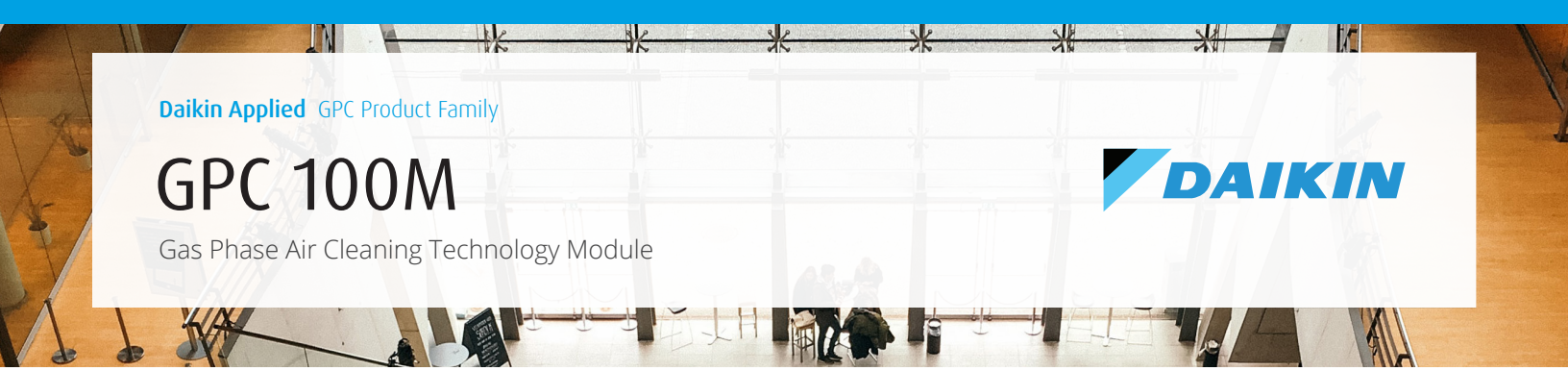


Daikin Applied GPC Product Family

GPC 100M

Gas Phase Air Cleaning Technology Module

Improved Air Quality, Lower HVAC Costs

The GPC 100M module provides improved indoor air quality and dramatically lower HVAC costs by cleaning indoor air so that it can be safely recirculated. The GPC 100M complies with ASHRAE Standard 62.1, is easily integrated with most HVAC system designs, and delivers a significant number of LEED and WELL points. When combined with high-efficiency filters, the GPC 100M can be used to deliver safe indoor air quality for COVID-19 mitigation with less outside air. This award-winning, industry proven-technology helps owners meet their air quality, carbon reduction, and energy goals with the easiest, most cost-effective air cleaning solution on the market.

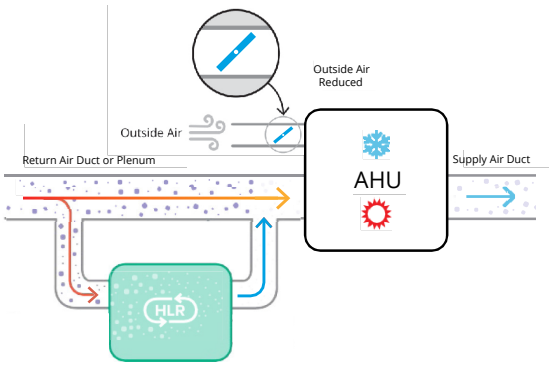
GPC 100M Module

IMPROVE AIR QUALITY | **SAVE ENERGY** | **REDUCE COSTS** | **INSTALL EASILY** | **REDUCE CARBON** | **EARN LEED/WELL POINTS** | **NO BY-PRODUCTS**

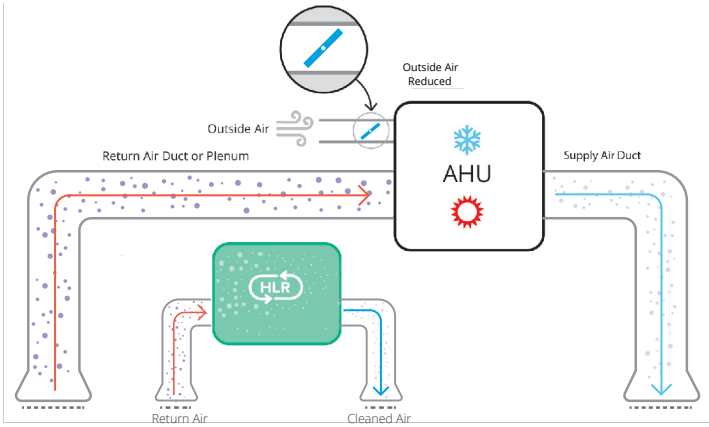
How it Works

Indoor Air Scrubbing – One or more GPC 100M modules can be installed on the return air side of a central air handling unit (AHU) or independent of the AHU. Air is drawn into the GPC 100M 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 GPC 100M then pushes clean air back into the return air stream or space. 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.

