

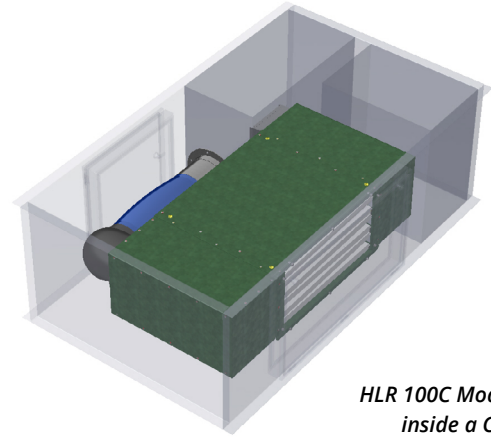
HLR 100C

HVAC Load Reduction Air Cleaning Module for Rooftop Units



Lower Replacement Cost, Decrease Energy Consumption

The HLR 100C enables packaged RTU systems to be replaced with smaller tonnage systems which cost less and consume less energy. Modules recover energy by cleaning indoor air using Sorbent Ventilation Technology® so that indoor air can be safely recirculated. The HLR 100C complies with ASHRAE Standard 62.1 and is easily integrated with most standard RTU curbs. The award-winning, industry-proven Sorbent Ventilation Technology inside the HLR 100C helps owners lower equipment replacement costs, decrease energy consumption, and achieve decarbonization goals with the easiest, most cost-effective ventilation solution on the market.

