

# SHARP

Be Original.



## Plasmacluster

The World's Most Popular Indoor Air Purifier

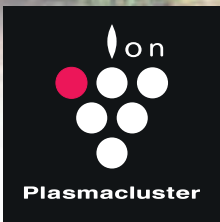
 CERTIFIED BY 28 GLOBAL TEST LABORATORIES



Sharp Plasmacluster range includes

Air Purifiers • Air Purifier + Dehumidifier • Air Purifier + Humidifier • Car Air Purifiers • Air Sterilizer

Call 1800 4254 321 toll-free to learn more or visit [www.mySHARP.in](http://www.mySHARP.in)



## Purify air with the same ions as in nature

Plasmacluster – only from SHARP

Plasmacluster ions are positive and negative ions that occur in nature. The effectiveness of Plasmacluster as an air-purifying technology has been supported by test data, and Plasmacluster is thus increasingly finding applications in various areas of activity, such as in businesses, in addition to household use. Plasmacluster provides you with natural and safe air. This unique technology from Sharp applies the power of nature.

### Sharp's Original Technology

Plasma discharge generates and emits the same positive and negative ions that occur in nature. Plasmacluster is an original air purifying technology developed by Sharp that removes airborne mold and viruses.

Winner of the 2008 Invention Prize National Invention Awards Ceremony held by the Japan Institute of Invention and Innovation (JIII)



Patented by Sharp (patent number 3680121)

### Assured Safety

GLP\*-compliant test facilities have gathered highly reliable safety data on Plasmacluster technology.

\* GLP (good laboratory practice) is a system of management controls for test facilities and test procedures designed to ensure the reliability of chemical safety assessment tests.

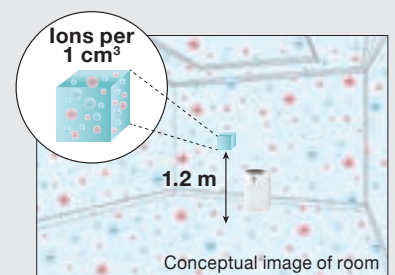
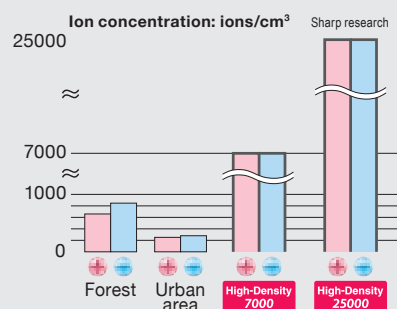
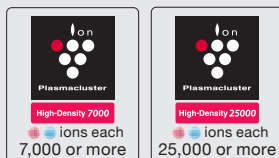
Purpose	Test name (abbreviation)	Ion density setting
Skin irritation (general condition)	Acute skin irritation/corrosion	Approx. 1,000,000 ions/cm <sup>3</sup>
Eye irritation (general condition)	Acute eye irritation/corrosion	Approx. 13,000,000 ions/cm <sup>3</sup>
Gene toxicity (general condition)	Inhalation toxicity (evaluation of genetic effect on pulmonary tissue)	Approx. 7,000,000 ions/cm <sup>3</sup>
Body and organ toxicity (general condition)	Inhalation toxicity	Approx. 7,000,000 ions/cm <sup>3</sup>
Pregnant woman and fetus toxicity (general condition)	Inhalation toxicity	Approx. 7,000,000 ions/cm <sup>3</sup>

Testing institution: LSI Medience Corporation

### The Same Safe Ions As in Nature

The safety of Plasmacluster ions has been verified, and so a high density of ions can be used. With more positive and negative ions in a room than even in a forest, Plasmacluster provides an environment of even greater effectiveness.

Numbers of  $\oplus$  and  $\ominus$  ions per 1 cm<sup>3</sup> when measured near the center of a room (at a height of 1.2 m from the floor) with the product placed at a wall:



# How Plasmacluster Mechanism Removes Microbes

The ions are long-lasting because they are surrounded by water molecules.

**STEP 1** **Ions are released**  
Plasmacluster ions, the same positive and negative ions found in nature, are generated by plasma discharge and released into the air.



**STEP 2** **The ions act on airborne microbes**  
The ions form hydroxide (OH) radicals that are highly oxidizing only when they adhere to the surfaces of mold, bacteria and viruses. They instantly remove the hydrogen from the surface proteins, breaking them down.



