

Efficient dust collection, power reliable air sterilization system

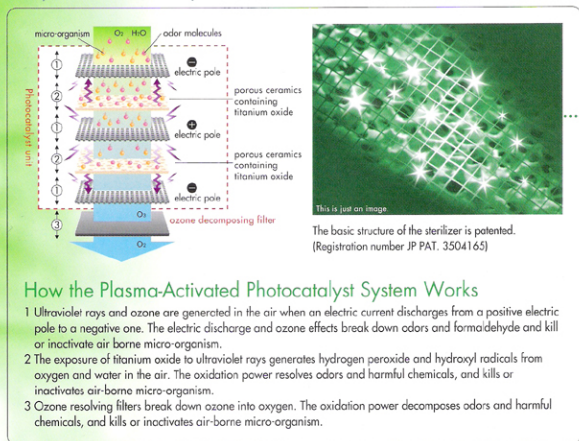
The world's first commercial air cleaner¹⁾

New photocatalytic system based on electric discharge and porous ceramic

Plasma-Activated Photocatalyst

*The plasma-activated photocatalysts vigorously decompose odor molecules and harmful chemicals. No odor remains inside the device.

*The plasma-activated photocatalysts do not require a lamp for generating ultraviolet rays. This eliminates the trouble of lamp replacement and disposal.



This is just an image.
The basic structure of the sterilizer is patented.
(Registration number JP PAT. 3504165)

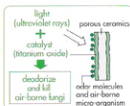
How the Plasma-Activated Photocatalyst System Works

- 1 Ultraviolet rays and ozone are generated in the air when an electric current discharges from a positive electric pole to a negative one. The electric discharge and ozone effects break down odors and formaldehyde and kill or inactivate air borne micro-organism.
- 2 The exposure of titanium oxide to ultraviolet rays generates hydrogen peroxide and hydroxyl radicals from oxygen and water in the air. The oxidation power resolves odors and harmful chemicals, and kills or inactivates air-borne micro-organism.
- 3 Ozone resolving filters break down ozone into oxygen. The oxidation power decomposes odors and harmful chemicals, and kills or inactivates air-borne micro-organism.

more than
10 times
the deodorizing
performance²⁾

Power of Light (Photocatalyst)

Plants generate oxygen from carbon dioxide and water, with sunlight and chlorophyll as catalytic substance. A photocatalyst uses the same system that plants do in photosynthesis. Oxygen and water in the air decompose odor molecules and harmful substances on exposure to ultraviolet rays (light) with titanium oxide as a catalytic substance. Today this photocatalyst technology is applied to refrigerators and lighting as well as toilet deodorizers and stain-proofing.



Needle discharge two-charged dust collection

