

GENERAL DESCRIPTION

GloveQb's Gas Purification and Circulation Units (GPCU's) are fully-functional, stand-alone systems that can be coupled to any glovebox or application that needs a controlled atmosphere. A GPCU is a key component for a high quality glovebox system. These systems continuously recirculate the glovebox gas atmosphere over catalysts to reduce oxygen and moisture levels to less than 1 vppm. This is crucial for many sensitive materials and processes in laboratories and industry.

GAS PURIFICATION & CIRCULATION UNITS

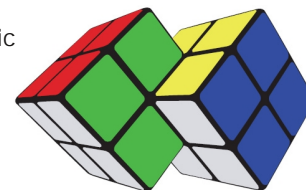
The systems are ready for installation and feature an easy to use PLC unit to control all of the functionality: regulation of the pressure in the glovebox (over- and under-pressure), the regeneration process, the purge functions, the oxygen and moisture sensors and many other features. The GPCU's are available in a range of models with different options to meet your specific application.

Standard features

- Compact design for any glovebox
- Designed for continuous operation
- PLC controlled, with added footpedals
- Single column, absorption of O₂ and H₂O
- Circulation blower for Argon, Nitrogen, or Helium
- Oil-free vacuum pump for pressure control and antechamber
- Stainless steel parts, piping and valves
- Automatic regeneration program

Optional features

- Separate solvent filter column, manual or automatic
- Continuous monitoring of O₂ and H₂O (0-1000 vppm)
- Double-filter columns for safe backup capacity
- Automatic purge valves for easy maintenance
- Automatic antechamber control
- Remote sensor read-out



GloveQb[®]
Hermetically sealed enclosures

TECHNICAL SPECIFICATIONS

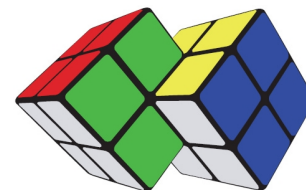
The GloveQb Gas Purification & Circulation units are available in the models listed below:

Model	Columns	Basic system	Auto purging	Solvent removal
GPCU01	single	blower, VP, PLC	-	-
GPCU02	single	blower, VP, PLC	yes	-
GPCU03	single	blower, VP, PLC	-	manual
GPCU04	single	blower, VP, PLC	-	automatic
GPCU05	single	blower, VP, PLC	yes	manual
GPCU06	single	blower, VP, PLC	yes	automatic
GPCU07	double	blower, VP, PLC	-	-
GPCU08	double	blower, VP, PLC	yes	-
GPCU09	double	blower, VP, PLC	-	manual
GPCU10	double	blower, VP, PLC	-	automatic
GPCU11	double	blower, VP, PLC	yes	manual
GPCU12	double	blower, VP, PLC	yes	automatic

* VP=vacuumpump, PLC=Programmable Logic Controller with display and keypad

System dimensions:

- 640 mm (w) x 870 mm (h) x 940 mm (d)
- 110 / 220 V, single phase
- Blower: ~80 m³/hr
- Vacuumpump: oil free, 60-90 l/min, 0,3-0,06 mBar pressure
- Single column capacity: 1300 g H₂O, 30 liter O₂
- KF40 (circulation) and Swagelok (gas) connectors
- Working gas (Ar, N₂, He), regeneration gas 3-5% H₂ in Ar



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