

# enVerid Air Purifier

Ceiling Mounted Air Filtration System



## Effective, Reliable COVID-19 Mitigation Solution

The enVerid Air Purifier is an in-room, ceiling mounted True HEPA air cleaner with optional UVC lamps that captures 99.99% of viruses including a surrogate for the COVID-19 virus. Suitable for offices, classrooms, retail stores, and other commercial applications looking for a long-term, commercial-grade local HEPA solution, the product delivers a low cost, easy to install, ultra-quiet, and energy efficient alternative to costly HVAC system upgrades. Units can be mounted below the ceiling where their visibility provides peace of mind, or out of sight in the ceiling plenum. Each unit comes with a wall-mounted LCD display controller for easy monitoring and control.



## A Better Solution for Cleaning Indoor Air

The enVerid Air Purifier offers a cost-effective, long-term solution to remove virus particles and wildfire smoke from indoor air without the significant expense of upgrading HVAC systems and the “energy penalty” associated with conditioning higher volumes of outside air. Unlike temporary portable air filters that are noisy and distracting, use valuable floor space, present trip hazards from electrical cords, and are difficult to track and manage because they are easy to unplug and move, the enVerid Air Purifier is a permanent, optimally-placed solution that is quiet and easy-to-operate and manage at scale. Multiple health authorities including the CDC have stated that fixed recirculation systems such as the enVerid Air Purifier are preferred to portable filters because they can be installed with a higher degree of reliability and because they more reliably achieve adequate room air mixing and airflow patterns due to the distance between the supply and return grills.



**CATCH AND KILL TECHNOLOGY**



**ELIMINATE VIRUSES AND WILDFIRE SMOKE**



**COMMERCIAL GRADE**



**PERMANENT**



**QUIET**



**SCALABLE**

**99.99% EFFECTIVE**

Third-party tests conducted by **LMS Technologies**, a US-based independent air media and filter testing company, showed that the enVerid Air Purifier removes 99.99% of viruses from air passing through the filter. Testing was done using MS-2-bacteriophage, a surrogate for SARS-CoV-2. Viral efficiency testing was performed according to ASTM F2101-19, the testing standard for medical face mask materials. Testing by LMS also showed a single pass efficiency of 99.99% for particles as small as 0.1µm, well below the size range attributed to bioaerosols that can carry viruses. The UVC sterilization lamp installed in the return air box kills bacteria and viruses adsorbed on the filters. The enVerid Air Purifier can also be used without the UVC sterilization lamp.

