

- Daikin products are manufactured for export to numerous countries throughout the world. Prior to purchase, please confirm with your local authorised importer, distributor and/or retailer whether this product conforms to the applicable standards, and is suitable for use, in the region where the product will be used. This statement does not purport to exclude, restrict or modify the application of any local legislation.
- Use only those parts and accessories supplied or specified by Daikin.
- Read the User's Manual carefully before using this product. The User's Manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.
- If you have any enquiries, please contact your local importer, distributor and/or retailer.









### Dealer

### DAIKIN INDUSTRIES, LTD.

Head Office: Umeda Center Bldg., 2-4-12, Nakazaki-Nishi, Kita-ku, Osaka, 530-8323 Japan

Tokyo Office: JR Shinagawa East Bldg., 2-18-1, Konan, Minato-ku, Tokyo, 108-0075 Japan http://www.daikin.com/global\_ac/

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• Specifications, designs and other content appearing in this brochure are current as of May 2012 but subject to change without notice.

#### MC70MVM6

About the dust collection and deodorising 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 (building material odours and pet odours, etc.) can be removed.

STREAMER

This product is not a medical device, medical treatment device or a therapeutic good. This product is not intended to have any therapeutic use or to be used for the diagnosis, treatment, relief or prevention of illness.

If you have a health concern or are not feeling well, please consult a health care professional.



### Get crystal clean air with Daikin.



# Daikin Streamer Discharge Tech nology eliminates harmful substances Virus



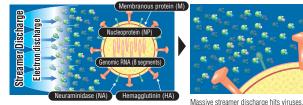
### What is the Daikin Streamer Discharge Technology?

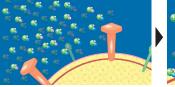
"Streamer Discharge" is a type of plasma discharge in which high speed electrons capable of oxidative decomposition are generated. It has the ability to eliminate bacteria and mould as well as hazardous chemical substances and allergens, etc. Compared to standard plasma discharge (glow discharge), the discharge range of Daikin's Streamer Discharge is wider, which makes electrons easier to collide with oxygen and nitrogen in the air. This enables high speed electrons to be generated three dimensionally over a wide area, which results in an oxidative decomposition speed that is over 1000 times greater with the same electrical power. Daikin's Streamer Discharge technology has proven successful in stably generating high speed electrons, a feat that has been considered difficult up to now.

## How the decomposition mechanism of Streamer Discharge Technology works.

If it were thermal energy, the decomposition strength would be comparable to a heat of approximately 100,000°C\*1.

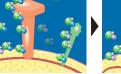
\*1 Comparison of oxidation decomposition. This does not mean temperature will become high

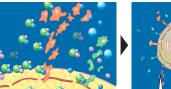






decomposes the surface protein through





The protein destroyed through oxidative

decomposition gets fragmented and the

streamer discharge reverts to safe nitroger

atoms, oxygen atoms, and water molecules

Surface protein (HA and NA) lestroyed by oxidative

decomposition.

# A clean technology that's recognised by public institutions<sup>\*</sup> in Japan and abroad.

oxidation

### Tests that prove the effectiveness of the Streamer Technology

\* Following experiments were practised by third parties based on Daikin industries, Ltd's request

Target of experiment	$\star$ Public institutions (Testing organization)	Test method	Targe	et of experiment	$\star$ Public institutions (Testing organization)	Test method	
	National Institute of Hygiene and Epidemiology (Vietnam)	CPE and TCID50		Pollen based allergens			
Virus	Kitasato Research Center of Environmental Sciences	CPE and TCID50	Allergens	Allergens from animate beings		ELISA method	
	Kobe University Graduate School	ELISA method	Allergens	Fungal allergens	Wakayama Medical University		
	Yamagata University	Scanning electron microscope		Flour			
Bacteria	Japan Food Research Laboratories	PCR method		Adjuvant (DEP)	Yamagata University	ELISA method	
Dacteria	The Jikei University	CFU	Hazardous	Adjuvant (VOC)	Tohoku Bunka Gakuen University	Damping technique	
Mould	Mould Japan Food Research Laboratories		chemical substances	Adjuvant inhibiting effect	Wakayama Medical University, National institute for Environmental Studies	ELISA method	
			Substances	Formaldehyde	Tohoku Bunka Gakuen University	Constant generation method	

