

TECHNICAL ENGINEERING SPECIFICATION



IsoClean CM Portable HEPA Air Cleaning System

The IsoClean® CM is a portable, in-room air cleaning system that significantly improves indoor air quality. Each IsoClean® CM comes equipped with two air filters; a MERV-8 anti-microbial prefilter to capture large pollutants and a 99.97% efficient high capacity HEPA filter. The IsoClean® CM is engineered to provide the optimum combination of efficient HEPA air cleaning with multiple air changes per hour to help minimize the spread of airborne diseases. The unit has an efficient variable speed centrifugal blower with adjustable fan speeds with RPM feedback to provide air changes per hour required for rooms of all sizes.

How It Works

The Isoclean® is designed to draw unfiltered air into the lower portion of the unit. The air passes through a 2 inch anti-microbial prefilter before passing through a 99.97% efficient HEPA filter. ASHRAE is currently recommending a MERV 13 rating to combat airborne pathogens. The HEPA filter inside the Isoclean® CM provides an even greater line of defense while still offering a large number of air changes per hour to continually improve the indoor air quality.

Features & Benefits

Flexible Applications

The versatile IsoClean® can be used as a clean air recirculating unit with a variable speed fan to accommodate spaces of all sizes.

Low-Cost Isolation Room

An easy and economical solution for creating a negative pressure, isolation room. Simply roll the IsoClean® into a standard room, connect a flexible ducting to the optional 14 in. (355 mm) collar on the top of the unit and vent the purified air to the exterior through a window or wall.

Portable, Vertical Footprint

The IsoClean® CM can be rolled from one room to another and easily fits into areas with limited floor space. Plugs into a typical 120V AC power outlet.

Variable-Speed Adjustable Airflow

The IsoClean® CM provides effective air filtration for a wide variety of room sizes with airflow ranging from 400 to 1700 CFM (679-2888 m³/hr) utilizing the VCU control with RPM feedback.

Options/Accessories

- » UV-C Sanitizing Light
- » Carbon Prefilter*
- » 100% Exhaust Duct Collar*
- » Directional Discharge Kit*

*Sold Separately

Applications

- » Negative Pressure Rooms
- » Office Buildings
- » Health Clubs
- » Fitness Centers
- » Dental & Medical Offices
- » Manufacturing Plants
- » Restaurants
- » Classrooms & Dormatories
- » Auditoriums

Room Air Changes Per Hour

Provides 6 room air changes per hour (ACH) in a 1,700 sq. ft. space or 12 room air changes in a 850 sq. ft. space. Assumes 10 foot high ceilings.

Efficient Air Scrubbing

Room air, along with airborne contaminants, are drawn into the intake grille at the bottom, while the purified air is discharged at a high velocity from the exhaust grille located at the top of the IsoClean®.

Quiet Operation

Adjustable fan speed allows for reduction of sound level as the airflow is reduced. At minimum airflow, the sound level is a negligible 48 dBA. At maximum airflow, the sound level is 69 dBA. A normal conversation at 3 feet away is approximately 65dBA.

Simple Maintenance

Both HEPA filter and prefilter are easily accessible for replacement by authorized personnel.

Other Applications

Warranty

» Limited 1-year warranty

- Clinics
- » Nursing Centers
- » Physician Offices
- » Homeless Shelters
- » Addiction Recovery Centers
- » Correctional Facilities
- » Temporary Medical Facilities



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Dimensional Information

Description		120V	120V with UV
Part No.		272000-001	272000-001UV
Dimension Inches (mm)	Height	57.75 Inches (1467)	
	Width	26.18 inches (665)	
	Depth	24.75 inches (629)	
UL Listing		Pending	Pending
Airflow CFM (m³/hr)		Variable speed Minimum CFM: 400 (679) ±10% Maximum CFM: 1700 (2888) ±10%	
Power Requirements		10.2 Amps @ 120V/60 Hz	10.3 Amps @ 120V/60 Hz
Unit Weight lbs. (kg.)		148 (67)	150 (68)
Shipping Weight lbs. (kg.)		173 (79)	175 (80)
Shipping Dimen- sions (mm)	Height	65.75 (1670)	
	Width	28.75 (730)	
	Depth	27.25 (692)	



Specifications

Chassis Construction

Powder-coated steel plenum and filter housing with a corrosion resistant polyurethane enamel finish. Four 2" (51 mm) casters, two locking.

HEPA Filter

High Capacity HEPA, with a minimum efficiency of 99.97% @ 0.3 micron. Accessible through a large removable access panel for maximum serviceability for quick replacement.

Prefilter

2 inch, disposible, MERV-8, anti-microbial filter.

Located on top of the unit and allows the addition of a discharge air duct collar for 100% exhaust applications.

Motor/Blower Assembly

Direct drive, continuous duty, 3/4 HP, variable-speed, electronically commutated motor with sealed-for-life bearings and inherent overload protection located on the "clean side" of the filter.

Controls

On/Off switch and VCU motor controller located on left side of unit allows simple set-point adjustment and a digital display indicates current motor speed. A green LED indicates normal operation. A red LED provides indication when filters need to be changed.

Electrical

Standard 5-15P, 115 V, single phase, rubber-covered cord with 3-prong, grounded plug (120V Model).

UV Light (if equipped)

UV light operates continuously while the unit is in operation. The bulb has a wavelength of 254 nM with specs of 15.9W, .34A, and 4.9W of UV-C at 100 hours. Bulb is rated at 9,000 hours.

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