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## FEATURES

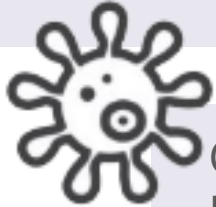
- Anti-bacterial coating
  - Anti-scratch
  - Anti-fingerprint
  - Up to 80" diagonal
  - Can be retrofitted
  - CNC cut to any shape and size
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# CHECKVUE Range ANTI-BACTERIAL PROTECTION FOR TOUCH SCREENS

Helping to protect your touch screen, killing 99.9% of all bacteria and pathogens with a silver nanoparticle coating

# The Problem

There have been an increasing number of articles discussing the effect of surface cross-contamination during the use of touch screens. The COVID-19 pandemic has highlighted this issue further

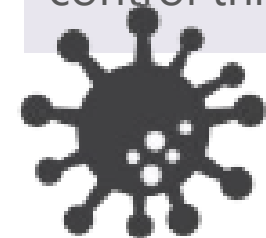


One thing is for certain, that the **use of touch screens is here to stay**, so CDS have looked into how to protect the user from this contamination

Like many other suppliers we have investigated tuning the touch screen so that the **touch is activated slightly above the surface of the glass**, but this would be no more than 5-10mm and realistically someone using a touch kiosk will not be able to have the time vs motor skills to control this level of accuracy and will almost certainly still touch the surface glass



CDS feel the best solution is to add a surface coating on the touch sensor and after market research we are now able to offer a nano-cell silver coated filter protection our sensors



# The **CDS-ABF** anti-bacterial film properties

The CDS-ABF anti-bacterial films have a propriety hard coating which kills 99.9% of bacteria and pathogens. The hard coat incorporates pure metal nano-technology which prevents bio-film colonization on the surface. The surface treatment will kill pathogens such as MRSA, E-Voli and other virulent bacteria greatly reducing the risk of cross-contamination.

As a means of exogenous pathogen control the films are ideal for prevention of HAI (Hospital Acquired Infection), strains of bacteria becoming more resilient to antibiotics which is a serious health issue – the super bugs. Our AB1 film can be used on PCAP touchscreens in all areas where there is a risk of contamination.

The increase in use of touch screens where a large number of people are touching screens on a daily basis, requires that these users are protected from infectious agents. Every measure should be taken to reduce the risk in public spaces and the workplace.

Product code	Film type	Total thickness	Adhesive	Peel adhesion (grams/in)	Tensile strength	Hardness	Construction
CDS-ABF-OC	100μPET	120μ	Silicone	5	20	2H	Anti-Bacterial – Hard Coat
CDS-ABF-AG	100μPET	120μ	Silicone	5	20	2H	Anti-Bacterial – Hard Coat – Anti Glare

# The Construction

The CDS-ABF anti-bacterial films is a 100micron thick PET film with two surface finishes, either optically clear (OC), or anti-glare (AG), both versions have silicon adhesive which is easily removed. The films are anti-finger print, 2H anti-scratch and have an anti-bacterial treatment designed for all PCAP touch screens.

## PRODUCT STRUCTURE

### CDS-ABF-OC

Surface protection tape (PET 38 $\mu$ m)

Hard coat layer (5 $\pm$ 2 $\mu$ m)

PET film (100 $\mu$ m)

Silicone adhesive (15 $\mu$ m)

Release film (PET 50 $\mu$ m)

### CDS-ABF-AG

Surface protection tape (PET 38 $\mu$ m)

Anti-glare coating (5 $\pm$ 2 $\mu$ m)

PET film (100 $\mu$ m)

Silicone adhesive (15 $\mu$ m)

Release film (PET 50 $\mu$ m)



# The Application

**NEW BUILDS** – CDS are able to fit this to new products being supplied. Contact our sales team to discuss your requirement. Either currently buying from CDS or if you are buying through another display specialist and would like CDS to offer a protected alternative.

**RETROFIT** – Where there is already an existing estate, the films are simple and easy to apply as a retrofit, either on-site or return to base. We already have big brand names either using or investigating using this technology for use in public facing food based kiosks as well as many other touch screen applications.

**TOUCH TECHNOLOGIES** – The film covers the front of the glass sensor, so any technologies which require the front glass to be touched (such as surface capacitive, SAW or resistive will either not work or have limited effect. Where customers are using these older technologies, CDS are also able to upgrade products with the modern PCAP technology which can accommodate the ABF technology.

**CUSTOMISATION** – All the films are CNC cut to size and CDS are able to accommodate customer shapes (e.g. rounded corners / cut outs, and stretched / round displays). Bespoke branded release liners are also an options based on volume.

