

PHOTOCATALYTIC AIR CLEANER



MC704VM

Clean air is essential for a comfortable environment



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Daikin has a worldwide reputation based on over 70 years' experience in the successful manufacture of high quality air conditioning equipment for industrial, commercial and residential use.

Daikin's unique position as a manufacturer of air conditioning equipment, compressors and ozone-friendly refrigerants has led to its close involvement in environmental issues. For several years Daikin has had the intention to become a leader in the provision of environmental friendly products. This challenge demands the eco design and development of a wide range of products and an energy management system which involves energy conservation and reduction of waste.

DAIKIN'S PHOTOCATALYTIC AIR CLEANER REMOVES BACTERIA,

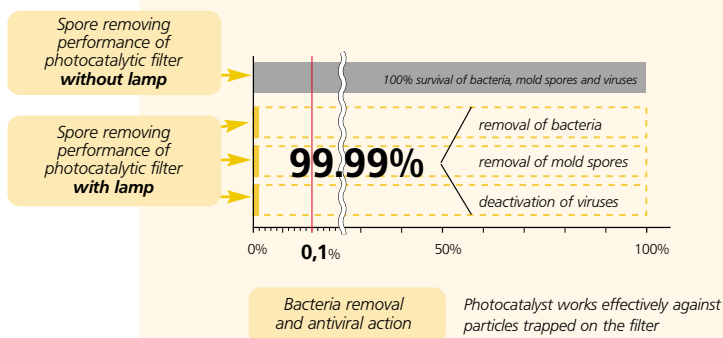
01

Antibacterial photocatalytic filter eliminates viruses and removes bacteria

99.99%

Antibacterial photocatalytic filter:

1 Removes mold spores and has antiviral action



2 Removes diseases causing bacteria

Many disease causing bacteria (mold, microbes and viruses) exist in unclean air. The photocatalytic filter removes or deactivates almost 99,99% of these organisms so that air blown from the unit is always clean.

4

1 Filter roll

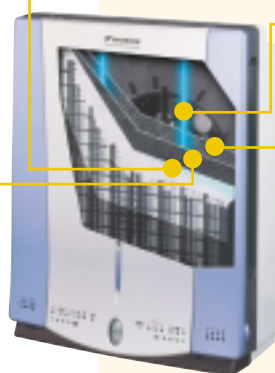
Antibacterial photocatalytic filter rear surface

- Breaks down odour molecules in trapped dust and other particles!
- Mold spores trapped by the filter are eliminated.

2 Photocatalyst 1st stage

Antibacterial photocatalytic filter

- Odour molecules that slip through the filter are broken down
- Antibacterial and antiviral (deactivates viruses)



Special Inverter lamp

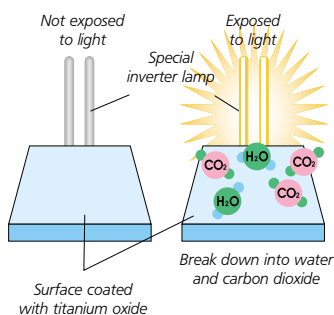
- Photocatalyst is activated by non-harmful ultraviolet light source

3 Photocatalyst 2nd stage

Antibacterial photocatalytic filter

- Even hard-to-decompose chemical pollutants are broken down!

Photocatalytic method of breaking down odour molecules



How the photocatalytic filter works to deodorise, remove bacteria and deactivate viruses

When light strikes titanium oxide, hydrogen peroxide (H₂O₂) and hydroxyl radicals (OH) are formed. These 2 substances possess powerful oxidising properties and through mutual interaction they are able to decompose odorous substances into odourless carbon dioxide and water. A powerful oxidative also removes bacteria and deactivates viruses.

BREAKS DOWN ODOURS AND DEODORISES

02 Photocatalytic power breaks down odours and cleans the air

85%

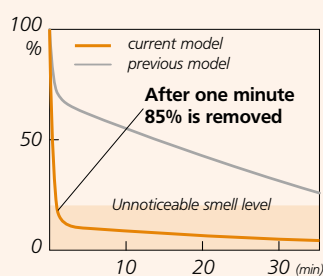
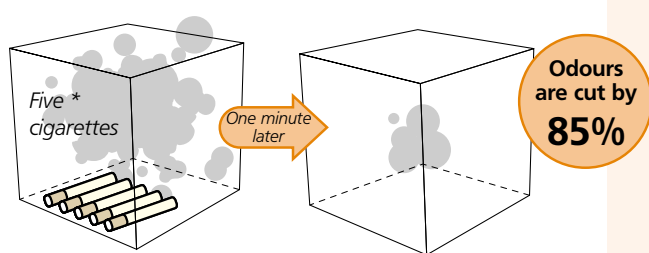


Eliminates smells in even the furthest corners of a spacious living area

Powerful air flow and 4-directional suction ensure the efficient collection of odours. The photocatalytic deodoriser offers a performance comparable with the very best in the industry.

