



Humidifying air purifier

MCK55W



Humidification and purification in one

Pure air thanks to active plasma ion discharge and flash streamer technology

High performance HEPA filter to catch fine particles of dust

Powerful suction and whisper quiet

New stylish and compact design

Why choose Daikin?

As a global leader in the HVAC-R industry, we rely on more than 90 years of experience and expertise to deliver the highest quality products and solutions.

Daikin air purifiers uphold our promise to provide comfortable indoor climates in homes, offices and commercial spaces around the world. Based on a tradition of technological and design excellence, our air purifiers reduce the presence of pollutants, allergens and moulds to provide clean air and healthier indoor environments.

Because our care for the planet is absolute, our air purifiers also contain the latest technologies to consume less energy and reduce environmental impact, while maintaining excellent performance over the years.

Our commitment to quality also extends to providing the best possible service experience tailored to our customers' needs. Daikin service centres offer around-the-clock technical support before and after your purchase, and our reliable experts are available to assist with on-site support, installation, troubleshooting and maintenance.

Daikin's unique double method

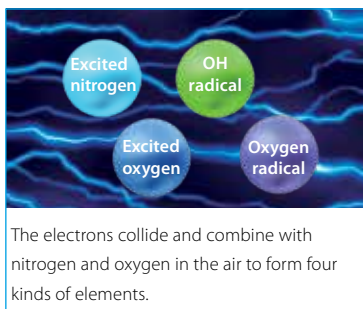
1. The Streamer unit, a high power plasma discharge technology, decomposes harmful substances* inside the unit. These substances are either trapped on the HEPA filter or adsorbed to the deodorizing filter element.

2. The Active Plasma Ion generation unit provides further purification to the space, by adding purifying elements to the cleaned air. These could for example assist to deodorize smelling curtains and carpets.

* Substances including: viruses¹, bacteria², pollen³, mould spores⁴



Plasma discharge emits high-speed electrons.



The electrons collide and combine with nitrogen and oxygen in the air to form four kinds of elements.



These elements provide decomposition power.

Note:

- 1 Testing organization: Kitasato Research Center for Environmental Science; Test result certificate 21_0026 (issued by same organization); Result of experiment: 99.9% removal of A-H1N1 virus after 1 hour.
- 2 Testing organization: Japan Food Research Laboratories. Test number: 15044988001-0201. Test method: Attached a test piece inoculated with bacteria liquid on the upstream side of a dust collection filter installed in an air purifier, and operated it in a test area of 25 m³. Counted the number of live bacteria after five hours. Test result: Reduced by more than 99% in five hours. Test unit: Tested with MCK555 (Japanese model), a model equivalent to MCK55W series (turbo operation).
- 3 Various allergens were irradiated by streamer discharge and the breakdown of protein in the allergens was verified using the ELISA method, cataphoresis, or an electron microscope (Joint research with Wakayama Medical University). Test example: Japanese cedar pollen Cryj-1³; Test result: 99.6% or more decomposed and removed in 2 hours.
- 4 Testing organization: Japan Food Research Laboratories. Test number: 204041635-001. Test result: 99.9% or more of mould (Cladosporium) spores decomposed and removed in 24 hours.



Three steps to decompose harmful substances

1 Powerful suction

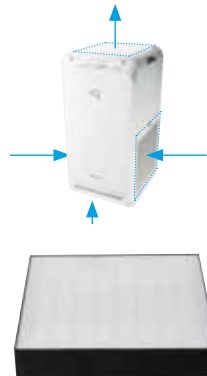
Takes in air over a wide area from 3 directions.

2 Effective capturing of pollutants

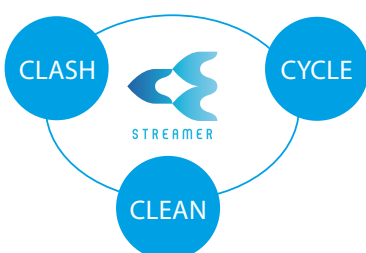
Efficiently catches dust and pollutants with an electrostatic HEPA filter.

3 Decomposition

Uses Daikin's Streamer technology to decompose, by oxidation, harmful substances caught on the filter.



The Streamer Symbol consists of three C's



CLASH: The dust collection filter catches the floating substances with the attached harmful gases and Streamer decomposes the gases by oxidation.

CYCLE: The deodorising filter adsorbs and decomposes odour. Thanks to the regeneration of the adsorbing capacity, the deodorising capacity is maintained. No need to change the deodorising filter, unlike air purifiers with activated carbon filters.

CLEAN: Removes bacteria from dust collection filter and humidifying filter.

High performance HEPA filter to catch fine particles of dust

Removes 99% of particles between 0.1 μm and 2.5 μm in size

The filter collects dust efficiently with electrostatic forces. It is not prone to clogging compared with non-electrostatic HEPA filters which collect particles only by the fineness of the mesh.