### Viruses and bacteria that have been proven to be deactivated by Streamer Technology

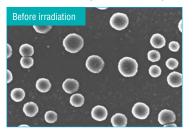
 Influenza virus (type A, H1N1)
Highly virulent avian influenza virus (type A, H5N1)
Bacillus coli, 0-157
Norovirus
Staphylococcus aureus Pseudomonas aeruginosa
• Tuberculosis bacteria
• Toxins (enterotoxins)

### Allergens that have been proven to be decomposed by Streamer Technology

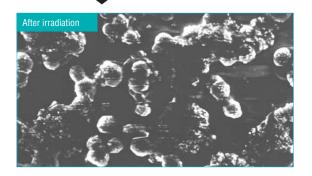
- Fungal allergens: sooty moulds, aspergillus, eurotium, aspergillus niger, fusarium, penicillium
- Pollen based allergens: cedar pollen, alder pollen, birch pollen, Japanese cypress pollen, pencil cedar pollen, bald cypress pollen, mugwort pollen, orchard grass pollen, ragwood pollen, sweet vernal grass pollen, timothy grass pollen, fleawort pollen, Japanese beech
- Allergens from animate beings: house dust mite [dermatophagoides pteronyssinus] (droppings and dead mites), house dust mite [dermatophagoides farinae] (droppings and dead mites), American cockroach (droppings), German cockroach (droppings), flea (droppings), dog epidermis (dander), cat epidermis (dander), hamster epidermis (dander) Other: wheat flour

\*2 Test method: constant generation method; Test room: 22 to 24 m<sup>3</sup>; Temperature: 23 ±3°C; Humidity: 50 ±20%; Ventilation condition: When concentration of 0.2 ppm is continually emanated, a removal capacity of 0.08 ppm is maintained at 36 m<sup>3</sup>/h, which is within the guideline of the Ministry of Health. Labour and Welfare (Japan). (This equates to the ventilation capacity of an approximately 65 m<sup>3</sup> room.)

Influenza virus (type A, H1N1)



Viruses were placed on the electrode of the streamer discharge unit and then photographed through an electron microscope after being irradiated. (Testing organization: Yamagata University)

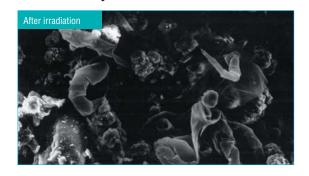


### Allergens from animate beings

House dust mite [dermatophagoides farina] body



Dead mites were placed on the electrode of the streamer discharge unit and then photographed through an electron microscope after being irradiated. (Testing organization: Wakavama Medical University)



### Hazardous chemical substances that have been proven to be removed by Streamer Technology

 Formaldehyde<sup>\*2</sup> Diesel exhaust particulates (DEP)

- Hazardous chemical substances in exhaust gas: NOx, tetrachlorethylene, benzene, trichloroethylene, dichloroethane, dichloromethane, chloroform
- VOC type hazardous chemical substances: iso-butanol, hexane, styrene, nonanoic acid, trimethyl benzene, xylene, naphthalene, ethyl benzene, toluene, ethyl acetate

This product can be used to improve the quality of the air by removing airborne hazardous chemical substances, allergens, mould, bacteria, and viruses, etc. However, this product is not intended for the creation of sterile environments or for the prevention pathogen infections.

This description relates to the Streamer Technology devised by Daikin, but not to this Air Purifier. Test results from use of the Streamer Technology are generated according to prescribed test methods conducted by Daikin. Although the Streamer Technology is contained within this Air Purifier, this does not mean that precisely the same results will be experienced using this Air Purifier. Actual results may differ depending on the conditions of product installation and use of the actual product, etc.

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### **Fungal allergens**

Eurotium cell

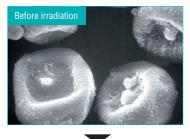


Mould was placed on the electrode of the streamer discharge unit and then photographed through an electron microscope after being irradiated. (Testing organization: Wakavama Medical University)