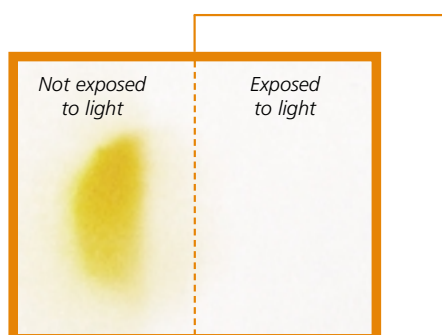
Rapid deodorisation of tobacco smoke

Rating of 85% for deodorisation refers to the ability of the photocatalytic air cleaner to deodorise the smoke from five burned cigarettes in a one-cube-meter enclosed space. One minute after operation, the amounts of ammonia, acetaldehyde and acetic acid are reduced by 85%.



Although the sensitivity of individual noses does vary, most people are not able to detect the smell when the odour level is reduced by 80%. This unit rapidly cuts odours to undetectable levels. In just one minute, photocatalytic air cleaners speedily cut the odour level by 85%.

*Be aware that the unit is unable to remove the harmful carbon monoxide that results from cigarette smoking



Photocatalytic technology provides the power to break down odours

Typical test results show that when tobacco tar is evenly coated on a surface, the tar is broken down only where the surface is exposed to light (see the right hand side of the image).

DAIKIN'S PHOTOCATALYTIC AIR CLEANER

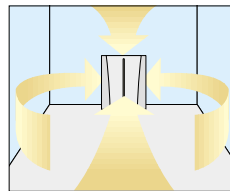
IMPRESSIVE AIR FLOW WITH AN ULTRA QUIET OPERATION

03

Impressive air flow and 4-directional suction

(Applicable room size up to 41 m² max)

420 m³/h



Powerful air movement for rapid purification

Hard to beat air flow characteristics, ensure speedy particle collection and rapid breakdown of odours. Performance levels of this order make the unit ideal for use in homes as well as in offices, shops, clinic waiting rooms and other business premises.

Insufficient air cleaner suction power or air flow capacity (even with a 100% efficient filter) lengthens the time required to clean the air in the room. The key to rapid air purification is a filter that efficiently collects dust plus powerful air movement.

4-directional suction

Even when the unit is located at floor level, the newly conceived 4-directional air suction feature of the unit results in unbeatable collection (from above, left, right and front) of dust and odours from all corners of the room.

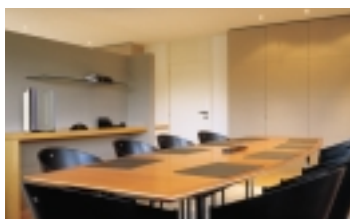
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04

Ultra quiet operation

(Ultra quiet in "Silent" mode)

16 dB(A)

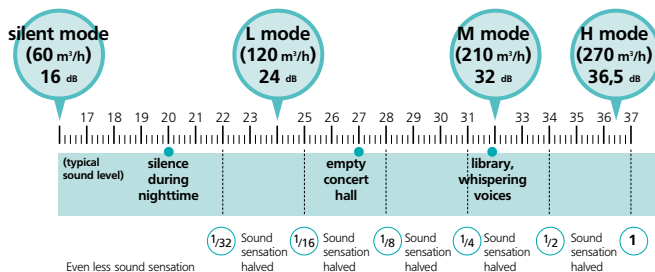


Quiet enough for any room!

As well as powerful dust collection and deodorising characteristics, the unit is super silent in operation and can be used in noise sensitive locations such as office meeting rooms and domestic bedrooms.

The secret is in the fan

The newly developed fan and a non-clogging photocatalytic filter ensure noise free operation, not only in 'Silent' mode but also during 'Turbo' mode.

