

LABmaster^{pro} Glovebox



PRODUCT INFO

- Compact, modular design
- Removal of oxygen and moisture <1 ppm
- PLC controller with Siemens color touch panel
- Simultaneous purification and regeneration within double purifier (DP) version
- Small and/or big antechamber with sliding tray
- Closed loop recirculation
- Negative and positive pressure operation
- Foot switch for temporary pressure adjustment
- ECO Mode operation feature available
- Live remote monitoring of your glovebox data with myMBRAUN Web-App available

ACHIEVE THE ULTIMATE: PEAK CONFIGURABILITY AND AUTOMATION IN ONE.

TECHNICAL DATA

Type of construction	Modular box with bolted in flanged side panels
Material	Stainless steel (US 304, 1.4301)
Inside lengths	1250 / 1500 / 1800 / 2000 mm
Inside depth	Single sided: 780mm or 1000 / Double sided: 1000 or 1200 mm
Inside height	900 mm
Leak rate	< 0.05 Vol%/h
Inside surface	Brushed finish Ra 1.2 µm
Outside surface	Coated, white (RAL 9003)
Window	Scratch and chemical resistant window
Glove ports	220 mm diameter, O-ring sealed
Gloves	Butyl
Light	LED
Feedthroughs	5 DN40KF flanges on the rear wall and 2 on the roof
Electrical feedthrough	1 (incl. 1 power cord Type B 6 Outlet power strip)
Dust filter	HEPA H13 in/out
Shelves	3 adjustable shelves rear side (single sided) or hanging (double sided)



OPTIONAL

Cold well
Safety glass window
Large choice of feedthroughs for signals, gas, liquids
Availability of a variety of gloves
Specific shelves and storage arrangements

UTILITIES

	Medium (or type)	Pressure	Flow rate	Connection
Working gas	Nitrogen, Argon, Helium or mixtures of those	5.. 6 bar	250 l/min	Ø 10 mm cutting ring-screw
Regeneration gas	N2/H2 mix. or Ar/H2 mix. (H2 2-5 %)	0.3 - 0.4 bar	50	Ø 10 mm cutting ring-screw
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	230 V / 50 ... 60 Hz / 6.4 ... 8 A 115 V / 50 ... 60 Hz / 13 ... 16 A 100 V / 50 ... 60 Hz / 15 ... 18.5 A			



MAIN ANTECHAMBER

Type	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
Vacuum / Refill process	PLC operated



OPTIONAL

Antechamber automatic pressure controlled
Rectangular square antechamber
L-shaped square antechamber
Round T-shaped antechamber
Square T-shaped antechamber

MINI ANTECHAMBER

Type	Cylindrical
Material	Stainless steel
Dimensions	150 x 400 mm (D x L)
Leak rate	< 10E-4 mbar l/s
Sliding tray	Stainless steel
Dimensions of sliding tray	387 x 120 mm (L x W)
Doors	Aluminum, anodized, thickness 12 mm
Door lock	Hinged doors attached to the antechamber body to prevent door from falling out
Pressure gauge	Analog
Vacuum / Refill process	Manual operation via hand valves



OPTIONAL

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

GAS PURIFIER

Operation principle	Closed loop recirculation
Attainable purity level	Moisture < 1 ppm, Oxygen < 1 ppm
Recommended enclosure volume	Up to 5 m ³
Number of filters per line	1
Number of filters per purifier	1 for SP / 2 for DP
Filter capacity per purification line	
(O ₂) Oxygen	36 l per filter
(H ₂ O) Moisture	1350 g per filter
Regeneration	Automatic regeneration sequence
Control unit	PLC - Siemens
Display	Large color touch panel
Box pressure control	Automatic pressure control with foot switch (± 15mbar)
Vacuum pump*	Rotary vane pump with 17 m ³ /h (10 CFM)
Blower (50 Hz / 60 Hz)*	Frequency controlled up to 88 m ³ /h
Main and side piping	Stainless steel 1.4301 (SUS 304)
Main and control valves	Electro-pneumatic
Regeneration gas	N ₂ /H ₂ mix. or Ar/H ₂ mix. (H ₂ 2-5 %)
Working gas	Nitrogen, Argon, Helium or mixtures of those
Size	1176 x 525 x 720 mm (L x W x H)
Purge function (optional)	200 l/min