# The Protection

**TESTING AGAINST BACTERIA** – We have MEASUREMENT OF ANTI-BACTERIAL test reports showing positive protection results from a UK laboratory. The test was conducted according to the standard BS EN ISO 22916 which is the test for anti-bacterial performance on hard non-porous surfaces such as plastics, metal or glass. The tests conducted looked at the performance of the film against MRSA, E-Coli, Klebsilla Pneumoniae, and Streptococcus Pyogenes over a 24 hour period

**TESTING AGAINST VIRUSES** – Silver nanoparticles have mainly been studied for their anti-microbial potential against bacteria, but there are papers indicating that they are active against several types of viruses. Such a journal can be found at <https://www.mdpi.com/1420-3049/16/10/8894/htm>

NOTE – CDS do not promote this product as an ANTI-VIRAL protection film

# CDS product guides

We have a number of different product guides available, please click on the guide cover below and we will arrange to send you the latest copy



**IP66**

**FEATURES**  
 IP66 sealed enclosure  
 High brightness 2000cd/m<sup>2</sup> +  
 Dust free  
 Moisture free  
 Maintenance free

**SIZES**  
 37" stretch, 32", 43", 55", 75"

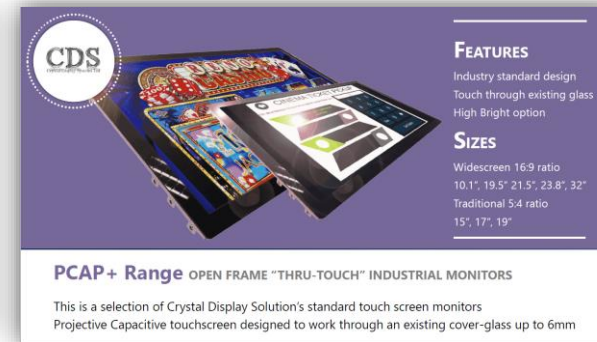
**IP66K Range Outdoor Digital Signage FULLY ENCLOSED SYSTEM**  
 Dust-free, moisture-free, Maintenance-free  
 This is the Crystal Display Solutions outdoor DIGITAL SIGNAGE range  
 Choose to customize the unit with a branded shell or hang it as it is straight out of the box



**FEATURES**  
 450cd/m<sup>2</sup> for indoor usage  
 24/7 operation  
 Portrait / Landscape orientation  
 Free scheduling software  
 Network capable

**SIZES**  
 19", 22", 32", 43", 50", 55"

**Slimline ECO Digital Signage PLUG AND PLAY ANDROID DS SYSTEM**  
 The Crystal Display Systems Ltd entry level indoor digital signage poster range  
 Still one of the most popular DS products, with thousands of screens installed globally



**FEATURES**  
 Industry standard design  
 Touch through existing glass  
 High Bright option

**SIZES**  
 Widescreen 16:9 ratio  
 10.1", 19.5", 21.5", 23.8", 32"  
 Traditional 5:4 ratio  
 15", 17", 19"

**PCAP+ Range OPEN FRAME "THRU-TOUCH" INDUSTRIAL MONITORS**  
 This is a selection of Crystal Display Solution's standard touch screen monitors  
 Projective Capacitive touchscreen designed to work through an existing cover-glass up to 6mm



**FEATURES**

- Increased contrast and viewing angle
- Bonding of sizes up to 75"
- UV protection / UV resistance
- Extended temperature
- Improved visual quality
- Fully re-workable
- No water condensation / contamination
- Better impact resistance
- Eliminates the wash-out effect
- Waterproof

**OPTICAL BONDING HI-RELIABILITY OPTICAL SOLUTIONS**  
 Optical bonding is a process used in applications where a premium solution is required

Crystal Display Systems is a leading designer, distributor & value added reseller of flat panel display solutions. Our expertise allows us to offer the best solutions to our clients and partners. We offer Industrial TFT LCDs, Retail Displays, Translucent displays, Touch screens, videowalls & many other digital solutions.

# Custom monitor builder

We have direct links with OEM factories allowing rapid development, commercially competitive and have scalable production capability. From designing a replacement for a current product through to a complete design CDS has the resource available





## DEVELOPMENT

of new products through  
out R&D team

## AFTER SALES

Support for internal  
repairs and full technical  
backup

## BESPOKE

Touch monitor design

# CDS

Crystal Display Systems Ltd

Crystal Display Systems is a leading designer, distributor & value added reseller of flat panel display solutions. Our expertise allows us to offer the best solutions to our clients and partners. We offer Industrial TFT LCDs, Retail Displays, Translucent displays, Touch screens, videowalls & many other digital solutions.

## RAPID

Sample production  
quicker than most local  
suppliers

## LEADTIMES

For production excellent  
compared to other  
manufacturers

## QUALITY

ISO9001 approved

## EUROPEAN

design with Far Eastern  
pricing

## GLOBAL

production with factories  
in CHINA / TAIWAN /  
SOUTH KOREA

## For More Information Please Contact Our Main Office And Technical Support Team

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