



Developed by Panasonic 18 years ago, nanoe™ Technology has continued to evolve ever since. Offering seven beneficial effects, this superior technology has the power to solve a variety of air-related problems!

## 7 effects of nanoe™ X

### Deodorises



Odours

### Inhibits 5 types of pollutants



Bacteria & viruses



Mould



Allergens



Pollen



Hazardous substances

### Moisturises



Skin & Hair

nanoe™ X is highly effective in inhibiting even adhered substances.

### • For hotels



Since so many different guests stay in a guest room, odours are bound to be left behind. nanoe™ X ions inhibit odours lingering in the air but also those that have settled into the carpet and curtains. The result is a room that is comfortable and fresh for the next guest.

Also recommended for: Removing stubborn odours from lounges  
Keeping restaurants clean



### • For clinics



Since patients and visitors of all ages constantly come and go in your waiting room, it's only natural to be concerned about air quality. nanoe™ X ions effectively inhibit airborne bacteria and viruses as well as those that have adhered to furniture, curtains and other amenities in the room.

Also recommended for: Maintaining high-level hygiene in maternity clinics  
Keeping air in child care centres extra-fresh



### • For homes



Air quality is of particular importance in homes with babies or small children. nanoe™ X ions effectively inhibit mould and other allergens, whether they are airborne or adhering to carpets and other surfaces. In this way, nanoe™ X Technology helps create a healthier space for the entire family.

Also recommended for: Inhibiting allergens in homes with pets  
Minimising mould in humid closets



Products featuring nanoe™ X have been widely adopted in commercial facilities and hotels across Japan.



APA Hotel  
5,000 units  
(as of April 1, 2019)



Sakana-machi Hospital



7-Eleven  
14,000 stores  
(as of April 1, 2019)

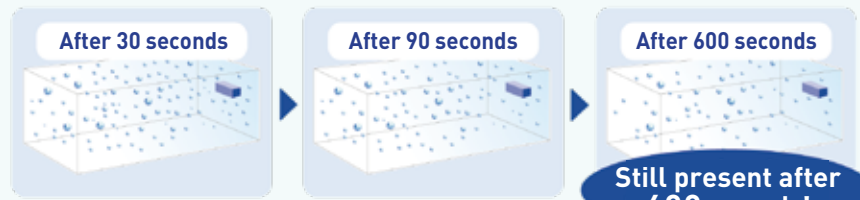
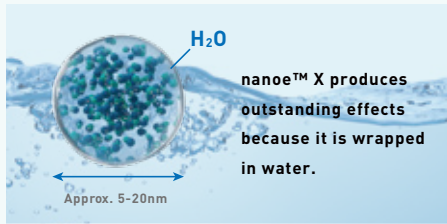


Expanding adoption to **36** models  
(as of January 31, 2019)

# Technology points

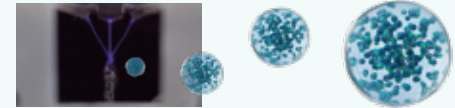
## 1. nanoe™ X is amazing

- nanoe™ X ions are water ions



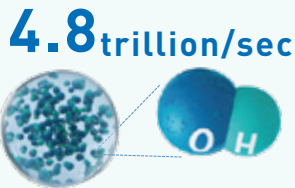
Since nanoe™ X particles are wrapped in water that acts like a shield, they tend not to bond with other substances but last until they interact with and inhibit bacteria, viruses and more.

## Only Panasonic generates OH radicals!



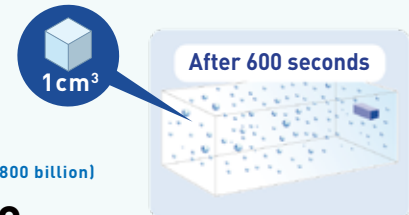
- Huge quantity of OH radicals

In one second, nanoe™ X generates as many as 4.8 trillion particles!



Testing room size: 24m<sup>3</sup>

1. Long life because they're enveloped in water 600sec
2. Huge quantity of OH radicals 4.8 trillion (=4,800 billion)



$$600\text{sec} \times 4,800 \text{ billion} \div 24,000,000 \text{ cm}^3 = 120 \text{ million/cm}^3$$

## 2. nanoe™ X devices are amazing!

Made in JAPAN

- Extremely durable - no need for replacement thanks to titanium!

**Light**

Specific gravity is about half iron

**Strong**

Equal to steel in strength

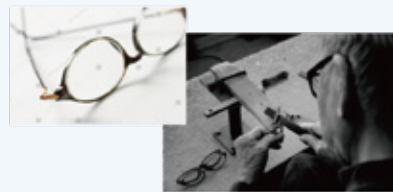
**Equal to steel in strength**

- ✗ Welding
- ✗ Processing
- ✗ Heat treatment

Does not deteriorate in processing

Used in eyeglasses and other accessories, titanium is a superior material that is lightweight and hard and does not deteriorate over time. The challenge of processing it is handled by Japanese craftsmen in Sabae, Japan.

- Japanese craftsmanship has made possible the adoption of titanium.



The electrodes of nanoe™ X devices are produced in Japan with technical support from a factory that features advanced expertise in processing ultra-small titanium parts for eyeglasses.

## 3. nanoe™ X is recognized by experts



The results of verifying the effects of nanoe™ Technology have been reported worldwide.



**PROFESSOR MASAFUMI MUKAMOTO**  
Graduate School of Life and Environmental Sciences, Osaka Prefecture University

"I recommend that equipment incorporating nanoe™ X Technology be placed in buildings where cleanliness is required, such as in schools, childcare facilities and medical institutions."



**PROFESSOR MASAHIRO SAKAGUCHI**  
Laboratory of Veterinary Microbiology I, School of Veterinary Medicine, Azabu University

"As nanoe™ X is effective in inhibiting invisible allergens, we can expect it to help create a comfortable environment."