

## MINI ONE – Active Microclimate Generator for



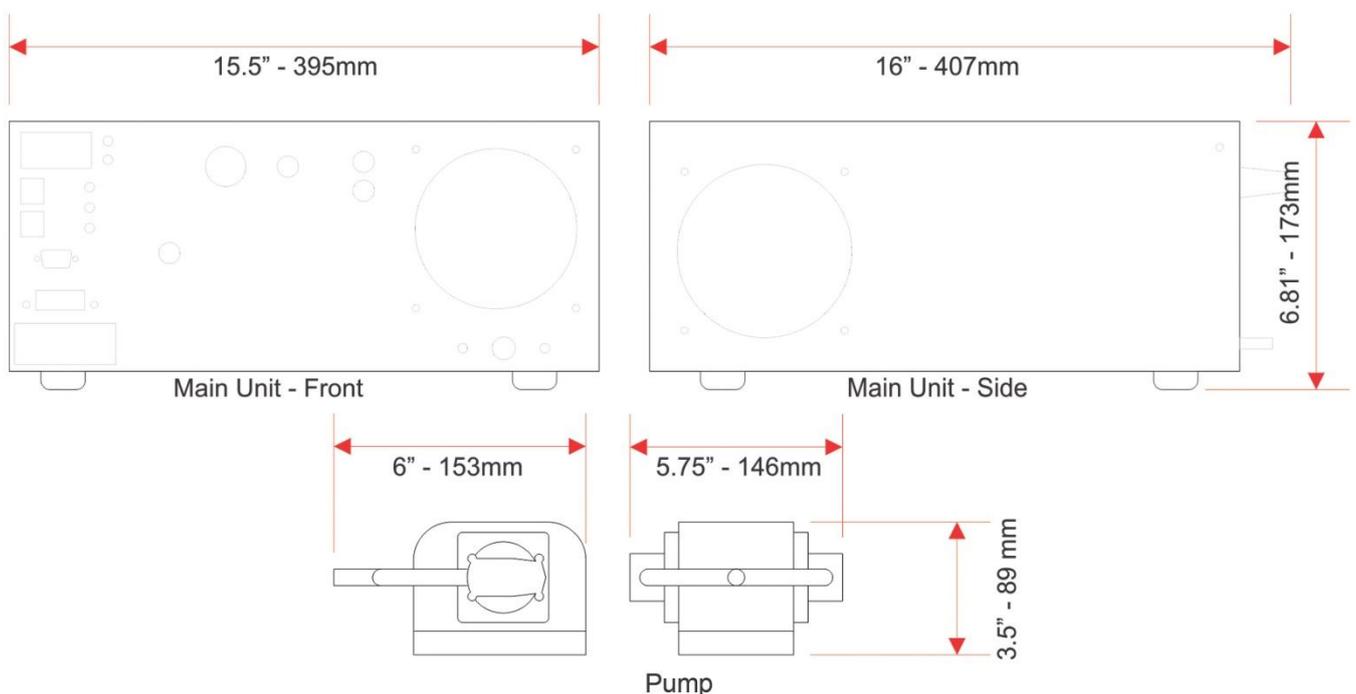
### Museum Showcases.

The Mini One is a miniature, positive pressure humidity control device for museum showcases and storage enclosures. This quiet, robust and extremely efficient unit can reliably control relative humidity in individual or multiple enclosures.

The Mini One satisfies the demanding standards of preventive conservation and modern museum design. It incorporates the most recent developments in electronic humidity control, noise suppression, and pollution abatement.

This positive pressure microclimate control system will typically maintain the relative humidity level in a sealed enclosure to within less than two percent of your target relative humidity. Depending upon the ambient temperature conditions and enclosure construction, stable relative humidity levels of less than thirty five to over eighty percent can be attained.

As the Mini One can be installed in a number of configurations for differing applications, performance characteristics will vary with installations and enclosures. In its most common application, the unit will provide a constant flow of filtered air at a pre-set relative humidity level.



## MINI ONE – Active Microclimate Generator for



*SD Card Slot  
For Data Logger*



*AIR PUMP*

This airflow will maintain stable humidity levels and purge pollutants in a tightly sealed museum display or storage enclosure of up to 10-15 cubic meters / 300-450 cubic feet.

Alternative installation modes may also be used: Multiple enclosures can be controlled by a single Mini One or single large enclosures can be controlled with standalone multiple Mini One units.

The Mini One is easy to install, its two modules may be arranged vertically or horizontally to maximize space. The pump may be separated from the main module, or many units may be supplied by a single central filtered air or nitrogen supply. Self limiting controls automatically adjust for differing case sizes, and internal data logger as well as data links for external control, reporting, and data logging are standard.

### OPERATING PRINCIPLES

Ambient gallery air is filtered for pollutants and drawn into the unit. This air is pressurized and directed through a proprietary mechanism that adjusts the relative humidity to the pre-set value. This air is directed through a small flexible tube to an input port in the showcase. Air flow to the enclosure is constant, and in normal applications the air is delivered only at the preset relative humidity.

In normal configurations the unit provides humidity control for a single tightly sealed enclosure, usually not exceeding 10 cubic meters. In these applications the unit will typically provide extremely accurate humidity control; the unit neither adds nor subtracts moisture from the air in the showcase – it gently feeds a steady stream of air into the showcase at the target humidity to displace the existing air and pollutants in the enclosure, which is forced out past gaskets and through small existing leaks.

### SPECIFICATION

**Max. Power Consumption:** 95W

**Typical Power consumption:** 65W

**Power supply:** 110 - 240 VAC

**System Internal Voltage:** 12 VDC

**Case Material:** powder coated aluminium

**Shipping weight:** 15 kg

**Output:** 35% - 80%

**Output Volume:** 24 m<sup>3</sup> /day

**Max output volume:** 40 m<sup>3</sup> / day  
(contact manufacturer for info)

**Output pressure:** ~2" H<sub>2</sub>O (600 Pa)



**Operating Temperatures:** 15 to 27 degrees C  
(Ambient temperatures will affect control capacities)

**Data Logging:** Internal (SD CARD), External Sensor

**Element:** Capacitive thin film sensor

**Sensor Reading Accuracy:** +/-2% over mid range

**Sensor Repetitive Accuracy:** +/-1%

**Biocides:** Copper components, chilled compartments and TiO<sub>2</sub> mesh