

# MB-300-G

## INERTGAS PURIFICATION SYSTEM



- Double reactor columns for continuous 24/7 operation
- Optimum performance for attached enclosure volumes up to:
  - 15 m<sup>3</sup> with UDF
  - 12 m<sup>3</sup> without UDF
- Removal of oxygen and moisture, <1 ppm
- Automated box pressure and regeneration control
- Negative and/or positive pressure operation
- PLC with multi-color touch panel display
- Optional control and safety features available

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Clean. Engineering. Expertise.

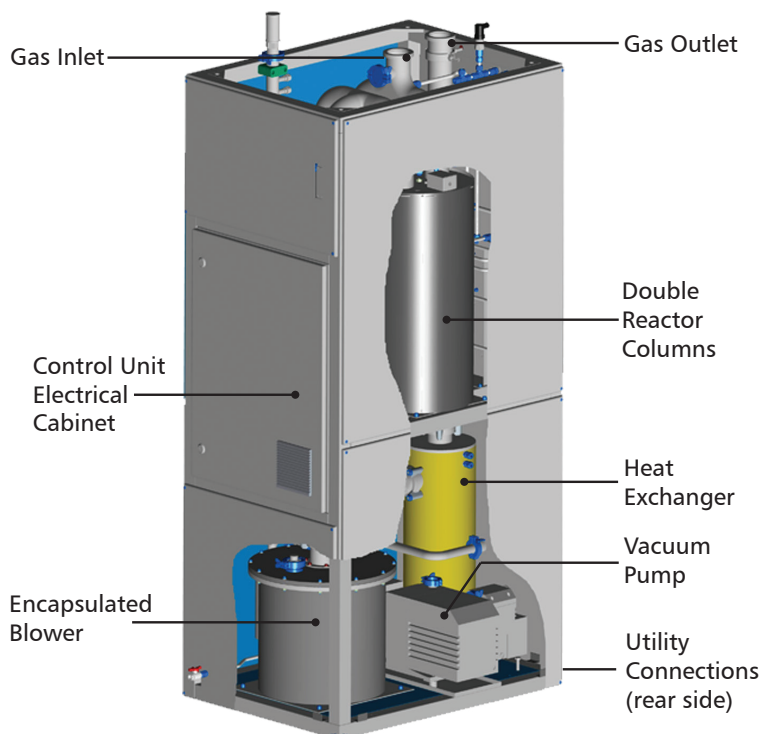
### DESCRIPTION

MBRAUN's MB-300-G gas purifier has been specifically designed for industrial applications. Features include increased capacity regenerable double reactor columns for maintaining ultra-low levels of oxygen and moisture in inert enclosures up to 12 m<sup>3</sup> in volume.

Other features of the MB-300-G include a more robust circulation blower and vacuum pump to ensure consistent performance under the most rigorous conditions. A more comprehensive Siemens touch panel display and PLC control system in order to provide a greater amount of flexibility for custom integrations is also a standard feature.

An integrated heat exchanger helps to keep the temperature inside the connected inert enclosure at optimal levels. Built on MBRAUN's high quality standards all subcomponents are made of stainless steel and are manufactured from distinguished suppliers.

MBRAUN offers a wide range of options compatible with the MB-300-G such as box purge units, solvent vapor removal, dry pumps and MBRAUN's proprietary oxygen and moisture analyzers.



### TECHNICAL DATA

Operation principle	Closed loop recirculation
Attainable purity level	Moisture < 1 ppm, Oxygen < 1 ppm
Max. enclosure volume w/o UDF	Up to 12 m <sup>3</sup>
Max. enclosure volume w/ UDF	Up to 15 m <sup>3</sup>
Number of purification lines per purifier	2
Number of reactor columns per line	1
Number of reactor columns per purifier	2
Reactor capacity per purification line*	
(O <sub>2</sub> ) Oxygen	91 l
(H <sub>2</sub> O) Moisture	4420 g
Regeneration	Automatic regeneration sequence
Control unit	Siemens PLC
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 250 m <sup>3</sup> /h
Main and side piping	Stainless Steel 1.4301 (SUS 304)
Main and control valves	Electro-pneumatic
Electrical (FLA) (without options)	230 V/50-60 Hz, 11 A or 115 V/50-60 Hz, 22 A or 100 V/50-60 Hz, 25 A
Cooling water (optional)	2 - 4 bar (4-5 l/min)
Regeneration gas	N <sub>2</sub> /H <sub>2</sub> mix. or Ar/H <sub>2</sub> mix. (H <sub>2</sub> 2-10 %)
Working gas	Nitrogen, Argon or Helium
Size	730 x 980 x 2040 mm (LxWxH)
Weight	475 kg (without vacuum pump)
Optional feature	Moisture and oxygen analyzer
Optional feature	Solvent vapor removal
Optional feature	Regenerable solvent vapor removal
Optional feature	Recirculation chiller for optimal working environment (RCC)
Optional feature	Dry pump upgrade
Optional feature w/ MBRAUN glovebox	Automatic box purge unit
Optional feature w/ MBRAUN glovebox	Antechamber automatic pressure controlled

\*Technical note: Dependent upon operating conditions.

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