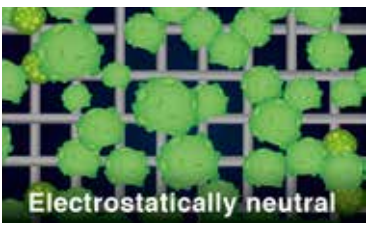
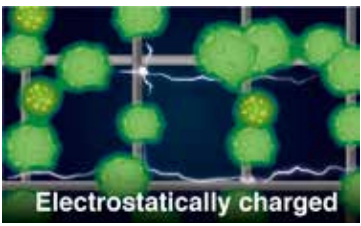
Therefore, a larger amount of air can pass through the filter.

The filter can purify a larger amount of air!

Electrostatic HEPA filter ← versus → Non-electrostatic filter

- > Removes 99,97% of fine particles of 0,3 μm
- > Filter fiber itself is charged with static electricity, and collects particles efficiently
- > Doesn't clog easily, hence less pressure loss

- > Because it catches particles relying only on mesh size, it is necessary to make mesh finer, making it easy to be clogged and cause high pressure loss



Compact, effective and quiet thanks to the new, innovative structure

Small footprint



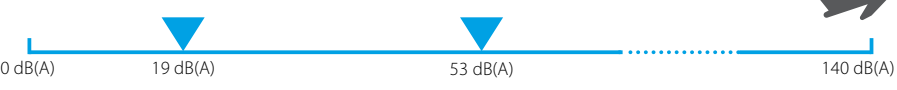
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Very quiet

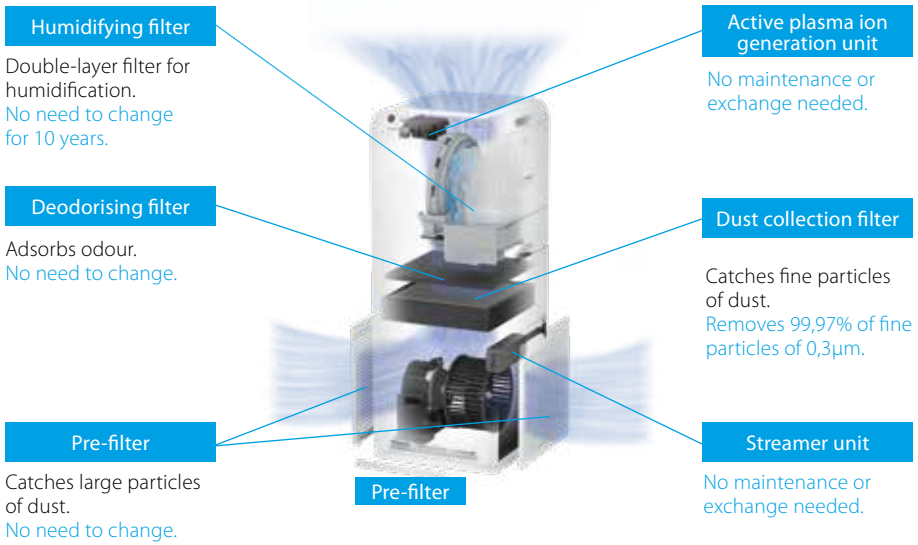


Silent mode

Turbo mode



Unique vertical structure



It may become necessary to change out items that usually do not require replacing due to environmental and operational conditions.

