proUmid

Humidity Generator

CHG300 – Circulating Humidity Generator for large Chambers

Precise Humidity Control

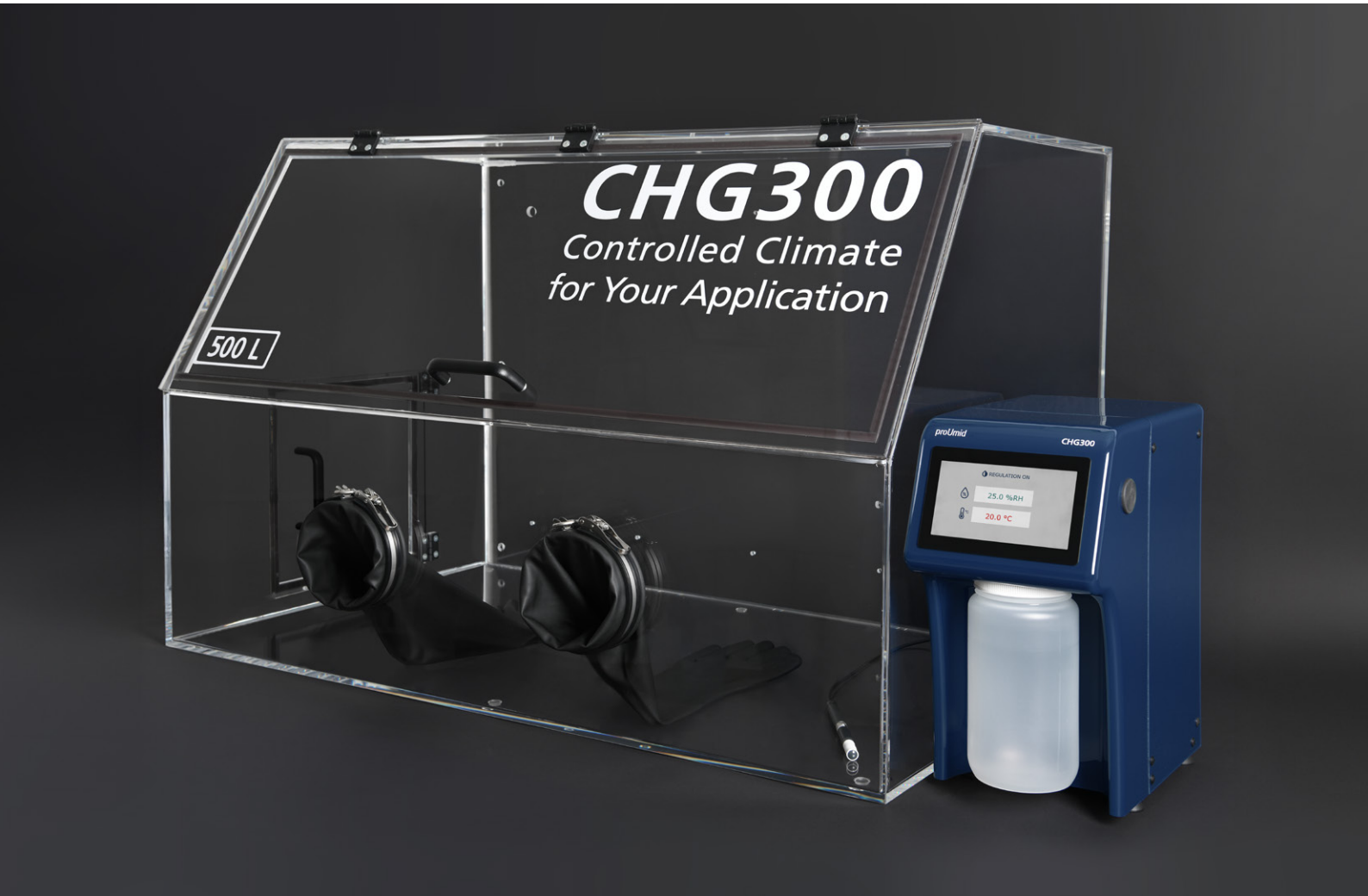
The CHG300/CHG300-TC (Temperature Control) is a humidity generator perfectly suited for midsize volumes like gloveboxes or enclosures. The CHG300 offers dynamic humidity control for chamber volumes up to 500 l and static control for chamber volumes up to 1000 l. This allows testing under controlled climatic conditions while maintaining flexibility in both setup and test equipment.