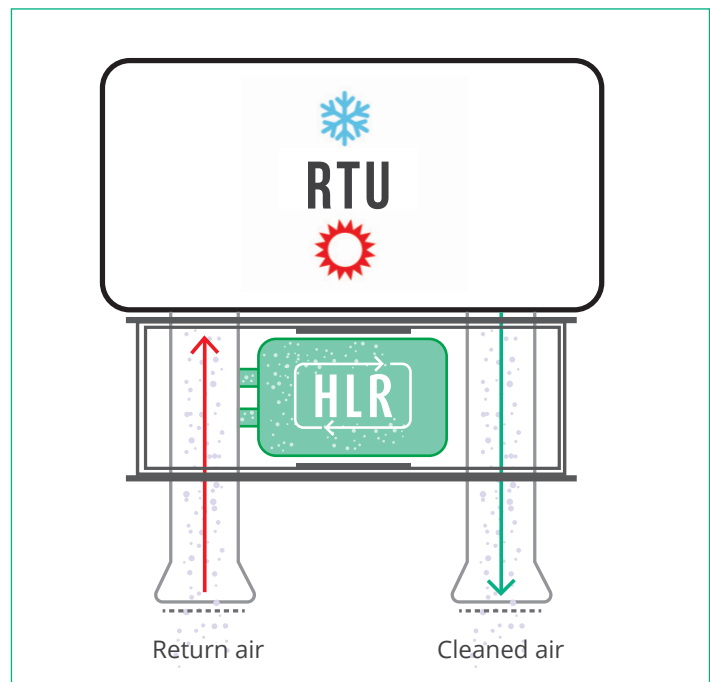


*HLR 100C Module
inside a Curb*

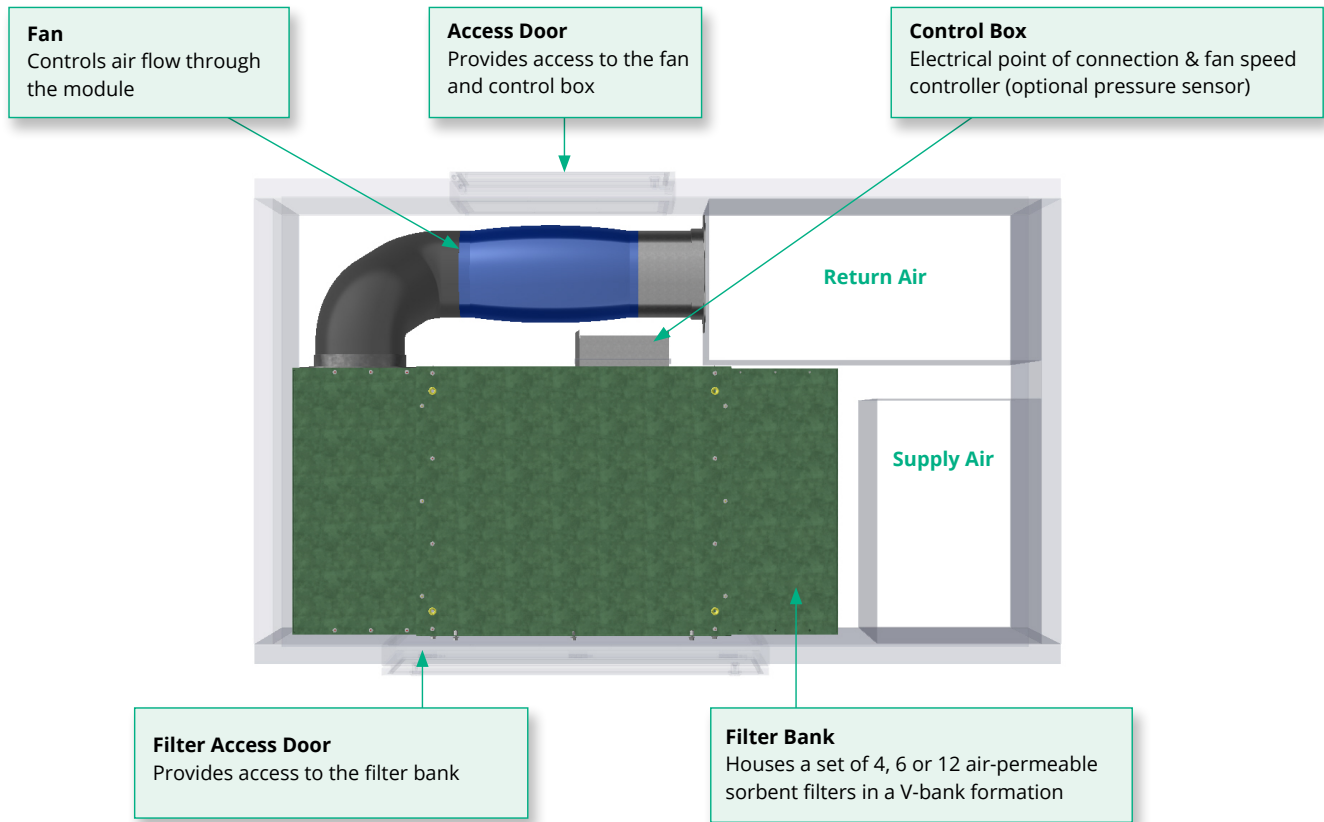
REDUCE COSTS	SAVE ENERGY	INSTALL EASILY	IMPROVE AIR QUALITY	REDUCE CARBON	EARN LEED/WELL POINTS	NO BYPRODUCTS

How it Works

Indoor Air Scrubbing – HLR 100C modules are integrated with packaged rooftop HVAC equipment by installing them inside standard roof curbs. Air is drawn into the HLR 100C by internal fans, which push the air through sorbent filters that capture and remove all the contaminants of concern from the air stream. Without producing any byproducts, the HLR 100C then pushes clean air back into the return air stream. By cleaning recirculated air, outside air ventilation rates can be safely reduced by up to 85%, and new HVAC equipment can be downsized, using the ASHRAE Standard 62.1 IAQ Procedure.



What's Inside the HLR 100C Module?



Broadly Applicable

The HLR 100C can be easily integrated with standard commercial RTUs ranging in capacity from 3 to 25 tons. Pairing the HLR 100C module with RTUs provides benefits to a variety of building types that fall under ASHRAE Standard 62.1 including offices, schools, higher education, retail, and conditioned warehouses. Given its small size, flexible configurations, and simple installation, the HLR 100C is ideally suited for both existing building retrofits and new construction.



Office Spaces



Conditioned Warehouses



K-12 Schools



Higher Education

Proven, Award Winning Sorbent Ventilation Technology®

Over 1,000 HLR modules with Sorbent Ventilation Technology inside have been specified and installed around the world by leading consulting engineers and HVAC contractors. Air cleaning efficiency has been validated by ASHRAE 145.2 testing, and energy savings have been field validated by multiple utilities who have provided incentives for installing HLR modules as well as by the U.S. Department of Energy. Unlike many other air cleaning technologies, independent lab tests show that Sorbent Ventilation Technology does not produce any byproducts. In 2021, the HLR 100M was voted HVAC Product of the Year by the readers of Consulting-Specifying Engineer magazine.