**STEP 3** **The broken-down components return to the air as water**  
The hydroxide (OH) radicals combine with hydrogen (H) to form water (H<sub>2</sub>O), which returns to the air.



*Air purifiers and ion generators with Plasmacluster technology can prevent the action of airborne viruses, as well as reducing the effects of suspended allergens generated by dust mite feces and dead mites by breaking them down, but Plasmacluster cannot create a completely sterile environment, or ensure prevention of infection. • The actual number of ions and effectiveness of microbe removing and purifying depend on the room conditions and the operation methods, including room size or shape, whether air conditioning or ventilation is used, product placement, direction of ion discharge, and operation mode.*

## Outcomes Achieved With Plasmacluster

**1** Air purification

- Removal of airborne mold and bacteria
- Suppressing the activity of airborne microbes
- Suppressing the activity of airborne viruses
- Reducing growth of adhering mold
- Suppressing the increase of dust mite allergens, including dust mite feces and dead mites
- Suppressing the activity of adhering viruses

**Examples:**  
At factories and food-processing facilities

**Examples:**  
At offices, workplaces, and public facilities

Improving the sanitary conditions of food

Helping save electricity with the air-conditioning temperature\*

Enabling cost reductions by reducing detergents and disinfectants

Improving air conditions and sanitary conditions

\* With the effect of Plasmacluster, airborne microbes can be suppressed even if the air-conditioning temperature setting goes up by around 2 °C, which contributes to electricity-cost saving.

**2** Removing stubborn odours

- Removal of cigarette smoke odor
- Suppressing the activity of airborne odor microbes

**Examples:**  
At offices, workplaces, and public facilities

**Examples:**  
Restaurants and supermarkets

Improving air conditions

Improving air conditions for eating and drinking

Providing measures against lingering odors and spoiled-food odors with food ingredients

**3** Eliminating static electricity

- Preventing dust from clinging to the ceiling and walls
- Removal of dust and pollen clinging to hair and clothing

**Examples:**  
At factories and food-processing facilities

Providing measures to prevent foreign matter from becoming mixed in

Providing measures against airborne microbe and dust

Contributing to reduction in rate of returned products.

### Plasmacluster is not a negative ioniser

Plasmacluster technology is often mistaken for a negative ioniser, a commonly-available type of air purifier. Ionisers add a negative charge to airborne harmful suspended particles making them heavier and fall to the nearest horizontal surface. On the other hand Plasmacluster technology produces positive and negative ions by breaking down water vapour molecules in the air. These ions actively attach to pollutants and break down their surface before returning to air as water vapour.



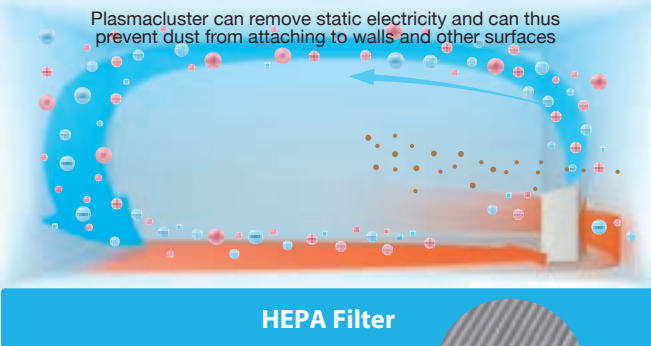
# Higher performance & better efficiency

Sharp Air Purifiers employ a 3-step system to combine the “active” Plasmacluster mechanism with “passive” HEPA filtration to sterilize and cleanse the indoor air off of airborne substances harmful to humans.

## COLLECT

Powerful Air Suction & Unique Airflow Quickly & Efficiently Collects Dust & Other Suspended Particles

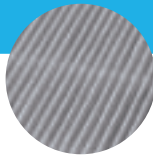
Faster airflow at a 20° angle collects dust at lower levels in the room for more effective cleaning.



### HEPA Filter

#### Enlargement of HEPA Filter

The larger the surface area of the filter, the more dust and other harmful particles are captured.



The filter measures as long as approx. **8 m** when fully extended.