Fast and precise humidity control
Closed loop regulation with unique constant circulation principle

Perfectly suitable for midsized test environments
Like gloveboxes and enclosures

Easily adaptable to your target system
Directly attachable and adjustable control parameters

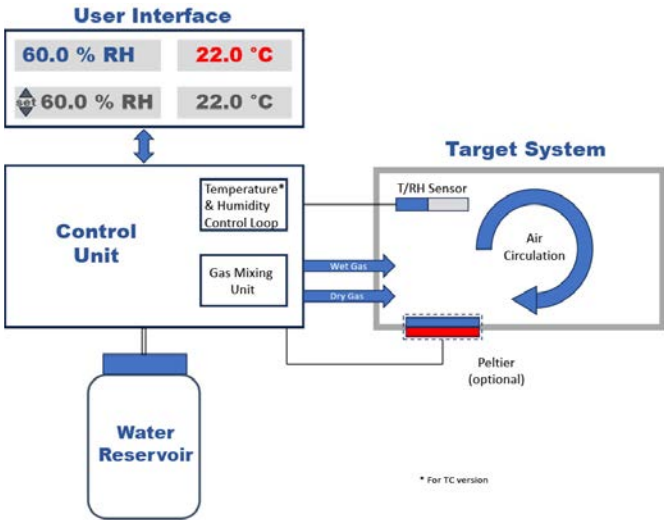
Powerful humidification
Supports large chambers up to 1000 l and strongly hygroscopic samples



Key Features of the CHG300

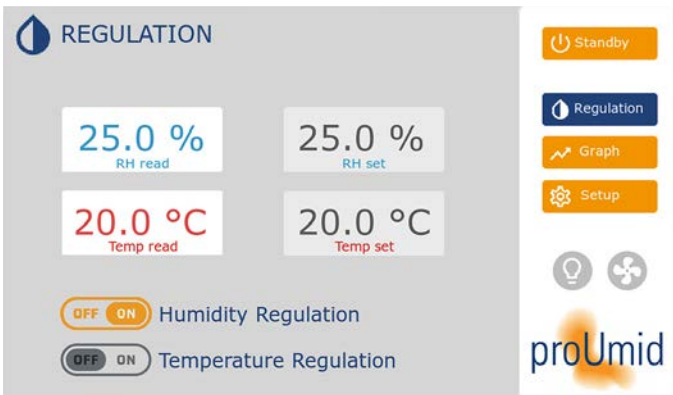
The CHG300 is designed for controlled humidity in midsize to large test chambers, gloveboxes or other applications where specific climatic conditions are required. Its powerful design enables fast humidity control and is well-suited for use with sample materials that exhibit high water adsorption, or even in semi-open systems. The TC option allows temperature control in the target system.

Precise Control
Closed-loop control: The CHG300's humidity and temperature sensor is ideally located within the target system close to the device under test. This sensor placement enables the CHG300 to deliver fast, stable, and robust control performance. Constant circulation inside the target system ensures a homogeneous climate and reduces carrier gas consumption.

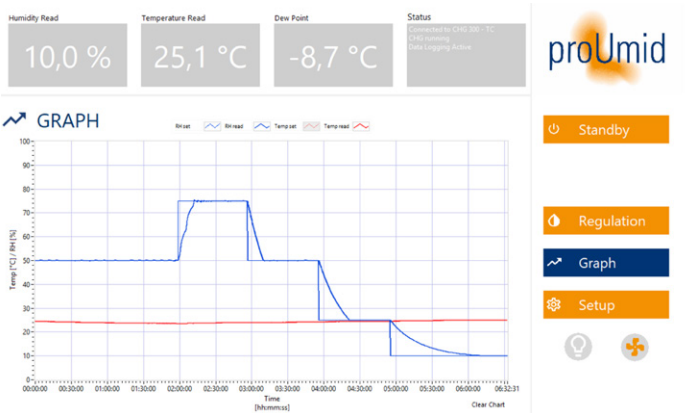


Application Area
Glove boxes, humidity controlled ovens, humidity controlled housings, Desiccators, Incubators etc.

