - M. Braun controller with large color touch screen



GAS PURIFIER UNIT TECHNICAL DATA	
Operation principle	Closed loop recirculation
Attainable purity level	Moisture < 1 ppm, Oxygen < 1 ppm
Recommended enclosure volume	Up to 5 m <sup>3</sup>
Number of purification lines per purifier	1 for sp / 2 for dp
Number of reactor columns per line	1
Number of reactor columns per purifier	1 for sp / 2 for dp
Reactor capacity per purification line*	
(O2) Oxygen	361
(H2O) Moisture	1350 g
Regeneration	Automatic regeneration sequence
Control unit	PLC - M. Braun
Display	Large color touch panel
Box pressure control	Automatic pressure control with foot switch (± 15mbar)
Vacuum pump*	Rotary vane pump with 17 m <sup>3</sup> /h (10 CFM)
Blower (50 Hz / 60 Hz)*	Frequency controlled up to 88 m³/h
Main and side piping	Stainless steel 1.4301 (SUS 304)
Main and control valves	Electro-pneumatic
Regeneration gas	N2/H2 mix. or Ar/H2 mix. (H2 2-10 %)
Working gas	Nitrogen, Argon or Helium
Size	820 x 600 x 848 mm (L x W x H)

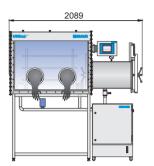


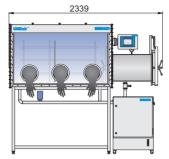
OPTIONAL
Moisture and oxygen analyzer
ECO Mode
myMBRAUN App
Solvent vapor removal
Regenerable solvent vapor removal
Recirculation chiller for optimal working environment (RCC)
Integrated heat exchanger
Dry pump upgrade
Automatic box purge unit
Antechamber automatic (time controlled or pressure controlled)
Freezer or box cooling

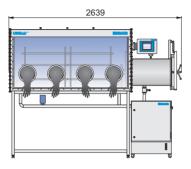
#### Dimensions in mm

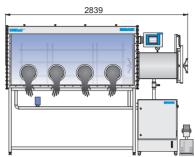
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#### SIZES AND CONFIGURATION









Weight: 440-540 kg

Weight: 475-570 kg

Weight: 520-625 kg for version 1800 mm box length

Weight: 550-670 kg for version 2000 mm box length

GLOVEBOX VOLUMES			
	Depth: 780 mm	Depth: 1000 mm	Depth: 1200 mm
Box length: 1250 mm	0.8 m <sup>3</sup>	1.1 m³	1.3 m³
Box length: 1500 mm	1.0 m <sup>3</sup>	1.3 m³	1.6 m³
Box length: 1800 mm	1.3 m <sup>3</sup>	1.6 m³	1.9 m³
Box length: 2000 mm	1.4 m³	1.8 m³	2.1 m³

1114	1210	1422
7		8
		1928
*	90	

UTILITIES				
	Medium (or type)	Pressure	Flow rate	Connection
Working gas	Nitrogen, Argon or Helium	6 bars	250 l/min	Swagelok Ø 10 mm
Regeneration gas	N2/H2 mix. or Ar/H2 mix. (H2 2-10 %)	0.3 - 0.5 bars	15-20 l/min	Swagelok Ø 10 mm
Regeneration gas exhaust	Flexible hose, 9 x 3 mm			
Vacuum pump exhaust	Depressurized flexible hose, diameter not less than 25 mm (to be supplied by customer)			
Electrical power (FLA) for dp version	for 230 V/50-60 Hz, 8 A or 115 V/50-60 Hz, 16 A or 100 V/50-60 Hz, 18.5 A			

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