Integrated with Airside Equipment



Independent, Directly in Occupied Space



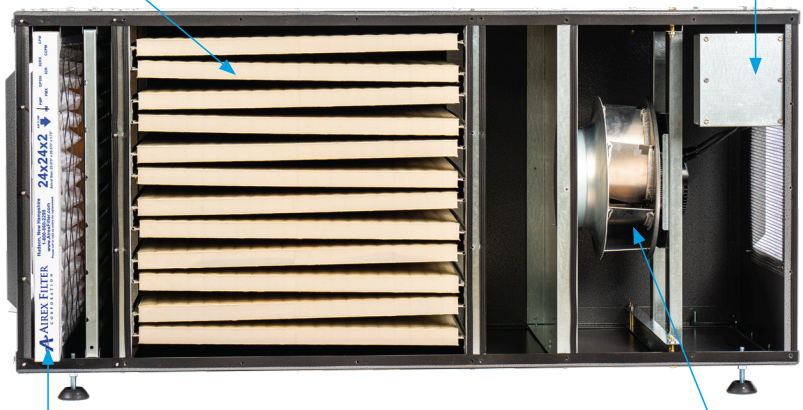
What's Inside the GPC 100M Module?

Broadly Applicable

The GPC 100M is a small indoor GPC module that integrates with a wide range of central or zone-based HVAC systems found in offices, schools, conditioned warehouses and distribution centers, and other commercial building types that fall under ASHRAE Standard 62.1. Given its small size, flexible orientations, and simple installation, the GPC 100M is ideally suited for existing building retrofits and new construction.

Filter Bank Houses a set of 12 air-permeable sorbent filters in a V-bank formation

Control Box Electrical point of connection & fan speed controller



Pre-Filter Slot Houses a 24" x 24" x 2" pleated filter

Fan Controls air flow through the module

Office Spaces

Conditioned Warehouses

K-12 Schools

Higher Education

Proven, Award Winning GPC Technology

Hundreds of GPC modules 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 GPC modules as well as by the U.S. Department of Energy. Unlike many other air cleaning technologies, independent lab tests show that GPC modules do not produce any byproducts. In 2021, the GPC 100M was voted HVAC Product of the Year by the readers of Consulting-Specifying Engineer magazine.

CONSULTING - SPECIFYING engineer 2021 PRODUCT OF THE YEAR Gold

100M Module Specifications

GENERAL SPECS

	Mechanical Room or Air Plenum
Construction	Single wall, Powder-coated Galvanized Steel
Sorbent Filters per Set	12
Typical Airflow	1,000 CFM
Static Pressure Increase	None
Sound Pressure Level	68.5 dBA at 1 m, 1,000 CFM, ducted
Maximum Allowed External Static Pressure	1.25" WG / 310 Pa
Entering Air Conditions	Non-condensing, ≤65% RH, ≤18°C (64°F) dew point
Maintenance	Two-year Filter Replacement 3 to 6-month Pre-Filter Replacement*
Operating Life	20+ years with scheduled maintenance

COMMUNICATIONS

Fan Speed	0-10 VDC
Start/Stop	24 VAC/DC

POWER

Voltage (VAC)	Frequency (HZ)	MCA	MOCP
208-277V	50/60 Hz	3.5 A	15 A

WEIGHTS

Module Shipping Weight	150 lbs	68 kg
Filter Shipping Weight	198 lbs	90 kg
Installation/Operating Weight	348 lbs	158 kg

DIMENSIONS (Front View)

Length	58.2" / 1,478 mm
Height	24.9" / 631 mm
Depth (Allow Additional 24" Clearance for Filter Service)	25.8" / 654 mm
Inlet Duct	17.88" x 17.88" w/ 1.0" flange 454 mm x 454 mm w/ 25 mm
Outlet Duct	11.88" x 11.88" w/ 1.0" flange 302 mm x 302 mm w/ 25 mm

CERTIFICATIONS

GPC Module Safety	UL 60335-2-40:2022 Ed.4 CSA 22.2:60335-2-40:2022 Ed.4
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 Daikin's GPC 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.

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

GPC 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.

* The Pre-Filter replacement frequency varies based on building conditions. Daikin Applied recommends changing it on the same schedule as other building filters.

Daikin Applied's award-winning Gas Phase Air Cleaning Technology reduces the cost and carbon emissions of heating, ventilating, and air conditioning commercial buildings and increases their resiliency to polluted outside air. Gas Phase Air Cleaning Technology 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. Gas Phase Air Cleaning Technology can also be used to earn LEED and WELL points. For more information, please visit daikinapplied.com.