

## GermBlok Film

As the COVID-19 pandemic continues to foment in some countries, the sanitation of touch monitors used by the public or located in healthcare facilities has become more important. In order to improve the safety of public touch systems and healthcare equipment, AMT is offering a nano-silver anti-bacterial film named GermBlok as a laminate for your touch screens installed in the field. Since application of GermBlok film is fast and simple, it is a standalone product for customers to self-laminate to touch displays no matter their product.

Nano-silver is very useful as an antibacterial because as overall silver surface area increases, contact with bacteria cells is also increased which enhances bacterial inhibition. Bacteria are a simple organism with a cell wall and cell membrane and can be either gram positive or gram negative depending on the composition of the cell wall. Silver ions are effective against both of these bacteria types and works by perforating the glycoprotein structure of the bacterial cell wall. Bacteria require protease for metabolism and reproduction, and silver ions undergo a chemical reaction with Sulfhydryl, denaturing protein, rendering it inactive and unable to reproduce, and causing cell death. Theoretically, silver ions will revert to silver atoms upon the destruction of the bacterial cell and continue to remain on the surface of GermBlok film and maintaining anti-bacterial efficacy.

AMT GermBlok film has a thickness of 155um with a greater than 90% transparency and has a relatively small effect on LCD picture quality. GermBlok film has been tested with the JIS Z2801 method using E. coli and Staphylococcus aureus with resulting anti-bacterial value of  $R \geq 2$  (99.99%). GermBlok backing adhesive is silicone based so is easy to apply, resists bubbling, and seals well. If customers need to replace GermBlok film, residue will not remain upon removal.

Currently, GermBlok film is available in sizes up to 32". You can tell us the dimensions you need and we will cut the GermBlok film to the appropriate size. In terms of displays with a front bezel, we recommend cutting GermBlok film to a size 1cm less than the actual display dimensions. Lamination is simple and similar to applying protective cover film onto your mobile phone or tablet. When laminating, a roller or other implement can be used to adhere GermBlok film to the touch screen.