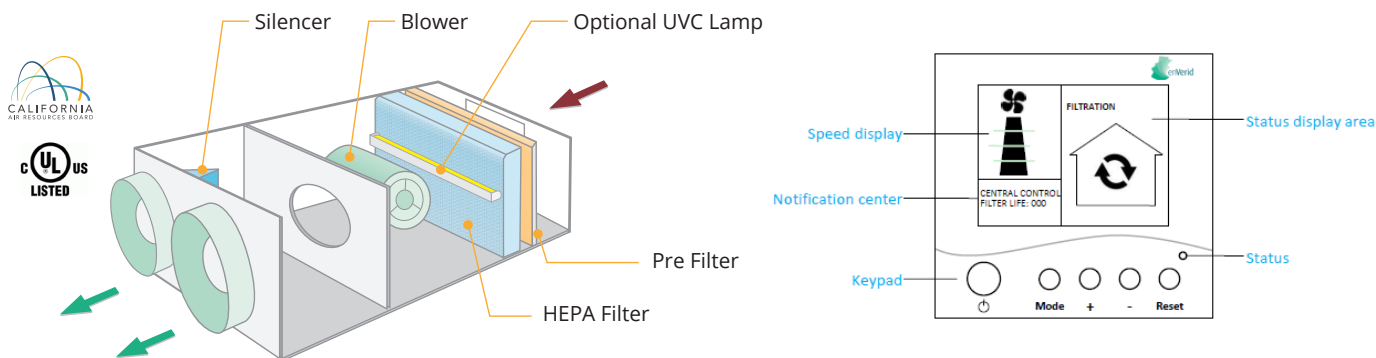
### EXAMPLE ENVERID AIR PURIFIER SIZING

Building Type	Floor Area (sq ft)	Ceiling height (ft)	enVerid Air Purifiers	Current Ventilation	OA Ventilation ACH	enVerid Air Purifier ACH	Total ACH	% ACH Increase
Classroom	900	8	1	Low ventilation	1	4.2	5.2	420%
Classroom	900	8	1	Typical school	1.5	4.2	5.7	280%
Classroom	900	8	1	Good ventilation	3	4.2	7.2	140%
Retail Store	2,500	10	3	Low ventilation	1	3.6	4.6	360%
Retail Store	2,500	10	3	Typical store	1.5	3.6	5.1	240%
Retail Store	2,500	10	3	Good ventilation	2	3.6	5.6	180%
Office Floor	20,000	8	20	Low ventilation	1	3.7	4.7	375%
Office Floor	20,000	8	20	Typical office	1.5	3.7	5.2	250%
Office Floor	20,000	8	20	Good ventilation	2	3.7	5.7	187%

## How it Works

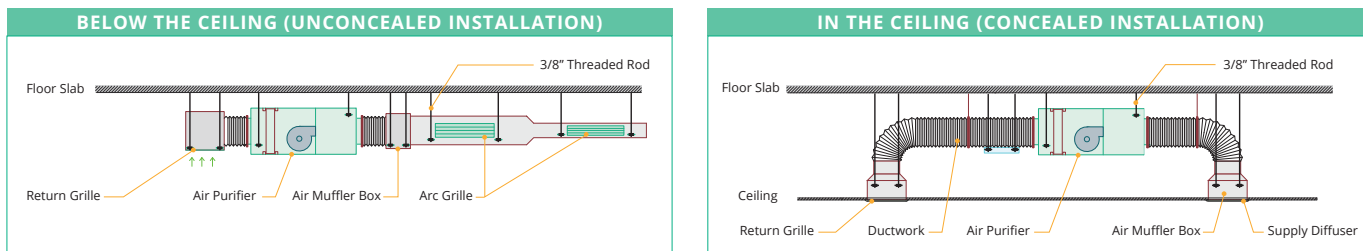
Each enVerid Air Purifier unit is mounted from the ceiling, quietly pulling air from the occupied space and running it through a pre-filter and True HEPA filter. Cleaned air is then sent back into the space. Each unit treats up to 1,000 ft<sup>2</sup> of space, cleaning the entire air volume every 20 minutes. Multiple units can be installed to meet the requirements of any size space.

The diagram below shows the components within the enVerid Air Purifier and the wall-mounted control panel. The control panel is connected to the unit using a hard-wired connection and can be mounted in the space or in a nearby IT or electrical/mechanical room. The enVerid Air Purifier unit and the display panel are fully UL certified according to UL 507, UL 867, UL 900, and UL 60730-1.



## Installation and Maintenance

The enVerid Air Purifier’s slim profile and ducted design allows for easy installation and wide coverage area.



The enVerid Air Purifier can be installed below the ceiling or in the ceiling plenum. Four hanging brackets are included with the unit for installation with 3/8" threaded rods (not included). Duct connections and ceiling return may be required depending on the installation. The unit requires access to 120V power and is connected to the controller with an 18-gauge stranded shielded communication wire (not included). Side access is required for safe and easy filter replacement. The filter display on the control panel shows the number of days until the next HEPA filter replacement, which is required every six-months if the UVC lamps are in use and twelve months if they are not in use. The washable pre-filter should be cleaned every time the HEPA filter is changed and replaced every 1-2 years. The UVC lamp bulbs should be replaced every 9,000 hours and cleaned whenever the HEPA filter is replaced.

PRODUCT SPECIFICATIONS								
L × W × H	WEIGHT	COLOR	MAX SPACE	SPEEDS	VOLTAGE	POWER (WATTS)	AIR FLOW (CFM)	NOISE (DB)
32" × 20" × 13"	60 lbs.	White	1,000 SQFT	4	120V	309/219/174/144	500/400/300/200	51/46/41/37