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HUMIDIFICATION

DUST COLLECTION

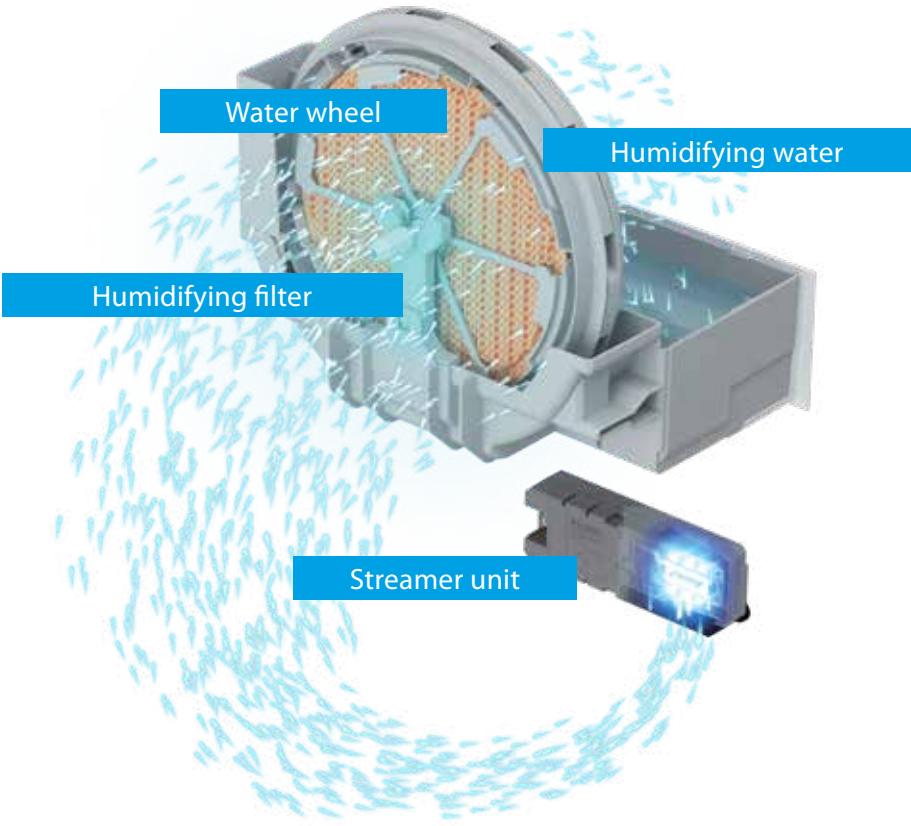
DEODORISATION

Capacity in turbo operation mode

AIR PURIFICATION		HUMIDIFYING CAPACITY	
Air purification only	Humidification + Air purification	500 ml/h	
Airflow			
5.5 m ³ /min.	330 m ³ /hour	Applicable room area	
Applicable room area			
~41 m ²		~23 m ²	

* Calculated by test method based on Japan Electrical Manufacturers' Association Standard JEM1467.

Powerful humidification to protect against Air Dryness and viruses



Triple Detection sensor to quickly detect air pollution



Equipped with a high sensitivity dust sensor that distinguishes small particles such as $PM_{2.5}$ and larger particles of dust and reacts accordingly. Triple detection of dust, $PM_{2.5}$ and odour is provided.



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- › Protects the skin, the throat and the nostrils from dryness
- › Protects against viruses by maintaining appropriate humidity of the room
- › Indicates humidity of the room
- › Eliminates bacteria on the humidifying filter



Single Unit		MCK			55W	
Application						Floor standing type
Applicable room area			m ²			41
Dimensions	Unit	HeightxWidthxDepth	mm			700 x 270 x 270
Weight	Unit		kg			9.5
Casing	Colour					White
Fan	Type					Multi Blade Fan (Sirocco fan)
	Air flow rate	Air purifying operation	Silent/ Low/ Medium/ Turbo	m ³ /h		54 /120 /192 /330
		Humidifying operation	Silent/ Low/ Medium/ Turbo	m ³ /h		102 /144 /192 /330
Sound pressure level	Air purifying operation	Silent/Low/Medium/ Turbo		dBA		19.0 /29.0 /39.0 /53.0
	Humidifying operation	Silent/Low/Medium/ Turbo		dBA		25.0 /33.0 /39.0 /53.0
Humidifying operation	Power input	Silent/L/M/Turbo		kW		0.011 /0.014 /0.019 /0.058
	Humidification	Silent/Low/Medium/ Turbo		ml/h		200 /240 /300 /500
	Water tank capacity			l		2.7
Air purifying operation	Power input	Silent/L/M/Turbo		kW		0.007 /0.010 /0.017 /0.056
Deodorizing method						Flash streamer + Deodorizing catalyst
Dust collecting method						Electrostatic HEPA filter
Air filter	Type					Polyethylene terephthalate net
Sign	Item	01				Dust: 3 stages / Odour: 3 stages / Anti-pollen mode / Water supply lamp / Child proof lock lamp / ON/OFF lamp / Streamer lamp / Econo mode / MOIST mode / AUTO FAN mode / PM _{2.5} sensor lamp: 3 stages / Humidity monitor lamp: 5 stages / Humidity setting: Low/Standard/High / Airflow rate: Quiet/Low/Standard/Turbo / Humidity on/off
Power supply	Phase/Frequency/Voltage			Hz/V		1~/50/60/220-240/220-230
Type						Humidifying air purifier

The applicable room area is appropriate for operating the unit of maximum fan speed (HH). Applicable room area indicates the space where a certain amount of dust particles can be removed in 30 minutes. (JEM 1467) | Humidification amount changes in accordance with indoor and outdoor temperature and humidity. Measurement condition: 20°C in temperature, 30% in humidity. | Operating sound levels are the average of values measured at 1m away from the front, left, right and top of the unit. (These are equal to the values in an anechoic chamber) | Electrostatic HEPA filter and humidifying filters are attached in the unit.

Functions

Dust (PM _{2.5} /dust) and odour sensor lamps	x
Streamer discharge	x
Active plasma ion	x
Electrostatic HEPA filters	x
Streamer regenerated deodorizing filter	x
Econo mode	x
Auto fan mode	x
Anti-pollen mode	x
Turbo mode	x
Child proof lock	x
Brightness adjustment	x
Auto restart after power failure	x
Stabilizer free	x



About the dust collection and deodorizing capacity of an air purifier:

- Not all harmful substances in cigarette smoke (carbon monoxide, etc.) can be removed.
- Not all odour components that emanate continuously (from building materials and pets, etc.) can be removed.

The Daikin air purifier is not a medical device and is not meant to be used as a substitute to any medical or pharmaceutical treatment.

FSC

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