Simulated image of the FU-A80

### What the HEPA Filter Captures

99.97% capture and removal of 0.3-micron dust particles	
	<b>Tree pollen</b> Cedar, cypress, birch, alder, beech, red cedar, oak, pine
	<b>Grass pollen</b> Ragweed, wormwood, hop, orchard grass, vernal grass, timothy grass
	<b>Allergens</b> Dust mite feces, dust mite remains, dog dander, cat dander, hamster dander, mold
	<b>Airborne mold</b> Black mold, Stachybotrys, Aspergillus niger, Penicillium
	<b>Dust</b> Dust, pet hair, pet dander, cigarette smoke, cooking fumes, mite dust, diesel exhaust particles, Asian dust
	<b>Odors</b> Cigarette odor, pet odor, cooking odor, kitchen food waste odor, toilet odor, body odor, mold odor, ammonia odor

**Sharp HEPA Filters meet top global performance standards** Sharp Air Purifiers sold in India are equipped with H14 Class (in EN1822 type) True HEPA filters, based on the JEM1467 standard of The Japan Electrical Manufacturers' Association. HEPA filters built to this standard remove 99.97% of dust and other particles of size 0.3um each time air passes through them.

## PASSIVE HEPA Filtration

## CAPTURE

High-Performance Filters Capture Airborne Dust Particles

All Sharp Air Purifiers have an air intake and an air outlet. The Air Purifier draws in air from the indoor environment through its air intake. This air then passes through a set of high-performance filters (Carbon filter & HEPA filter) before it's blown back into the room through the outlet vents. This is a continuous cycle.

### High-performance HEPA filter

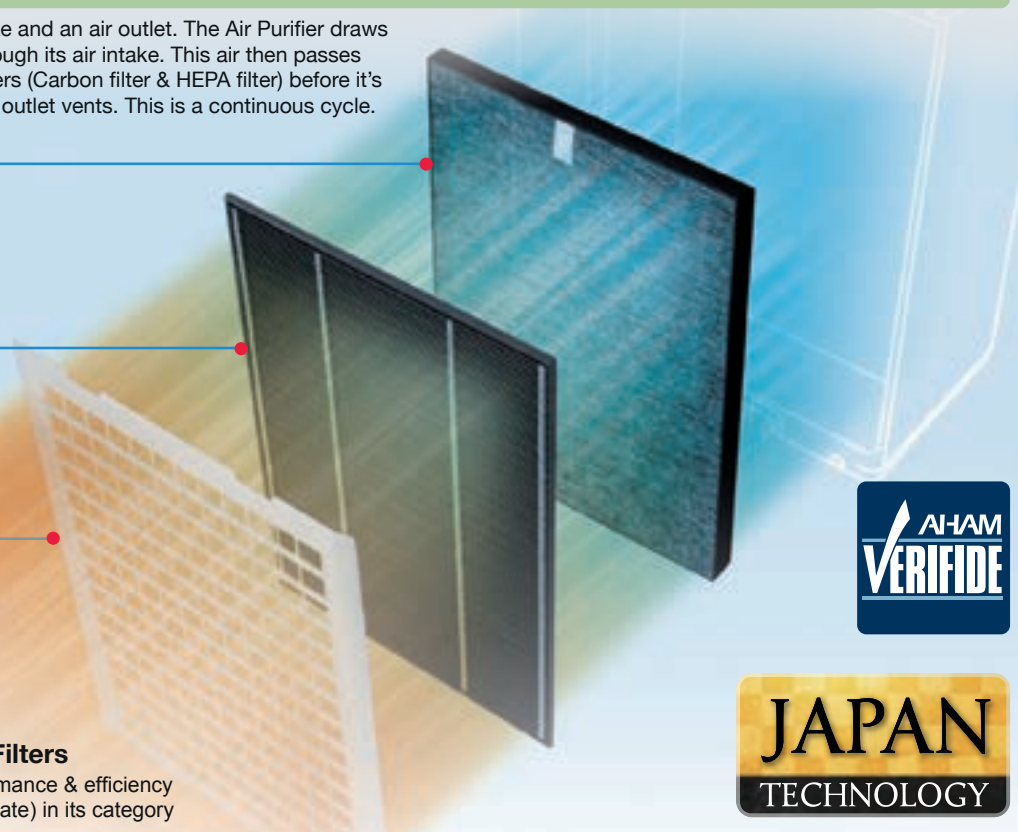
Captures 99.97% of 0.3 micron dust particles

