

**The World's  
First**

Elevator Plasmacluster™ Ion Generating System

# IONFUL

**For the creation of clean and  
hygienic elevators...**

In public elevators used by many people,  
the creation of a hygienic elevator with purified air is desired.  
Fujitec and Sharp Corporation have jointly developed IONFUL,  
a "Plasmacluster Ion Generating System" that purifies the air in elevators.  
The system discharges Plasmacluster Ions that inactivate airborne molds and  
viruses and deactivate airborne allergens,  
thereby creating a clean and comfortable elevator.

## **Inactivates Airborne Molds**

Plasmacluster Ions surround and inactivate airborne molds. This helps prevent the development of odors caused by propagation of mold.

## **Safe to Use**

Plasmacluster Ions consist of the positive and negative ions made from water and oxygen that exist normally in nature. These ions are safe and will not harm the human body.

## **Inactivates Airborne Viruses**

Plasmacluster Ions inactivate airborne viruses.

## **Replacing Parts or Cleaning Agents Unnecessary**

Plasmacluster Ions are discharged from the ventilation system. There is no need to change filters or refill cleaning agents.

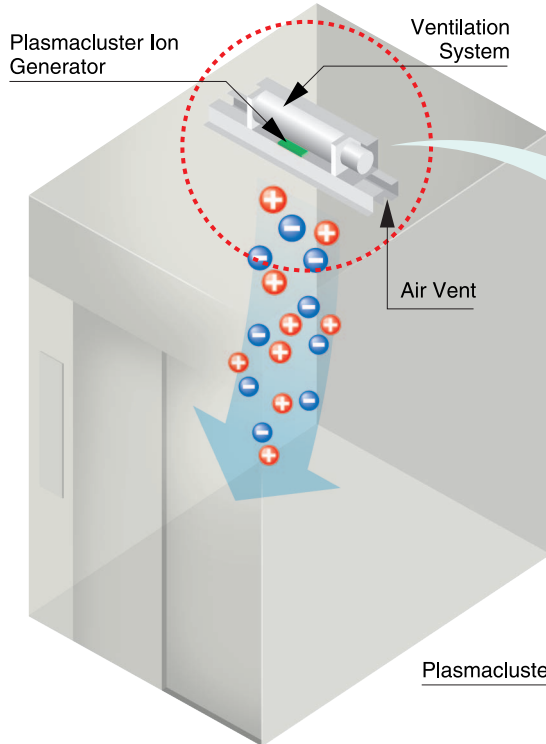
## **Deactivates Airborne Allergens**

Plasmacluster Ions wrap airborne allergens and deactivate them.

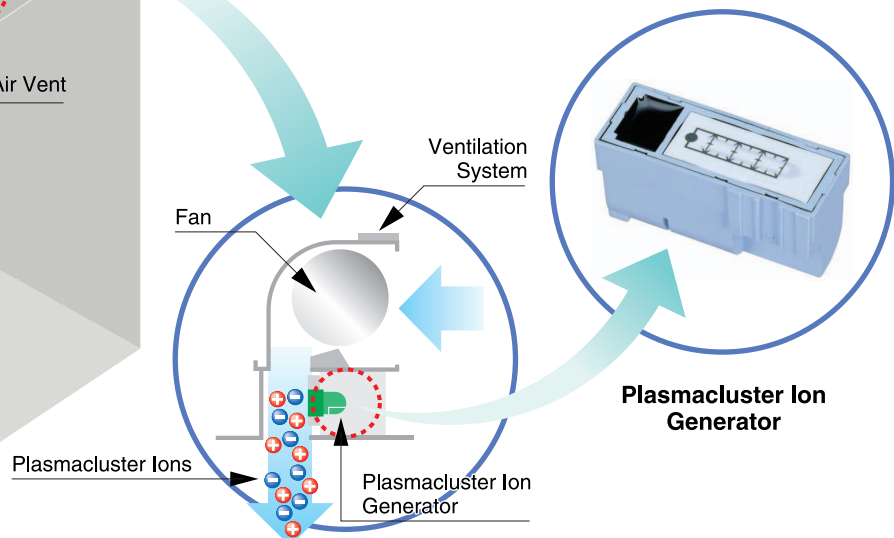
\* "Inactivate" refers to the deprivation of reproduction power. \* "Allergens" refers to the particles of mites and their waste.

\* "Deactivate" refers to the prevention of an allergic reaction from occurring by stopping the allergen(antigen) from combining with the IgE antibody.

# Structure of IONFUL



With the Plasmacluster Ion Generator incorporated in the elevator car ventilation system, IONFUL is designed to send Plasmacluster Ions into the elevator car through the system's vents. IONFUL has a control system that generates Plasmacluster Ions in response to the elevator's movement.



**Detailed Cross-Sectional View**

## Plasmacluster™ Ion Technology

The IONFUL system utilizes the Plasmacluster™ Ion technology independently developed by Sharp Corporation. Plasma discharge creates almost the same number of positive and negative ions from water and oxygen molecules. This large number of released

ions greatly reduces mold, viruses and allergens. The innovative Plasmacluster Ion air-purifying technology has been verified by public health research organizations throughout the world.

### JAPAN

- Ishikawa Prefecture Preventive Medicine Association 『Airborne Molds』
- Kitasato Research Center of Environmental Science 『Airborne Viruses』
- The Graduate School of Advanced Sciences of Matter, Hiroshima University 『Airborne Allergens』

### GERMANY

- The University of Lübeck 『Airborne Molds』

### CHINA

- Shanghai Municipal Preventive Medicine Research Institute 『Airborne Molds』

### KOREA

- Seoul National University Institute of Microbiology 『Airborne Viruses』

Actual inactivating performance depends on elevator operating status.  
No guarantee on curing/preventing people from certain illnesses and viruses should be claimed.



"Plasmacluster" is a trademark of Sharp Corporation.

<http://sharp-world.com/>

Specifications, design, etc. are subject to change without notice due to continual improvements.