Temperature and Humidity Regulation
The TC option allows the use of Peltier modules with up to 550 W electrical power for heating and cooling operation. A variety of Peltier modules are available upon request to best fit your application.



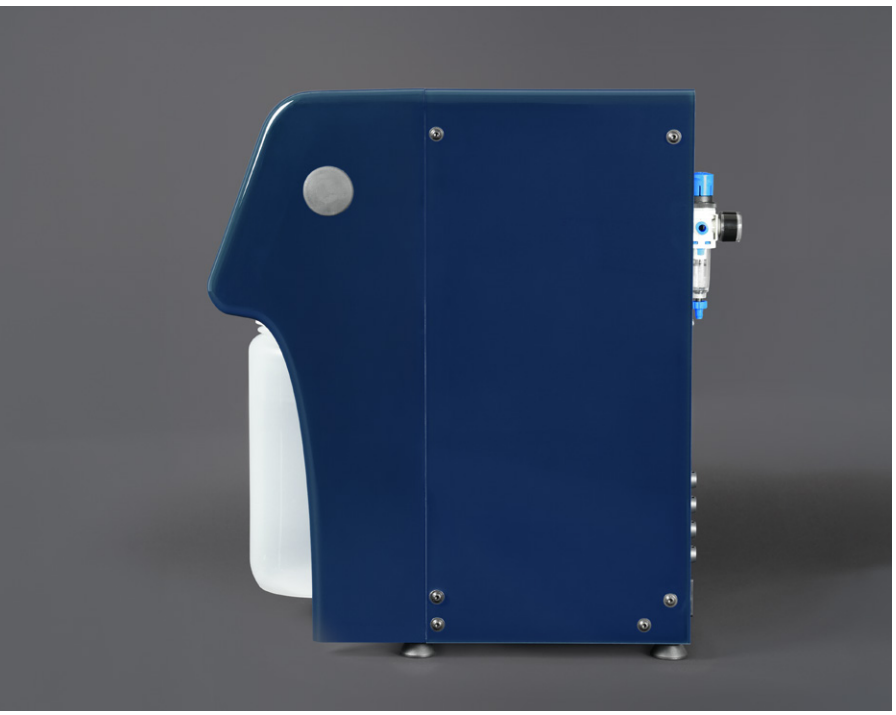
CHG-Control Software
CHG-Control is a PC-based software solution for controlling and monitoring CHG300 systems. The software provides real-time visualization of humidity and temperature values, automated profile execution, and continuous data logging. Its intuitive user interface enables efficient experiment setup, reliable process supervision, and comprehensive documentation of test results.

