January 2014



Crystal Display Systems Limited

Product and Services Overview for

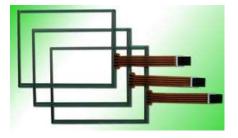
* Industrial & Commercial * Retail & Digital Signage













Contents

In this Crystal Displays 2014 overview we give you an excellent overview of our products and services in the following sections:

- **1. Who is Crystal Displays and what do we do?**
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Who is Crystal Displays and what do we do?



- Crystal Displays is a leading U.K. Designer, and Value Added Reseller, and Distributor of Flat panel display solutions with global customers and partners.
 - Crystal Displays offers Industrial, Retail and Digital Signage products as well as related products and services including stockholding and call off / Kan Ban options.



Additional capabilities/services include but are not limited to: Design consultation

- Demo /Sample program
- Customised Display kits
- Complete after sales service
- Repair services
- Extended warranty program
- Optical bonding services
- Touch screen integration
- Hibrite solutions
- Widest range of transparent Display kits and showcases
- Full range of Retail Displays



Manufacturers and Suppliers



Touchscreens



Interface solutions & others







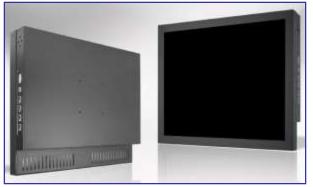


"We are constantly adding products to our range and can supply other brands upon request so please contact our team."

Industrial, Commercial, and Retail Monitors

CDS

Crystal Displays offers a full range of standard and custom monitor products top meet your needs and requirements. Contact us about your project now.



Chassis and rear Mount



Waterproof sealed



Panel mount



Sunlight readable





Professional large format monitors





Industrial super slim SMART monitors

Open frame

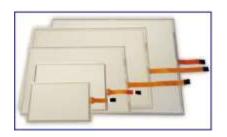
<u>Analog resistive Touch Screens</u> are especially suitable for cost sensitive, compact applications. 4 and 5 wire available.

<u>Capacitive Touch Screens</u> are resistant and suitable for outdoor and publicly accessible applications.

IR Infrared and SAW (Surface Acoustic Wave) technologies especially for hazardous environments, and IR for large sizes or applications without glass. IR and SAW Multi Touch products available.

<u>Touch Controllers</u> are connecting the Touch Screens with an RS232 or USB interface over which they are connected to a computer. The touch sensitivity and other features can be set with the driver software. Multi touch capability.

<u>Projected Capacitive</u> for ruggedised and specific multi touch applications. PCAP for stylish multi touch applications.









This excellent range of industrial interface offer high quality / high reliability solutions with all inputs required (see below) driving displays up to 4K (3840 x 2160). These are offered as stand alone boards, kits solutions with cables / connectors etc. or as fully tested kit solutions including the TFT panel and / or touchscreens









Product Name	PCB Dimension	Inputs	<u>Outputs</u>	Max Resolution	Datasheet
PI Series	100x150x16mm	RGB, DP, HDMI, Y/ Pb/Pr, PC Sound	LVDS, Speaker	1920 x 1080	Download
PO Series	96x96x15mm	RGB, DVI	LVDS, TTL	1920 x 1080	Download
PS Series	100x120x7.2mm	RGB, DVI, DP, HD MI, External I2C	LVDS, Audio	1920 x 1080	Download
C Series	110x150x17mm	RGB, DVI, CVBS, SVHS, Y/Pb/Pr, 10 w Audio	LVDS	1920 x 1080	<u>Download</u>
O Series	100x150x16mm	RGB, DVI 2w Audio	LVDS	1920 x 1080	Download

"Ultra-Wide stretched displays Including interactive touch"

Our range of stretched monitors, also known as BAR-Type displays offer an ultra wide aspect ratio is perfect for grabbing your audiences attention, and the high brightness display gives perfect visual performance in a wide variety of applications.

Having been used in a wide variety of applications including Bars, Casino's and elevators. Assembled with full industrial grade components to ensure the highest standards of reliability.

Android Retail Tablets

Android based interactive touch tablets have been specifically designed and built for commercial and retail use. Available in sizes 10" up to 21.5"



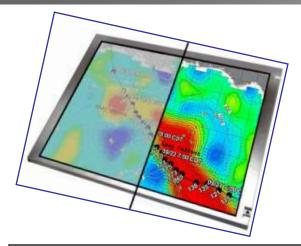








Value Add Services - Optical Enhancements



This can be achieved through Anti-Reflection Enhancement Film, AR glass top layer or full optically bonded display. This currently available up to 46" but please ask for latest information – for more information please email: info@crystaldisplay.com

Some of the benefits of optical bonding

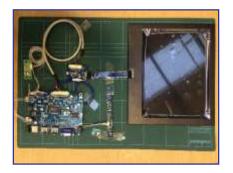
- ✓ Increased ruggedness: Bonding a sheet of glass on top of the display increases the ruggedness of the display.
- Optimum visuals in bright ambient light
- ✓ Improved durability: A bonded display is better able to resist scratches, fluids, stains and dirt.
- ✓ Condensation: The elimination of an air gap between the cover glass and the display means that moisture cannot penetrate and cause fogging on display's surface.
- ✓ Extended temperature range and EMI filtering: The temperature range of the display can be extended by incorporating ITO heaters on the cover glass; EMI filters can be added via the same mechanism.





Transparent Display Kits & Showcases

CDS



Transparent Display kits from 5" up to 84" for integrators and designers



Various Transparent showcases including customised sizes and designs













Innovative transparent (translucent) Displays panels and showcases

Retail / Digital Signage Products

CDS



Battery Powered Displays



Wide range of excellent Media Players



Digital multi Display shelf edge solutions



Advertising Displays and totem kiosks



Wide range of digital adverting displays with built in Media players and / or PC



Videowall and tiling solutions

Some of Crystal Displays other products



Digital Transparent Display Fridge for Advertising and promotions



Outdoor IP6x Display solutions





Small slim TFTs for mobile applications



Power supplies



Touch screen monitors



Holographic Displays



We specialize in Panel PCs and have a vast range of options now available. We can supply our solutions in many different formats to suit your application.

Our sizes start as small as 6.5" diagonal, right up to 65". We test all our panel PC's for each application for optimum performance and visual quality.

When choosing a Panel PC, you need to consider several elements including:

- The Display (Diagonal Size, Resolution, Brightness, Backlight etc)
- The Format (Open Frame, Chassis Mount, Rack Mount, IP66 Sealed etc) Touchscreen Required? Technology? (Resistive, Capacitive, IR, SAW etc)
- The PC itself (Processing Power, Graphic Power, I/O, HDD etc.)
 Operating System Preinstalled?
 (Windows 7, Windows 7 embedded etc)



Examples of Crystal Display applications

- Industrial / Aviation / Military Segment
- Medical Segment
- Automotive / Marine / Industrial Segment
- Retail / Digital Signage segment
- Gaming market
- EPOS
- Instrumentation
- Advertising
- Multi touch
- Specialist / Custom
- + Others ...

























Examples of Crystal Display clients



Anyone can supply product but we offer a full personal consultation, design & installation service, where required, backed up by the experience of many designs and projects so YOU receive the best solution for YOUR project.





For more information please contact our main office and technical sales support team

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Tel. +44 (0) 1634 292 025 info@crystal-display.com





www.crystal-display.com

"Thank You for your time and have a great 2014 from the CDS team"

Company Confidential