PRESERVATECH

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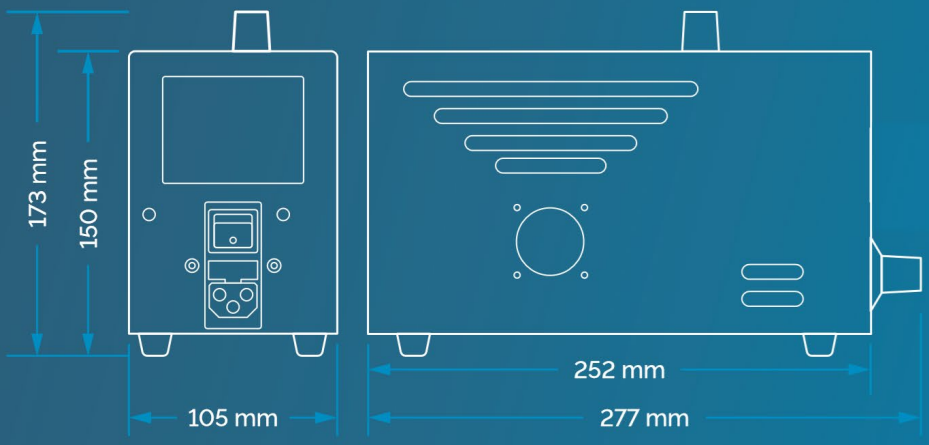
Solid State Microclimate Generator

for Museum Showcases

The PMCG humidity generator represents an innovative solution for managing humidity levels within museum-quality display cases. Utilizing cutting-edge solid-state technology, PMCG units distinguish themselves from other alternatives by eliminating the need for filling or emptying reservoirs. Once the system is configured, humidity levels within the display case can be effectively regulated for extended periods without the requirement for condensate removal, water level checks, additions, or any other routine maintenance tasks. This design ensures a hassle-free and long-term humidity control solution for preservation needs in museum environments.

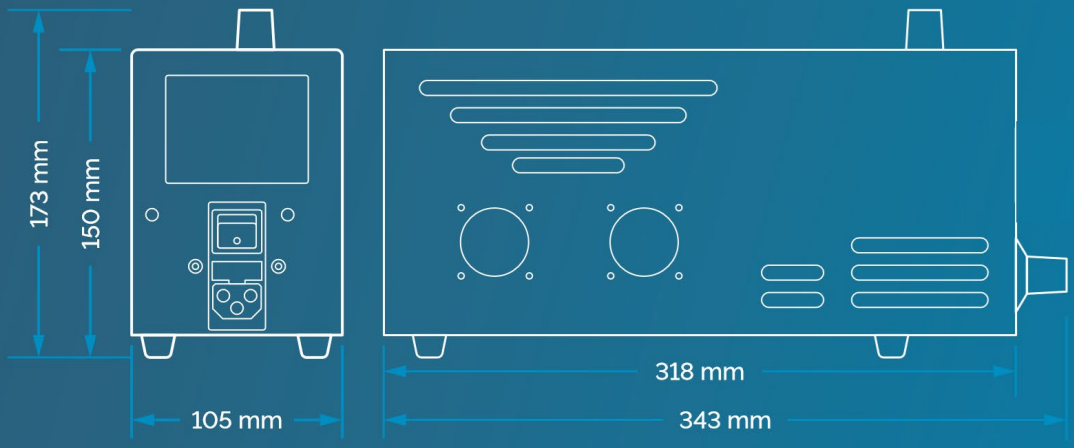
PMCG units are available in two versatile modes: **DD** (dehumidifying only) and **DH** (dehumidifying and humidifying). This flexibility allows users to tailor the functionality of the PMCG system to their specific requirements, providing a customized solution for both dehumidification and humidity control needs.

PMCG 2 – up to 2m³ case volume



Under condition that showcase is well sealed, PMCG 2 is powerful enough for cases up to 2 m^3 for DD version and 1m^3 for DH version.

PMCG 4 – up to 4m³ case volume



For well-sealed cases, PMCG 4 is good up to 4m^3 case in DD version and up to 2 m^3 as DH version.

In general, PMCG functions most effectively as a dehumidifying machine. In this mode, PMCG 2 and 4 can maintain the humidity inside the case within the range of 20-25%, or even well below 20% for smaller cases.

SPECIFICATION

Power Supply	110-230 VAC, 50-60 Hz, 2A	
Power Consumption	16/25W	
Achievable RH level	20-60% - depends on model*	
Permissible Ambient Conditions for Operation DD	<95% RH	
Permissible Ambient Conditions for Operation DH	25 – 95% RH	
Sensor Accuracy	±3%	
Noise Emission	20-30 dB - depends on blower used**	
Volume of Controlled Enclosure (2|4)	Up to $2m^3$ (DD) $1m^3$ (DH)	Up to $4m^3$ (DD) $2m^3$ (DH)
Dehumidifying Power DH Model(2|4)	40g/d	80g/d
Dehumidifying Power DD Model(2|4)	80g/d	160g/d

EXTERNAL CONNECTION

The PMCG is equipped with a external connector for an OUT OF RANGE alarm. This alarm is a 12 VDC connector to power an LED or other 12VDC device. This alarm will be activated when the RH at the sensor is lower or higher than a value set in the controller by the user.

MASTER/SLAVE CONFIGURATION

When it is necessary to control humidity in a single large or leaky showcase, multiple units may be connected in a master/slave configuration. The master unit can be connected to a remote monitoring system as normal, and up to five slave units can provide extra control capacity to achieve the desired conditions.

REMOTE MONITORING

Existing museum Wi-Fi networks may be used to connect the units to the internet, and rhmonitoring.com is accessible through any web connectable device. Monitoring can be done from any location. Using rhmonitoring.com, an operator can read the current relative humidity and temperature conditions, check historical data, examine graphs and change certain parameters. Notifications and alarms, such as “Out of Range” may be sent by email as required.