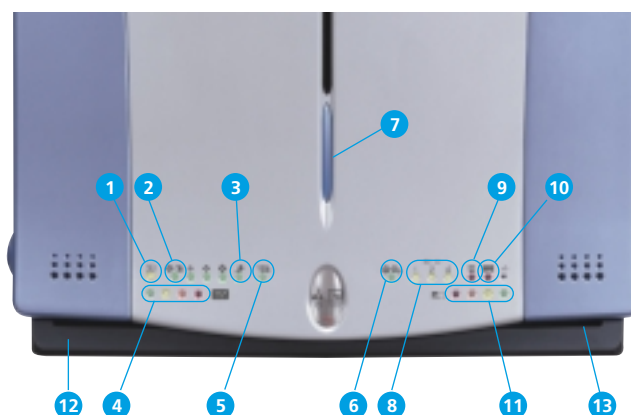


The chart shows how the rate of sound energy decreases as the decibel level decreases.
Every 3dB reduction results in half the sound sensation

Noise generated in different operation modes

Operational silence enables people to sleep while the unit cleans the air.

SIMPLE AND STYLISH FRONT PANEL



Operational functions

- | | |
|---|---|
| <p>1 Energy saving automatic operation
Air flow is adjusted to the amount of dirt in the air. Cleaner air causes the energy saving mode to cut in.</p> <p>2 Silent mode
Silent mode allows undisturbed sleep</p> <p>3 High power turbo mode
High power turbo mode for rapid air purification when necessary</p> <p>4 Clean monitor (dust)
Indicates the level of air contamination detected by dust sensor</p> <p>5 Pollen mode
Pollen is trapped easily by changing the air flow setting</p> <p>6 Negative ion mode
Indicates that negative ions are being generated</p> | <p>7 Operation mode
Lamp indicates unit is operating</p> <p>8 Off timer
Enables the unit to be set to turn off in 1, 2 or 4 hours</p> <p>9 Clean indicator
Indicates the need to clean the ionizer</p> <p>10 Filter replacement indicator
Indicates the need to replace the filter</p> <p>11 Clean monitor (odour)
Indicates the level of air contamination detected by odour sensor</p> <p>12 Dust sensor</p> <p>13 Odour sensor
These sensors monitor air quality in the room and automatically set the necessary level of operation</p> |
|---|---|

Easy to use



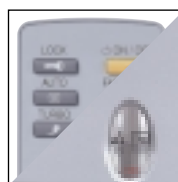
- 1 **Flat panel**
Rather than a grille, the flat panel is easy to clean



- The plasma ionizer is also easy to clean. You can use water to clean the opposing electrode plates



- To clean the ionizer, all you have to do is wipe with tissue paper



- 2 **Child lock**
Even if a curious child handles the remote control, the child lock ensures continued operation at the chosen settings



- 3 **Easy to carry**
The unit is portable and can easily be carried from one room to another



- 4 **Store**
The new design allows the remote control to be stored inside the unit

DAIKIN FILTER SYSTEM

Long-lasting 7-year filter roll

Annual refresh assures hygiene



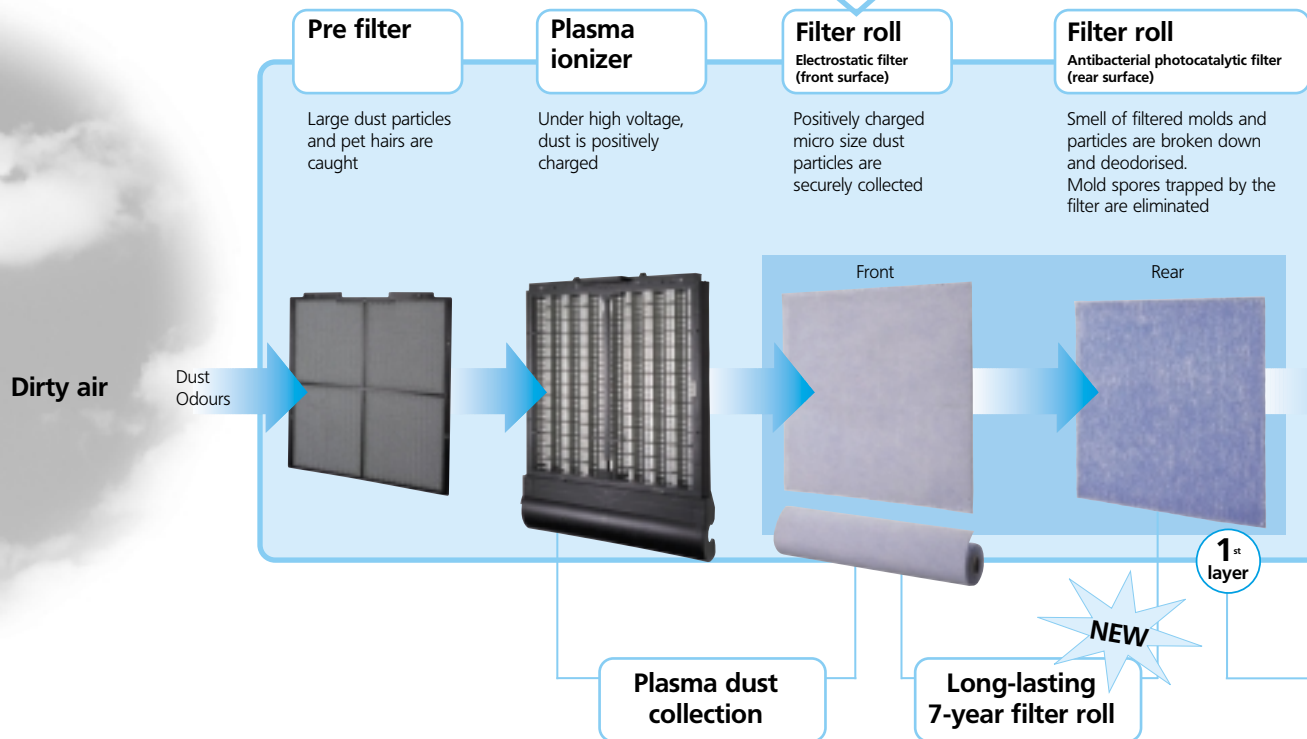
When the filter replacement indicator turns on, you throw away the old filter. To maintain deodorising power and dust-collecting performance, all you have to do is replace the old filter with a new filter from the roll.