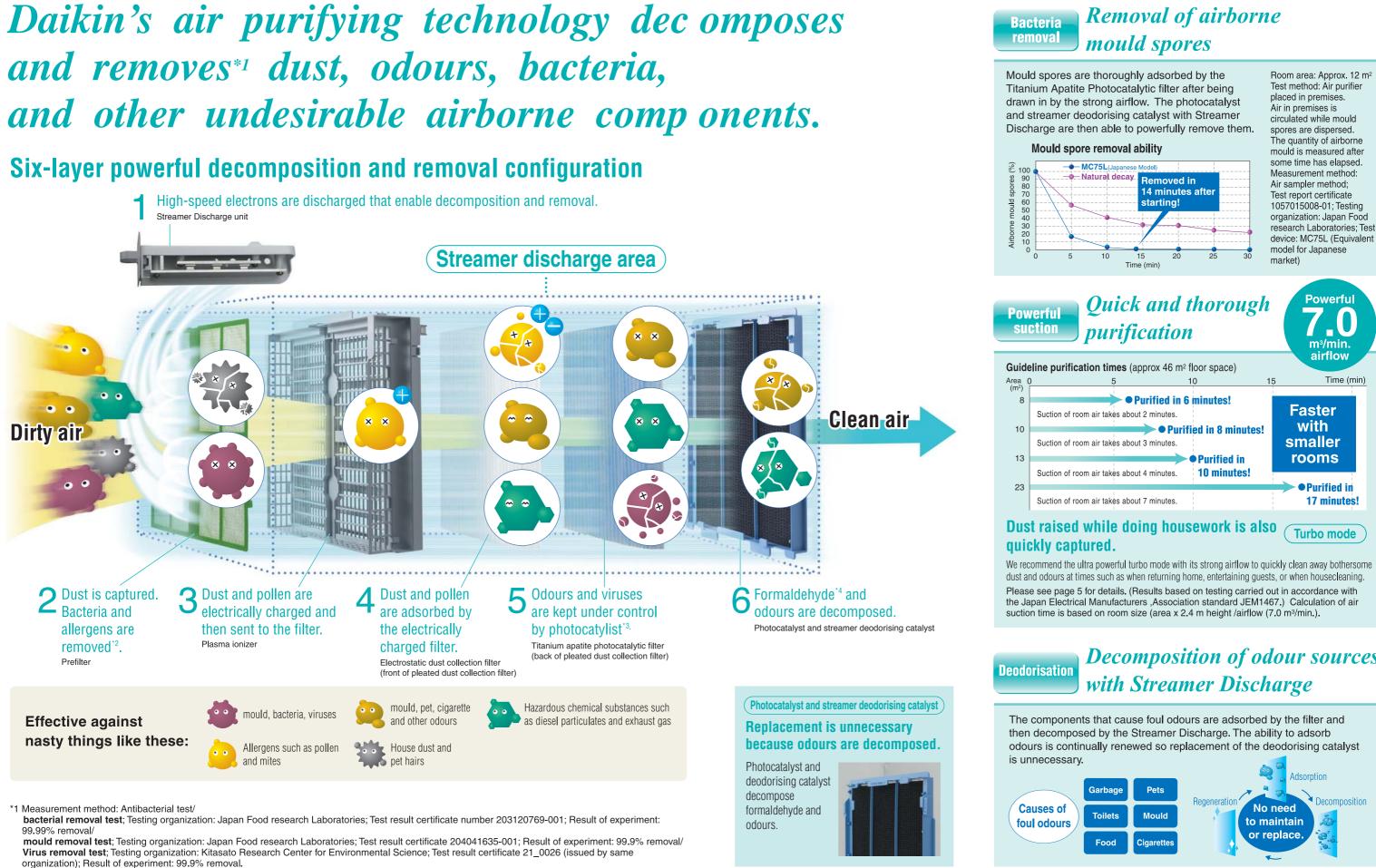
### **Pollen based allergens**

cedar pollen



Pollen was placed on the electrode of the streamer discharge unit and then photographed through an electron microscope after being irradiated. (Testing organization: Wakayama Medical University)





These results will differ from actual location where product will be used.

- \*2 Conditions of experiment: Allergens were irradiated by Streamer Discharge and the breakdown of protein in the allergens was verified using either the ELISA method, cataphoresis, or an electron microscope. (Joint research with Wakayama medical University.)
- \*3 Measurement method: Virus removal test; Testing organization: Kitasato Research Center for Environmental Science; Test result certificate 21\_0026 (issued by same organization); Result of experiment: 99.9% removal.
- \*4 Test method: constant generation method; Test room: 22 to 24 m3; Temperature: 23 ±3°C; Humidity: 50 ±20%; Ventilation condition: When concentration of 0.2 ppm is continually emanated, a removal capacity of 0.08 ppm is maintained at 36 m<sup>3</sup>/h, which is within the guideline of the Ministry of Health, Labour and Welfare (Japan). (This equates to the ventilation capacity of an approximately 65 m<sup>3</sup> room.)