### Active Carbon Filter / Charcoal Layer

Helps in removal of smoke and chemical fumes

### Micron Mesh Pre-Filter

Captures dust particles as small as 50 microns



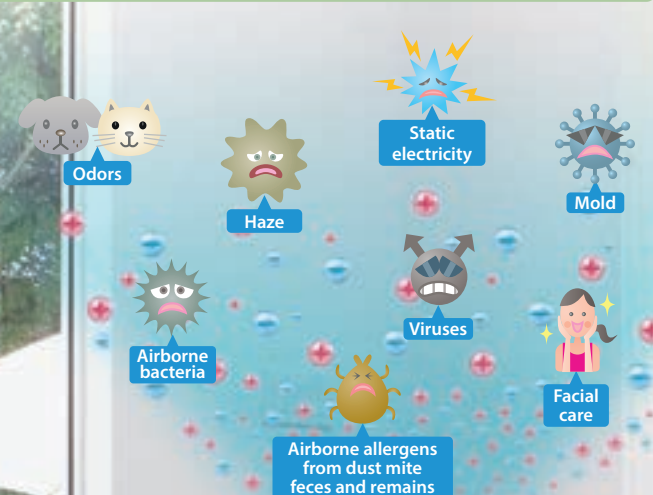
### Advantages of Sharp HEPA Filters

- Large surface area for higher performance & efficiency
- Highest CADR (Clean Air Delivery Rate) in its category

# ACTIVE Plasmacluster Technology

**ELIMINATE** Plasmacluster Ions Can Remove Mold, Viruses, Allergens, Odors and Static Electricity

- 1. GENERATES FRESH INDOOR AIR**  
Plasma discharge generates and emits the same positive and negative ions that occur in nature
- 2. NEUTRALISES HARMFUL VOC & OTHER TOXIC GASES**  
Plasmacluster ions surround and break VOCs and toxic gases
- 3. KILLS MICROBES AND OTHER CONTAGIOUS ELEMENTS**  
Plasmacluster ions kill viruses including H1N1, microbes, bacteria like E. Coli, MRSA, TB & fungal spores to sterilize indoor air
- 4. ELIMINATES STATIC CHARGE**  
Plasmacluster ions remove static charge which causes dust & pollen to cling to surfaces such as ceilings and walls, curtains, even hair and clothing
- 5. HYDRATES SKIN**  
Plasmacluster ions not only help the skin retain moisture, but also help improve its elasticity and texture



**NO HARMFUL OZONE**

Sharp's Plasmacluster ion technology does not produce any harmful Ozone during its process of air treatment. It mimics nature.

**CB Certificate for Electrical Equipment**  
Japan Quality Assurance Organisation

## Holistic Effectiveness Of Sharp Plasmacluster Air Purifiers

Deconstructing indoor air		What Sharp offers to eliminate the problem				
Type of Pollutants / Problems	Approximate concentration of each pollutant in Indoor air*	Pre Filter Thin mesh washable Pre Filter can trap up to 10 micron dust particles	HEPA Filter Sharp original - Charged HEPA for consistent performance and extended life	Active Carbon Filter Absorbs gases while the air passes through the filter	Plasmacluster Sharp original - nature's method of purification. Certified and safe.	Dehumidifier & Humidifier Balances humidity levels to make occupants comfortable
House Dust, Pet Dander	15%	✓				
PM10, PM2.5, Pollen	30%		✓			
Chemical Fumes & Toxins	23%			✓	✓	
VOC & Haze Compounds	7%				✓	
Infectious Substances	25%				✓	
Skin & Throat Dryness, Skin Texture, Static Electricity	-				✓	✓

\* Deconstructing Indoor Air: Estimated pollution mix in indoor air depends on primarily three factors - season, geo location & occupant lifestyle



# Plasmacluster Air Purifier Applications

A variety of unwanted elements lurk in the air of your indoor living environments



## Bedrooms & Living Rooms

Most of our time is spent in bedrooms & living rooms. Hidden in the air remain a variety of contaminants such as viruses, bacteria, pollen, haze invading from the outside, as well as odors and dust mite feces and remains. Sharp Air Purifiers neutralize all such threats to make the indoor environment safe for its inhabitants.