The front side of the two-sided filter roll works to collect dust, pollen, mite droppings and detritus, mold spores and other particles that have been positively charged by

the plasma dust collector. Daikin's newly developed photocatalytic filter works on the reverse side to decompose the constituents of the absorbed odours of clinging dust and mold.

Economical filter roll

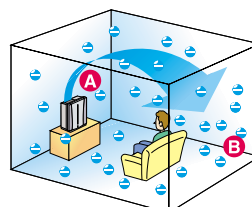
Unrolled, the filter roll is 2.4 meters long. This means there is no need to buy a replacement for seven years.



8

Air with negative ions

Close to the air you breathe in nature



A One meter from the outlet 300,000 per cc	B Corners of the room (approx. 12 m ³) 12,000 per cc
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Clean air made even fresher with negative ion generator. Refreshed air flows throughout the room with the press of a switch.

The unit pumps out negative ions so that one meter from the outlet there are 300,000 negative ions per cubic meter of air. Negative ions, which are normally quite vulnerable and easily eliminated, spread to the corners of your room and restore a favorable overall ion balance to your surroundings.

HEPA FILTERS ARE NOT SUITABLE FOR HOMES, OFFICES, OR SHOPS
HEPA filters are designed to remove microfine dust particles from clean rooms and other sealed environments. In open situations, such as homes, offices and shops, the filter quickly clogs, air flow is impeded and performance rapidly deteriorates. Also the use of glass fibers as a filter medium keeps HEPA filters from being completely environmentally safe.

