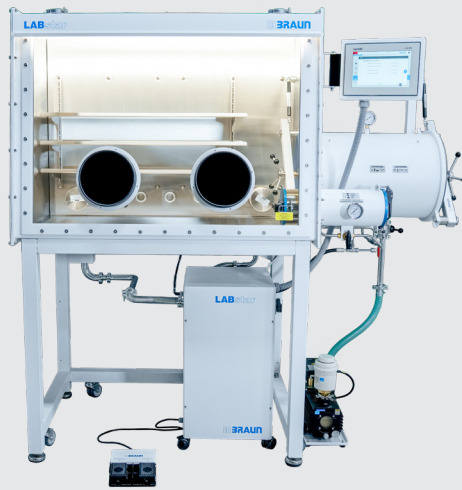


LIMITED EDITION: LABstar⁵⁰ GLOVEBOX

Final configuration may differ from picture



PRODUCT INFO

- **Limited Anniversary Edition**
Limited to 50 units – with exclusive design and promotional price
- **Ready to Ship Glovebox**
In stock, limited options, fast & affordable
- **High Purity**
Removes oxygen and moisture to <1 ppm
- **Smart Control**
PLC-based BOSCH controller with large 10" touch panel
- **Flexible Pressure Management**
Negative / positive pressure operation with foot switch adjustment
- **Efficient Material Transfer**
Small and large antechambers with sliding trays
- **Optimized Gas Management**
Closed-loop recirculation for stable conditions

GLOVEBOX

Type of construction	Modular box with bolted in flanged side panels
Size	Dimensions shown on page 3
Inside height	900 mm
Material	Stainless steel (US 304, 1.4301)
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 3 Outlet power strip)
Dust filter	HEPA H13 in/out
Shelves	3 adjustable shelves rear side
Glovebox volume	0.8 m ³

BENEFITS



Affordable entry-level model



Fast delivery and cost-effective
2-4 Weeks delivery

POWER CONSUMPTION



Normal = 86 kWh*



ECO-Mode = 26 kWh*

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 connection
Regeneration gas	N ₂ /H ₂ mix. or Ar/H ₂ mix. (H ₂ 2-5 %, optional H ₂ >5%)	0.3 - 0.4 bar	15-20 l/min	Ø 10 mm cutting ring-screw connection
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)			

*The MB-ECO-Mode function is already installed in this special glovebox edition. The power consumption is based on standard operation for 40 hours (8 hours per day, 5 days a week).

MAIN ANTECHAMBER

Type	Cylindrical
Size	390 x 600 mm (D x L)
Size of sliding tray	575 x 290 mm (L x W)
Material	Stainless steel
Inside surface	Brushed finish
Outside surface	Coated, white (RAL 9003)
Leak rate	< 10E-4 mbar l/s
Sliding tray	Stainless steel
Doors	Aluminum, anodized, thickness 10 mm
Door lock	Door closing mechanism with spindle handle for one hand operation
Pressure gauge	Analog
Vacuum / Refill process	Manual operation via hand valves
Position	Right sided only



MINI ANTECHAMBER

Type	Cylindrical
Size	150 x 400 mm (D x L)
Size of sliding tray	387 x 120 mm (L x W)
Material	Stainless steel
Leak rate	< 10E-4 mbar l/s
Sliding tray	Stainless steel
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
Position	Right sided only

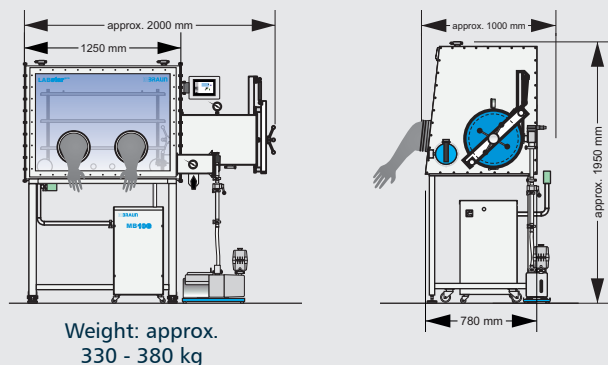


GAS PURIFIER

Operation principle	Closed loop recirculation
Size	460 x 430 x 740 mm (W x D x H)
Attainable purity level	Moisture < 1 ppm, Oxygen < 1 ppm
Number of filters per purifier	1 for SP
Filter capacity per purification line	
(O ₂) Oxygen	20 l per filter
(H ₂ O) Moisture	900 g per filter
Regeneration	Automatic regeneration sequence
Control unit	PLC - BOSCH
Display	Large color touch panel
Box pressure control	Automatic pressure control with foot switch (± 15mbar)
Vacuum pump	Rotary vane pump including oil mist filter and oil return kit
Blower (50 Hz / 60 Hz)	Variable speed up to 45 m³/h
Main and side piping	Stainless steel 1.4301 (US 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

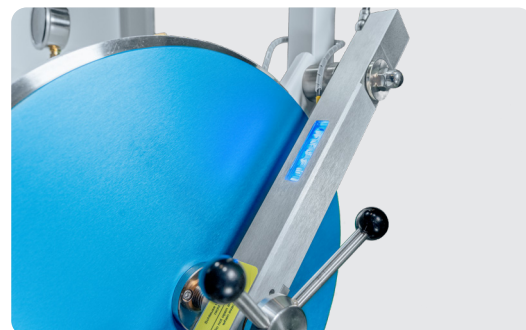


DIMENSIONS



INCLUDED IN THIS PACKAGE

Gas Purifier	Specification
MB-ECO-Mode	For an economical and power saving operation
MB-BP Box Purge	Purge of the glovebox system to quickly achieve optimal atmosphere conditions inside the box
Gas Consumption Measurement	Estimates gas consumption, indicates potential problems and remaining gas
LED Antechamber status display	The status light on the antechamber bar can be manually changed via the panel to indicate its current state
MB-MO-SE1 & MB-OX-SE1 Sensor set	Monitoring the atmosphere for residual moisture and oxygen content



ADDITIONAL OPTIONS

Upgrades	Specification
MB-GOE Grouping of exhausts	Combines all exhaust outlets into a single connection for safe and efficient discharge, with integrated condensation collector of water vapor from regeneration gas exhaust
MB-WT Water trap	Condensate collection tank for water vapour for installation in the regeneration gas exhaust line
MB-BF-B01 Screw-in solvent filter	Screw-in filter designed to absorb small amounts of solvent vapors within the glovebox
MB-SF-2/40 Solvent filter	Filter unit to remove solvent vapors of the glovebox atmosphere
MB-OX-EC Oxygen sensor	Electrochemical oxygen sensor designed for use when atmosphere is not dry or in environments with high solvent vapor concentrations
MB-FZ-35 Freezer -35 °C	Sidewall-integrated glovebox freezer for sample storage at temperatures down to -35 °C
MB-Static-Eliminator	A system designed for the effective elimination of static electricity to prevent charge-related issues during sensitive processes



The configuration may vary depending on the region. Please contact us for a detailed quotation.