HLR 100C

GENERAL SPECS

Installation	Rooftop Unit Curb		
Construction	Single wall, Galvanized Steel		
Sorbent Filters per Set	4, 6 or 12		
Maintenance	Two-year Filter Replacement		
Operating Life	20+ years with scheduled maintenance		

	100C-4	100C-6	100C-12
Sorbent Filters per Set	4	6	12
Typical Airflow	350 CFM	500 CFM	1,000 CFM

COMMUNICATIONS

Fan Speed	Variable Speed Dial		
Start/Stop	24 VAC/DC or Pressure Sensor		

POWER	100C-4	100C-6	100C-12
Voltage (VAC)	120 V	120 V	115 V
Frequency (HZ)	60 Hz	60 Hz	60 Hz
MCA	2.5 A	2.5 A	8.5 A
MOCP	15 A	15 A	15 A
Power Consumption	232 W	232 W	762 W

WEIGHTS	100C-4	100C-6	100C-12
Module Shipping Weight	80 lbs/36 kg	100 lbs/45 kg	130 lbs/59 kg
Filter Shipping Weight	66 lbs/30 kg	99 lbs/45 kg	198 lbs/90 kg
Installation/ Operating Weight	146 lbs/66 kg	199 lbs/90 kg	328 lbs/149 kg

DIMENSIONS

(Front View)	100C-4	100C-6	100C-12
Length	30.9"/785 mm	30.9"/785 mm	52.3"/1,328 mm
Width	24.4"/620 mm	24.4"/620 mm	24.6"/625 mm
Height	11.1"/282mm	13.9"/353 mm	26.2"/665 mm

(Allow Additional 36" Clearance for Filter Service)

CERTIFICATIONS

HLR Module Safety	ETL Recognized Component Mark Pending
Filter Bank and Filters	UL 900:2015 Ed.8
Air Cleaning Efficiency	ASHRAE 145.2
Compliant under ASHRAE 62.1 and IMC 403.2	

ASHRAE Standard Compliance

Standard 62.1 for Ventilation and Acceptable Indoor Air Quality

All of enVerid's HLR products are fully compliant under ASHRAE Standard 62.1. By using ASHRAE's performance-based Indoor Air Quality Procedure (IAQP) rather than the prescriptive Ventilation Rate Procedure (VRP), engineers can calculate a minimum ventilation rate that optimizes indoor air quality and energy efficiency. Introduced in 1981, IAQP determines outdoor air intake rates based on an analysis of contaminant sources and air cleaning capacity to stay below recommended contaminant concentration limits. Tools developed by enVerid's in-house engineering team, including enVerid's online IAQP Calculator, streamline the application of IAQP for engineers.

Standard 145.2 for Assessing the Performance of Gas-Phase Air Cleaning Systems

HLR technology is one of the only air cleaning technologies to have undergone independent lab tests for cleaning efficiency using ASHRAE Standard 145.2. Independent labs have conducted ASHRAE 145.2 single-pass efficiency testing for all the contaminants of concern required to maintain acceptable indoor air quality in buildings.

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Energy Savings. Air Quality.

enVerid Systems' award-winning Sorbent Ventilation Technology® (SVT®) reduces the cost and carbon emissions of heating, ventilating, and air conditioning commercial buildings and increases their resiliency to polluted outside air. SVT delivers these benefits by filtering harmful contaminants from indoor air so that indoor air quality can be maintained with less outside air ventilation, which is energy intensive and expensive to condition and may be polluted. Reducing outside air requirements enables building owners to install smaller, less expensive HVAC systems that use less energy and to operate existing HVAC systems more energy efficiently. SVT is available in systems sold by leading HVAC manufacturers and in enVerid's HVAC Load Reduction® (HLR®) modules, which can be easily integrated with HVAC systems from any manufacturer. Over 1,000 HVAC systems with SVT have been designed into commercial, academic, and government buildings globally over the past ten years in full compliance with ASHRAE Standard 62.1 and the International Mechanical Code. SVT can also be used to earn LEED and WELL points. For more information, please visit enverid.com