Energy-saving functions

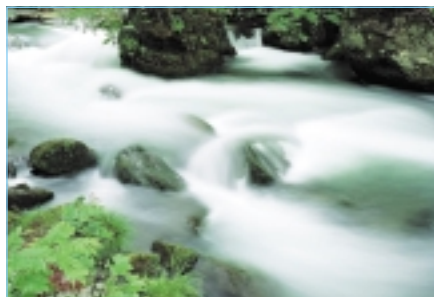
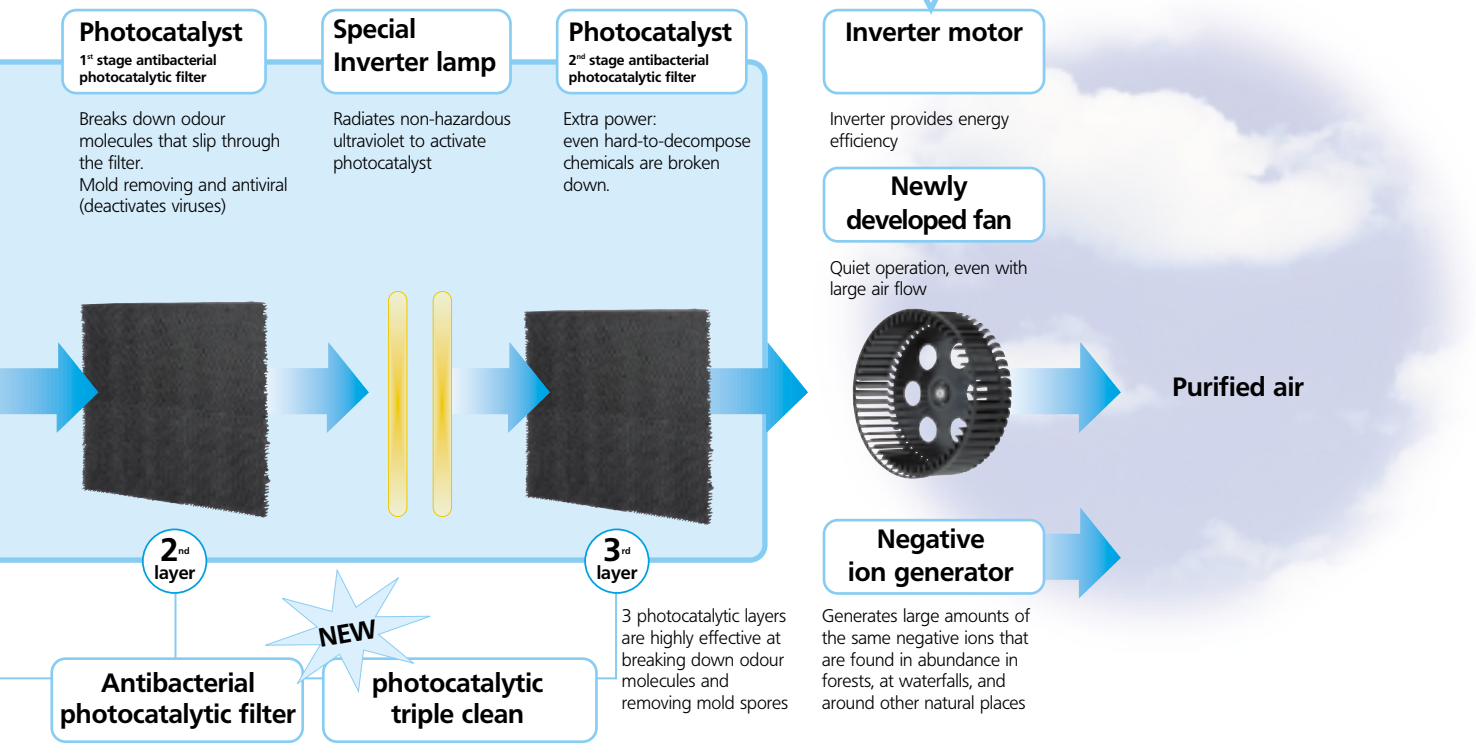
Energy-saving functions

By converting electrical frequencies it is possible to control the motor revolutions over a wide range from ultraslow to high speed. This, combined with the use of a highly efficient DC motor, cuts the amount of power consumed during operation.

Energy-saving automatic operation



Air flow is adjusted to the level of dirt in the air. When the air is cleaner, energy-saving mode cuts in. This avoids wasted use of electricity.



What are negative ions?

Positive ions attract atmospheric pollutants, particles of house dust and other harmful airborne matter into interior spaces and keep them there. Negative ions, which are abundant in natural places such as forests, waterfalls, and the seaside, cancel the effects of positive ions and clean the air.

Typical amounts of negative ions at natural places

Forests	2,500 per cc
Waterfalls	10,000 to 18,000 per cc

Technical specifications for Daikin Photocatalytic air cleaner

MODEL		MC704VM				
Power supply		1~, 220-240V, 50Hz				
Dimensions (H x W x D)	mm	498x400x198				
Colour		sparkling silver and metallic ocean blue				
Weight	kg	7.0				
MODE (50Hz)		Turbo	H	M	L	Silent
Power input	kW	0.052	0.024	0.020	0.017	0.015
Running current	A	0.46	0.26	0.19	0.16	0.15
Sound pressure level	dB(A)	47	36.5	32	24	16
Air flow rate	m ³ /h	420	270	210	120	60
Pre filter		polypropylene screen				
Dust collecting element		plasma ionizer (electrostatic dust collection) + electrostatic filter roll				
Deodorising filter		photocatalytic filter				
Catalyst		titanium oxide + special inverter lamp				
Safety devices		front panel switch (safety switch)				
Power cord		2 wire 0.75 mm ² (2.5 m)				
Standard accessories		operation manual, wireless remote control, batteries, filter roll				
OPTION						
Replacement filter roll		BAC14D				



MC704VM