• Not all odour components that emanate continuously (building material odours and pet odours, etc.) can be removed. This product is not a medical device, medical treatment device or a therapeutic good. This product is not intended to have any therapeutic use or to be used for the diagnosis, treatment, relief or prevention of illness.

About the dust collection and deodorising capacity of air purifiers:

Quick and thoro purification	m³/min.
rification times (approx 46 m² floor space) 5 10	airflow 15 Time (min)
• Purified in 6 minutes! of room air takes about 2 minutes.	Faster
of room air takes about 3 minutes.	smaller
of room air takes about 4 minutes. <b>10 minut</b>	
of room air takės about 7 minutes.	17 minutes!
والمتعادية والمتعالية والمتعاد والأطريب أتعا	

# Decomposition of odour sources

• Not all harmful substances in cigarette smoke (carbon monoxide, etc.) can be removed.

If you have a health concern or are not feeling well, please consult a health care professional.

### **Specifications**



Applicable room area	Up to 46 m <sup>2</sup> (12 m <sup>2</sup> purified in approx. 9 minutes)*1								
Power supply		1 phase 220-	-240 / 220-230 V (50/60 Hz),	Cabtire code					
Color			White						
Dimensions (mm)			576 (H) x 403 (W) x 241 (D)						
Weight (kg)			8.5						
Convenient functions		Off timer,	Child proof lock, Brightness a	adjustment					
Mode	Quiet	Low	Normal	High	Turbo				
Airflow (m <sup>3</sup> /min.)	0.91	2.2	3.5	4.8	7.0				
Power consumption (W)	7.0	10.0	16.0	26.0	65.0				
Sound pressure (dB)	16.0	24.0	32.0	39.0	48.0				
Sold separately Replacement pleated filter	KAC017A4E Set of 5								
Pollutants that can be collected, reduced, and decomposed   Pollen (cedar pollen, alder pollen, birch pollen, pencil cedar pollen, bad cyress pollen, mugwort pollen, birch grass pollen, fleawort pollen, and Japanese beech   Image: Constant of the pollen, bad cyress pollen, tagwoot pollen, sweet vermal grass pollen, timetry grass pollen, fleawort pollen, and Japanese beech   Image: Constant of the pollen, bad cyress pollen, tagwoot pollen, and Japanese beech   Image: Constant of the pollen, bad cyress pollen, tagwoot pollen, and Japanese beech   Image: Constant of the pollen, bad cyress pollen, tagwoot pollen, and Japanese beech   Image: Constant of the pollen, to constant of the pollen, tagwoot pollen, and Japanese beech   Image: Constant of the pollen, bad cyress pollen, tagwoot pollen, and Japanese beech   Image: Constant of the pollen, bad cyress pollen, tagwoot pollen, and Japanese beech   Image: Constant of the pollen, bad cyress pollen, tagwoot pollen, and Japanese beech   Image: Constant of the pollen, bad cyress pollen, tagwoot pollen, and Japanese beech   Image: Constant of the pollen, bad cyress pollen, tagwoot pollen, and Japanese beech   Image: Constant of the pollen, bad cyress pollen, tagwoot pollen, and Japanese beech   Image: Constant of the pollen, bad cyress pollen, tagwoot pollen, and Japanese beech   Image: Constant of the pollen, bad cyress pollen, tagwoot pollen, and Japanese beech   Image: Constant of the pollen, bad cyress pollen, tagwoot pollen, and tagwoot pollen, tagwoot pollen, tagwoot pollen, tagwoot pollen, tagwoot pollen, tagwoot pollen, tagwoot pollen, tagwoot pollen, tagwoot pollen, tagwoot p									
							Pollutants that can be collected/pollutants that can be deodorised	Dust   Pet hair   Image: Asian dust   Image: Asian dust	

\*1 Calculation based on testing method of the Japan Electrical Manufacturers ,Association standard JEM1467.