## Small Rooms (For Children) & Closets

Children have a weaker immune system compared to adults. It is therefore important to provide them with a clean environment. Closets on the other hand are usually not properly ventilated and this causes odors, particularly of sweat, to linger. Mold too, grows easily in closets.



## Kindergartens, Nursery Schools & Child Day Care Centers

Provide a comfortable space to children, free of airborne allergens, viruses, fungi and pollution. Sharp Plasmacluster Air Purifiers will help reduce instances of children falling sick because of such airborne threats.



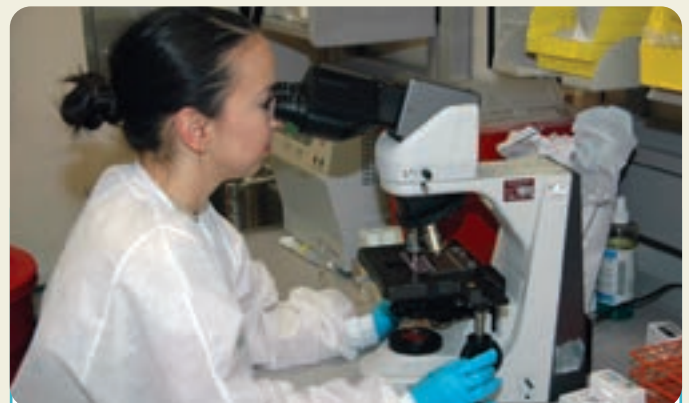
## Elderly Care Facilities

Provide a comfortable space to elders, free of airborne allergens, viruses and fungi. Sharp Plasmacluster Air Purifiers will help reduce instances of elders falling sick because of such airborne threats.



## Hospitals

Aside from neutralising airborne threats such as viruses and microbes, Sharp Plasmacluster Air Purifiers reduce odors peculiar to hospitals that permeate doctors' cabins, waiting rooms and hallways. What's more, Sharp Air Purifiers also curtail formation of mold which is known to cause respiratory distress in many individuals.



## Path Labs & Medical Test Centers

Sharp Plasmacluster Air Purifiers help maintain a sterile, dust-free, germ-free indoor environment and are a must-have for facilities such as pathology labs and test centers.



### IT Server Rooms

Aside from removing static electricity, Sharp Plasmacluster Air Purifiers remove dust and other particles suspended in air to help maintain a highly clean and sterilized operating environment in server rooms.



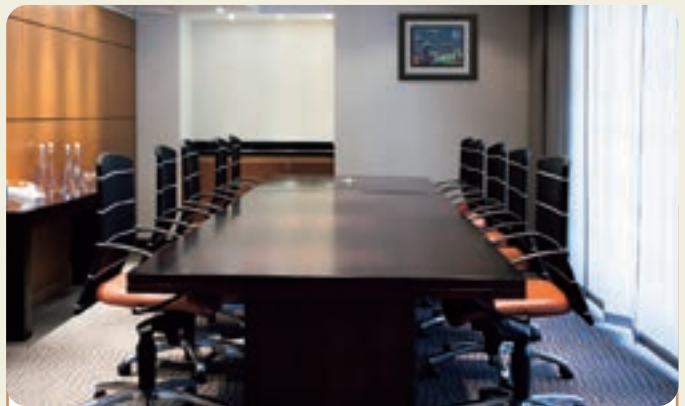
### PCB Handling Areas

Precision device circuits stay protected and dust impurities prevented by deploying Sharp Plasmacluster Air Purifiers. Installing equipment that eliminates static electricity also helps reduce manufacturing defects that may be caused in critical components because of unwanted electrical charges.



### Hotels & Restaurants

Sharp Plasmacluster Air Purifiers help provide a high-quality, pollution-free and welcoming atmosphere for customers by removing airborne threats and unpleasant odors such as from food or cigarette smoke.



### Office Meeting Rooms & Waiting Rooms

Protect your employees and clients against the risk of pandemics. Provide clean air in areas used often for meetings and other discussions.



### Banks & Currency Chests

Like any other place where people gather in large numbers, air inside banks is prone to carry regular airborne threats such as viruses, microbes & germs. Sharp Plasmacluster Air Purifiers remove such threats. Also, currency carries a lot of dust with itself and chests and cash-rooms are not properly ventilated. Plasmacluster Air Purifiers can help provide a dust-and-mold-free environment.