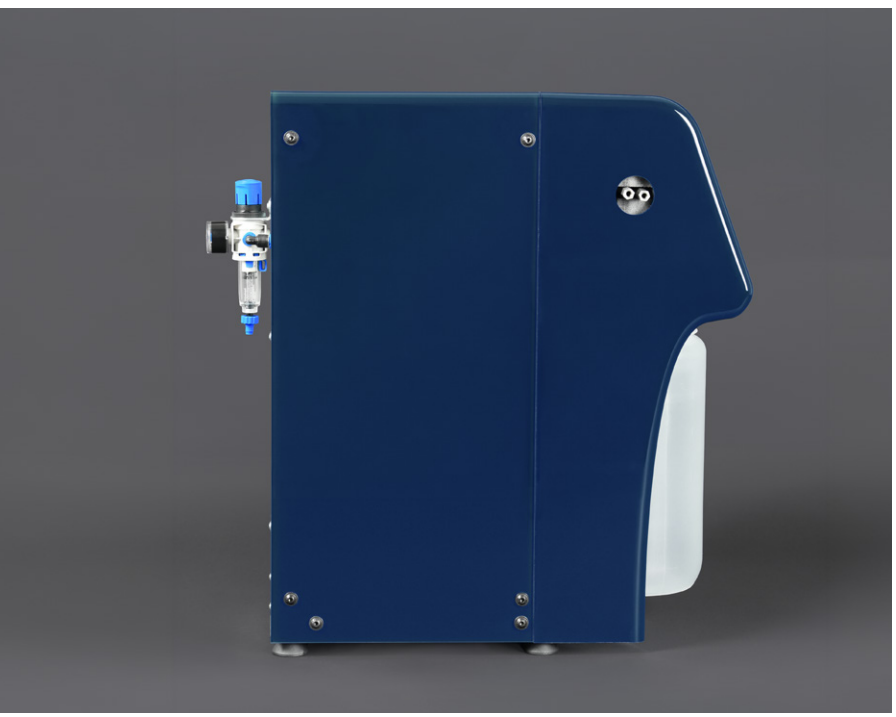


Humidity regulation of a 500 l glovebox using the CHG Control software

State of the Art Design

This modern patent pending design is capable of powerful humidification and uses efficient constant circulation for fast humidity regulation. The 7" touchscreen display allows easy, intuitive operation. The CHG300 is equipped with customizable attachment options for the target system. The air outlets can be positioned on either side of the instrument, and the versatile outputs offer multiple options to attach to the target system.



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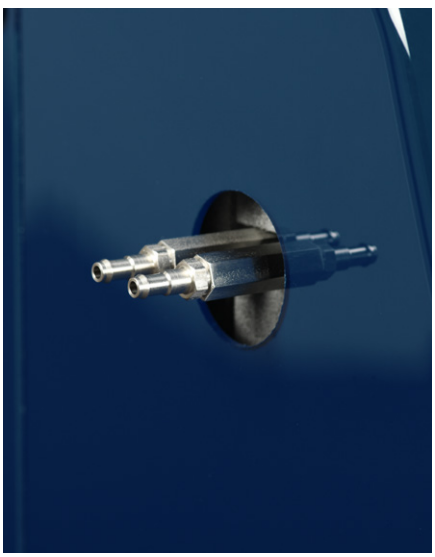
CHG300
REGULATION
25.0 %
RH read
25.0 %
RH set
20.0 °C
Temp read
20.0 °C
Temp set
OFF ON Humidity Regulation
OFF ON Temperature Regulation
Standby
Regulation
Graph
Setup
proUmid

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Technical Data

CHG300 Standard	
Chamber volume	10 – 500 l for dynamic control (up to 1000 l for static control)
Flow	Max. 25 l/min
Chamber climate	0 – 98 % RH Max: 75 °C with 98 % RH (max humidity decreases with higher temperature)
Gas supply	Nitrogen, Compressed Air (dry, oil free), Helium, CO_2, Argon 2.5 – 10 bar, dry, clean, oil-free (class 1.2.1, ISO 8573-1:2010)
Water supply	Removable tank, 2000 ml
Ambient condition	15 – 35 °C, 20 – 75 % RH
Communication	USB Modbus Protocol
Supplied Power for Temperature Regulation via Peltier-Module	–
Dimensions	Width: 238 mm, Height: 452 mm, Depth: 433 mm, Weight: 6.9 kg

CHG300-TC	
Chamber volume	10 – 500 l for dynamic control (up to 1000 l for static control)
Flow	Max. 25 l/min
Chamber climate	0 – 98 % RH Max: 75 °C with 98 RH % (max humidity decreases with higher temperature)
Gas supply	Nitrogen, Compressed Air (dry, oil free), Helium, CO_2, Argon 2.5 – 10 bar, dry, clean, oil-free (class 1.2.1, ISO 8573-1:2010)
Water supply	Removable tank, 2000 ml
Ambient condition	15 – 35 °C, 20 – 75 % RH
Communication	USB Modbus Protocol
Supplied Power for Temperature Regulation via Peltier-Module	550 W
Dimensions	Width: 238 mm, Height: 452 mm, Depth: 433 mm, Weight: 8.1 kg

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