### **Dust collection speed (guideline)**

	46.0m <sup>2</sup>	44.6m <sup>2</sup>	41.3m <sup>2</sup>	38.0m²	36.3m²	33.0m²	29.7m²	26.4m²	23.0m²	19.8m²	16.5m <sup>2</sup>	13.2m <sup>2</sup>	10.0m <sup>2</sup>
MC70LVM	30	29	27	26	25	23	21	19	17	15	13	10	8
~ 46.0m <sup>2</sup>	minutes	minutes	minutes	minutes	minutes	minutes	minutes	minutes	minutes	minutes	minutes	minutes	minutes

(Results based on testing carried out in accordance with the Japan Electrical Manufacturers, Association standard JEM1467.)

### Conditions used to calculate purification time About floor space used

As one of the items stipulated in the Japan Electrical Manufacturers ,Association standard JEM1467, floor space is determined as the size of a room that can be purified of dirty air\*2 with a dust concentration of 1.25 mg/m3 in 30 minutes up to a cleanliness of 0.15 mg/m<sup>3</sup>, as defined in the Building Sanitation Management Law, under the condition of one natural ventilation (1 time/hour).

Calculation of purification time

Using the above stipulation, the purification time for each unit of area is calculated as the time it takes to go from a dust concentration of 1.25 mg/m<sup>3</sup> to 0.15 mg/m<sup>3</sup>, in other words, the time it takes to reach 12% of the initial concentration.

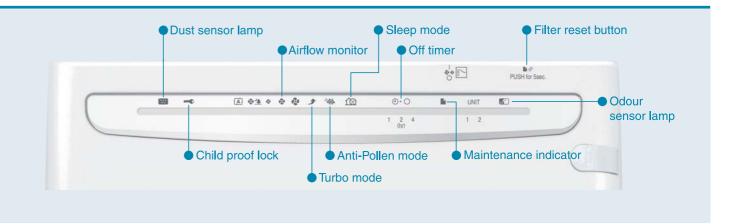
\*2 Dirty refers to things such as odours, bacteria, and pollen. Things such as stains and oil spots cannot be removed.

# Economical: no need to buy filters for 10 years\*4.

**Operation is economical** with the five included filters. You won't need to buy filters for 10 years, because each filter lasts 2 years.

Easy filter storage Unused filters can be stowed neatly inside the unit. \*4 Based on ten cigarettes being smoked per day. (Calculation based on testing method of Japan Electrical Manufacturers Association JEM1467 standard.) The unit is unable to decompose all harmful substances such as carbon monoxide found in cigarette smoke. Two years as the replacement period for the pleated filter is given as a guide. This may differ depending on how and where the product is used. The replacement period will become shorter if it is used in a place where there are a lot of pollutants in the air.

# User friendly design that's easy to read and easy to use



### **Feature list**

Titanium apatite photocatalytic filter	Streamer Discharge				
Bacteria and viruses are thoroughly adsorbed by the titanium apatite and then removed by the photocatylist.	This function quickly decomposes odours and allergens, etc., with high speed electrons that have a powerful ability to oxidize.				
Pleated dust collection filter	Dust and odour sensor lamps				
Very economical, the air purifier comes standard with 5 replacement filters. You will not have to buy filters for 10 years (1 filter can be used for 2 years).	Dust and odours are dectected and shown in 3 easy-to-understand colours to indicate the level.				
Anti-Pollen Mode	Sleep mode				
Switching between normal and low airflow to create a gentle turbulence, pollen is caught before it lands on the floor.	Operation automatically switches only between "Quiet" and "Low" modes in accordance with how polluted the air is. This is recommended for times such as when sleeping.				
Off timer	Child proof lock				
Operation stop time can be set.	This can be used to prevent small children from mishandling the air purifier.				

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### Streamer deodorising catalyst

Odours and allergens, etc., are adsorbed on the catalyst and then decomposed by the power of the streamer.

#### Power saving inverter

The inverter saves energy by efficiently controlling the rotational speed of the motor in order to reduce power consumption

#### Turbo mode

This convenient mode provides highpower operation to quickly clean the air in a room when, for example, you come home or when you have guests over.

#### Brightness adjustment

The brightness of the indicator panel lamp can be adjusted.

#### Plasma dust collection

Dust and pollen are collected by charging them positively while charging the electrostatic dust collection filter negatively

#### Energy saving automatic operatio

The air purifier is run, without wasteful operation, only in accordance with the level of pollutants in the air, which is detected by the sensor

#### Prefilter

This catches large dust particles. Bacteria and allergens are removed by the streamer and filter

#### Auto-Restart after Power Failure

The air purifier memorises the settings for mode, airflow, etc., and automatically returns to them when power is restored after a power failure.