### Automobiles

Odors from eating food, smoking cigarettes and burnt rubber cling easily to a car's interiors. And then there's mold that grows in the car's air conditioning system. Sharp's Plasmacluster Air Purifiers for cars, vans & SUVs address these issues quickly and efficiently.



## Air Purifier + Dehumidifier

DW-E16FA-W is a high density Plasmacluster 2-in-1 air purifying dehumidifier with a 3-litre water tank and dehumidifying capacity of up to 16 lt/day



The DW-E16FA-W is a powerful Dehumidifier with high concentrations of Plasmacluster ions, a high performance HEPA filter and a deodorizing active carbon filter for Room Air Purifying, Laundry Deodorizing, Quick Drying and Dehumidifying



- Active + passive purification
- Continuous drainage option
- Automatic humidity control





## LAUNDRY DRYING

Deodorize room-dried laundry with a high concentration Plasmacluster ions

## DEHUMIDIFYING

Adjust the dehumidification amount for proper humidity level according to room temperature

## AIR PURIFYING

Collect dust pollen and unpleasant odor during laundry drying and dehumidifying



180°  
Airflow

Auto  
Operation

Laundry  
Mode

Dehumidify  
Mode

Tank Full  
Indicator

Dust  
Sensor

HEPA  
Filter

Deodorizing  
Filter

CHILD  
LOCK

Vertical  
Swing

Timer  
(OFF)

## Features

### • Auto Dehumidifying

Equipped with temperature and humidity sensor, the dehumidifier can operate automatically to control the room humidity

### • Laundry Dehumidifying

Direct airflow to the laundry for rapid drying

### • Laundry Deodorizing

Effective in deodorizing clothes by using high density Plasmacluster ions

### • Mold-Proof & Virus Neutralised

Neutralises mold effectively by dehumidifying and releasing high density Plasmacluster ions simultaneously

### • 180° Airflow

The louver direction and air swinging selection provides widely dehumidifying and deodorizing function and the maximum air delivery is around 180° \*

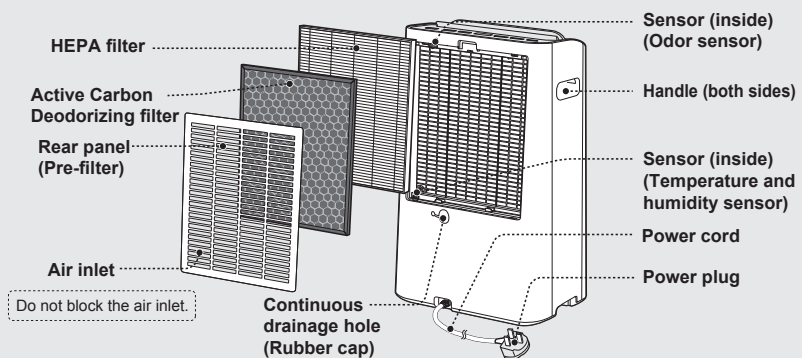
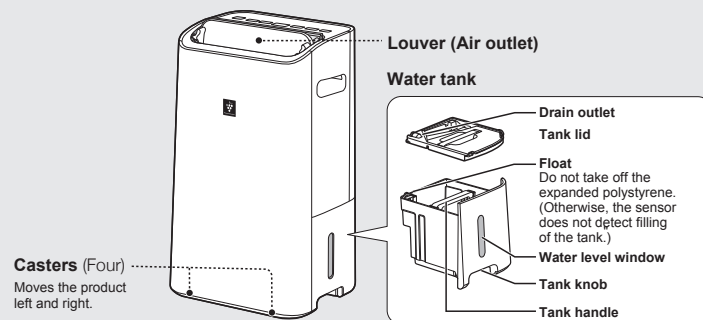
### • 2/4/6 Hours Off Timer

Set 2/4/6 hour Off Timer simply by pressing a single button

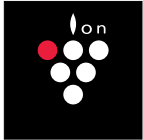
### • Full-Tank Indicator

When the water tank is full, the dehumidifier will stop operation automatically, and the full-tank indicator will flash

### • Continuous Drainage



\* The maximum air delivery is around 180° (Louver movement angle is around 115°)



