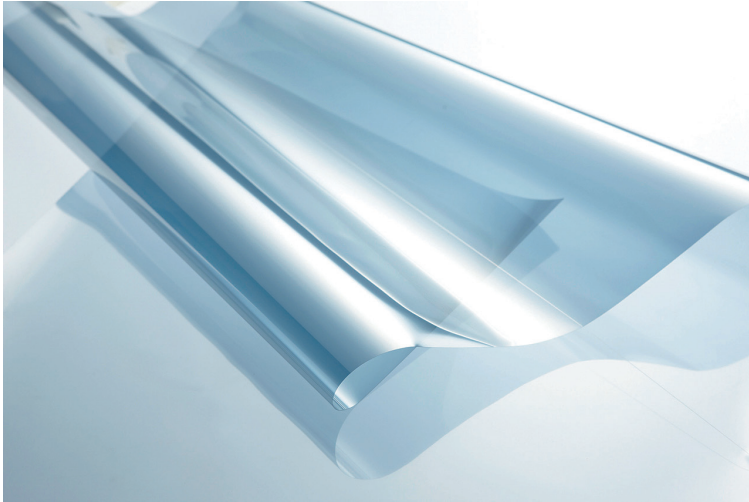


Anti-viral and Anti-bacterial Film for Touch Screen

FV Series

DMC
Interface with Touch



For reducing specific bacteria and viruses at low cost*1

Simply attach the anti-viral/anti-bacterial film on the surface of touch screen to inhibit the growth of certain bacteria and viruses .

*1 Not all kinds of bacteria and viruses are reduced.

Usable on PCAP

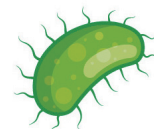
Usable on Resistive

Definition of Anti-viral:

→ “Reducing the number of specific viruses on products”*2

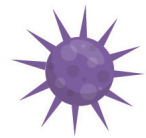
Having no cell, virus is just a structure and its size is about one thousandth of bacterium. Virus cannot replicate on its own and can be regarded as a matter. Therefore, it is necessary to decompose its structure and reduce its capability to get into a cell in order to inhibit a virus from replication.

1-10µm

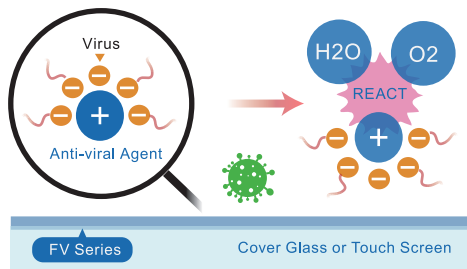


BACTERIA

0.02-0.3µm

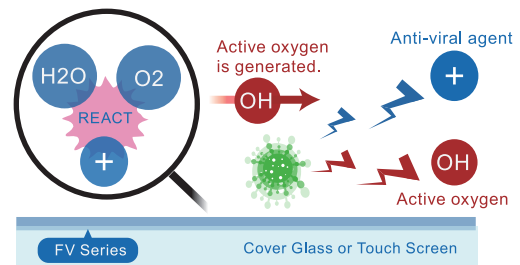


VIRUS



Virus will be Attracted and Fixed.

Anti-viral agent (metal) with a positive charge will act on a virus with a negative charge. The virus and anti-viral agent will be attracted by the static electricity level, fixed, and cannot be separated. The antiviral agent will react with the moisture in the air.*3



Virus will be Inactivated by Active Oxygen.

The antiviral agent (metal) will react with the moisture in the air to generate active oxygen (OH radical). Because of the high oxidizing power of the active oxygen, it will denature proteins in the viruses. Thus it is expected to reduce number of viruses.*2

*2 Not all kinds of viruses are reduced.

*3 Not applied to all kinds of viruses

Definition of anti-bacterial:

→ “Inhibiting bacterial growth on product surfaces”

The use of antibacterial processed products can reduce the spread of bacteria.

Anti-viral and Anti-bacterial film for Touch Screen

FV Series



SIAA Mark*4 has been Obtained.

FV series is certified by SIAA (the Society of International sustaining growth for Antimicrobial Articles) for its anti-viral and anti-bacterial functions.

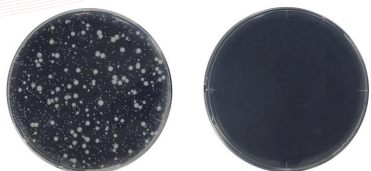
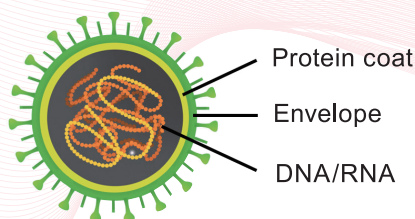
*4 SIAA mark is displayed on products that are subject to quality control and information disclosure in accordance with the guidelines of the Society of International sustaining growth for Antimicrobial Articles, based on the results of evaluation in accordance with the ISO 21702 / I SO22196 method.

Anti-viral Performance

FV series is effective regardless of whether a virus has envelop or not. The number of viruses decreases by more than 99%(*6) in test method conforming to ISO 21702 *6.

*5 Not all kinds of viruses are reduced.

*6 ISO21702:2019: Measurement of anti-viral activity on plastic and other non-porous surfaces.



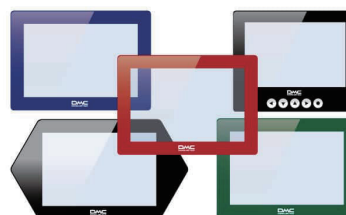
Anti-bacterial Performance

The growth of bacteria shall decrease by more than 99% in the test method conforming to ISO22196. *7

*7 ISO22196:2011: Measurement of antibacterial activity on plastics and other non-porous surfaces.

Color-printed Film Available for Customization

188μm-thick color-printed film is also available for customization. A bezel-less flat surface is possible with it.



SPECIFICATION

Product Number*8	Size of Supported Touch Screen	Film Size*9
FV-154093 * 001	7W	153.9mm x 92.94mm
FV-213160 * 001	10.4	212.7mm x 159.9mm
FV-248185 * 001	12.1	247.5mm x 185.0mm
FV-306230 * 001	15	305.63mm x 229.6mm
FV-381236 * 001	15.6w	381.2mm x 236.4mm

*8 *= Film type A: Clear
B: Anti-glare

*9 For size customization, please contact our sales.

▶ Anti-viral Test	ISO21702	▶ Anti-viral Activity Value	≥2.0
▶ Anti-bacterial Test	ISO22196	▶ Anti-bacterial Activity	≥2.0
▶ Film Thickness	52um (adhesive layer excluded)	▶ Light Transmittance	Clear : 87% Anti-glare : 83%

About the Film : This anti-viral and anti-bacterial film uses RIKEGUARD®.
RIKEGUARD® is a registered trademark of RIKEN TECHNOS.

The chemicals applied on the films of FV series are subject to Biocidal Products Regulation (BPR).
Therefore, the product cannot be exported to Europe.