# High-Performance Air Purifiers

For everyday comfort, choose according to your room size / application

## FU-A28E-W

Recommended Room Size: 200 sq ft



- Plasmacluster technology with HEPA filtration
- CADR: 168 m<sup>3</sup>/hr



## FP-F40E

Recommended Room Size: 320 sq ft



- Off Timer (2, 4, 8 hours)
- Dust Indication Monitor
- Auto Restart

-W (White) -T (Brown)



## KC-F30E-W Air Purifier with Humidification

Recommended Room Size: 280 sq ft



- Humidity and temperature display
- Off timer (1, 2, 4, 8 hours)
- Dust indication monitor
- Auto restart



## FU-A80E-W

Recommended Room Size: 650 sq ft



- Dust Indication monitor
- Quiet Operation for Nighttime (23 dB)
- Auto Restart (Not Default)



## IG-GC2E Air Purifier for Cars



With 2-port USB car adapter, charge your smartphone at the same time

For that fresh, clean feeling... wherever you go



For smoking and food smell



Mold odor from car air conditioner



Metallic Black



Champagne Gold

### Tiny dust and pollen collection

PM10 filter



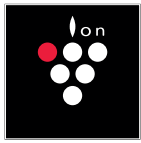
Twin air suction

PM10 filter collects tiny dust and pollen. With a PM10 dust filter on each side, the unit captures approximately 80% of pollen and fine dust particles (10 microns or larger in size).



Plug into a PC and keep your personal space comfortable

# Specifications



Model	FU-A28E-W	FP-F40E-T & FP-F40E-W	FU-A80E-W	KC-F30E-W	DW-E16FA-W	IG-A20E
MRP (Rs)	12,000/-	25,000/-	32,000/-	29,000/-	35,000/-	65,000/-
Air Purification System	Plasmacluster Ion Generator with HEPA Filter	Plasmacluster Ion Generator with True HEPA & Active Carbon Filter				High Density Plasmacluster Technology
<b>Additional Functions</b>				<b>Humidification</b>	<b>De-Humidification</b> (16 litres/day @ 30°C & 80% RH)	<b>Sterilisation</b>
Coverage Area* (sq ft) Air Purification / Plasmacluster	200	320 / 250	650 / 480	280 / 230	300	350
Air Flow/ CADR (m³/hr)	168 / 108 / 48 (High/Medium/Low)	240 / 150 / 90 (High/Medium/Low)	480 / 300 / 120 (High/Medium/Low)	240 / 170 / 90 (High/Medium/Low)	240/ 170/ 75 (High/Medium/Low)	468 / 390 / 306 (High/Medium/Low)
Modes	Low, Medium & High	Medium & High Haze, Auto, Low,	Medium & High Shower, Auto, Low,	Medium & High Haze, Auto, Low,	Auto Dehumidifying, Laundry, Deodorizing, Auto, Low, Medium & High	Low, Medium & High
Pre-filter	Standard Mesh	Standard Mesh	Standard Mesh with ACF	Standard Mesh	Mesh Type	Special Polyester Mesh
Filter Life#	Up to 2 years				Up to 2.5 years#	Lifetime (Washable)
Auto Restart	No	Yes	Yes	Yes	Yes	Yes
Sensors	-	Odour & Dust (PM10)	Dust (PM10)	Temperature, Humidity & Dust (PM10)	Humidity, Odour & Tank Full**	-
Unit Dimensions (mm)	385 x 380 x 128 (W x H x D)	383 x 540 x 209 (W x H x D)	402 x 620 x 245 (W x H x D)	380 x 570 x 197 (W x H x D)	360 x 565 x 260 (W x H x D)	594 x 480 x 230 (W x H x D)
Net Weight (kg)	3.4	4.7	8	7.2	12.2	10.5
Power Consumption (W)	48 / 27 / 12 (High/Medium/Low)	27 / 12 / 4.1 (High/Medium/Low)	75 / 20 / 5 (High/Medium/Low)	31 / 12 / 6 (High/Medium/Low)	38 / 10 / 7 / 190 (High/Medium/Low / Dehumidifying)	22 / 14 / 9 (High/Medium/Low)
Noise Level (db)	47 / 38 / 25 (High/Medium/Low)	48 / 38 / 21 (High/Medium/Low)	53 / 41 / 23 (High/Medium/Low)	49 / 38 / 21 (High/Medium/Low)	53 / 35 / 27 (High/Medium/Low)	45 / 40 / 34 (High/Medium/Low)
Warranty	12 months, ON SITE					

\* Depending on fan speed & indoor environment conditions

# The Filter Life may vary according to use and environment conditions

\*\* Water tray capacity: 3 litres or Continuous Drainage

Due to continuous improvements and product upgrades, designs & specifications are subject to change without notice.

**Humidification Function:** India being a tropical country, in most places the average humidity level (RH) remains as low as 45%. In such situations if an Air Conditioner or a Room Heater is being used, humidity levels drop further resulting in dryness of skin, throat in selective groups of people. The humidifying function in KC-F30E helps in maintaining optimum humidity levels in your room. It works on the principle of Natural Evaporation and humidity levels never cross 60%. The Humidification Filter needs to be washed and kept clean if it is not in use, especially during the monsoons.

**De-humidification Function:** If you live somewhere along the vast coastline of India, or in regions that experience high levels of humidity and rainfall, Sharp's air purifier with de-humidification function is just what you need. De-humidification effectively counters problems associated with highly humid conditions such as proliferation of mould fungi and viruses, foul odours and even skin rashes.

## Specifications for Sharp Plasmacluster Air Purifier for cars

Model	IG-GC2
Power	Car adapter
Operation mode	3 (Turbo/Med/Low)
Power consumption	1.8 W/0.7 W/0.5 W
Operating noise level	36 dB/23 dB/19 dB
Outer dimensions	Upper: 74 mm / Lower: 65 mm / Height: 162 mm
Weight	Approx. 265g (excluding accessories)
Coverage	Approx. 127 cu ft
Colors	Champagne Gold & Metallic Black
MRP (Rs)	12,000/-

**Filter Maintenance / Replacement Suggestions:** The darkening of filter layers is normal due to dust / smoke etc. getting trapped in them. At times, the filter itself may produce some odour and needs to be exposed to bright sunlight for 3 to 4 hours at least once in 45 days. The HEPA filter life fully depends on the nature of indoor environment and duration of usage. HEPA filters should never be washed. Always check the direction of filters when placing them into their frames. It is time to have the filters replaced if you feel, that even after cleaning, the air outflow has dropped by 50%-60% compared to the initial days of your new Air Purifier usage.



# High-Density Plasmacluster Ions Remove Airborne Mold, Bacteria & Viruses

Plasma discharge generates and emits the same positive and negative ions that occur in nature. Plasmacluster technology is Sharp's original air purifying technology that removes airborne mold, bacteria, viruses and odors. The benefits have been proven by official test institutions in Japan and around the world.



## CERTIFIED WORLDWIDE

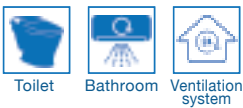
PLASMACLUSTER—GAINING TRUST AND NEW CUSTOMERS AROUND THE WORLD (TESTED BY 28 INSTITUTES AND ORGANIZATIONS)



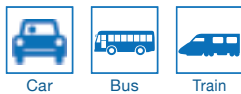
• Sharp does not guarantee the test results can be replicated in actual user situations.  
• Plasmacluster ion effectiveness will vary depending on ion density and product used.  
• Plasmacluster and the Plasmacluster logo are trademarks or registered trademarks of Sharp Corporation.

### Plasmacluster is used in a variety of industries

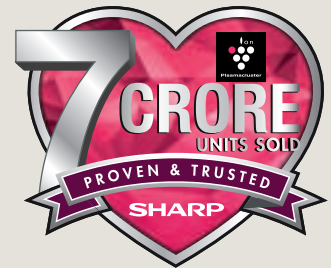
For homes



For vehicles



For buildings



**SHARP IS COMMITTED.** Sharp continues to provide service support for all its air purifier models for a period of up to 5 years from their discontinuation.

facebook.com/SharpAirPurifiersIndia | twitter.com/SharpPurifiers | Subscribe to Sharp India today



Sharp Business Systems (India) Private Limited  
Email: [pci@sharp-oa.com](mailto:pci@sharp-oa.com)  
All India Toll Free: **1800-4254-321**  
24x7 Service Support: **1800-4254-322**  
[www.mySHARP.in](http://www.mySHARP.in)

Business Partner