

DATA SHEET

ZyBrid[®] edge



Based on our award winning multi-touch Projected Capacitive Technology (MPCT™), ZyBrid[®] edge touch sensors are a durable and cost-effective solution that can be used to create stunning, interactive video walls. The toughened glass is impact resistant and touch performance is unaffected by scratches, moisture and surface contaminants, making it ideal for high use locations such as museums, corporate meeting rooms, command and control centres, etc. The touch sensors can be mounted to the ultra-narrow bezel video wall displays using a suitably designed mechanical framing system, or optical bonded to the front of the display.

FEATURES AND BENEFITS

- Made from durable, vandal and scratch resistant, thermally toughened glass
- Delivers drift free, fast, accurate touch response
- Performance unaffected by moisture and surface contaminants
- Near zero borders (<3mm) designed to match video wall display bezels
- Seamless touch transition between displays with up to 100 independent touch points using the ZXY500™ edge touch controller
- Supports up to 20 linked individual touch sensors of any size up to ~86 inches
- Excellent light transmission with optional glass surface enhancements such as anti-glare, anti-reflection, etc.
- Compatible with a variety of multi-touch supporting operating systems including Windows, Linux and Android
- Does not use any unsightly optical/infra-red touch frame style mounting structure. Solution is fully flush from edge to edge across the entire surface of the video wall
- Touch performance is unaffected by mechanically misaligned displays within the video wall
- Individual modular touch displays deliver easy maintenance of video walls compared to optical/infra-red touch systems
- ZXY500[®] edge controllers can be changed between Associate and Primary firmware modes using an on-board switch

OPERATION

The touch sensor is divided into a transmit and receive matrix of sensing cells created using 10 micron diameter insulated copper electrodes. These are applied to the rear of the touch sensor glass substrate. These are nearly invisible to the human eye when viewed on a powered display. The electrodes are connected to Zytronic's proprietary multi-touch controller, and a voltage is applied to the transmit array.

When a finger or conductive stylus approaches the surface of the sensor, a change in capacitance is detected, which alters the measured voltage transferred between the transmit and

receive matrix of sensing cells. The position of the applied touch is then determined by the ZXY500™ edge touch controller and its onboard firmware. Unlike conventional capacitive touch systems, the active component of the MPCT™ sensor is embedded behind the thermally toughened front glass layer, ensuring protection, long life and stability.

The unique sensitive characteristics of the MPCT™ sensor eliminates the need for an operating force, providing users with the same levels of touch sensitivity as experienced with the latest smartphones and tablet PCs but on a far larger scale.

SENSOR

See data sheet for multi-touch ZyBrid® touch sensor for full product details:

- Sensor Thickness** 3, 4 or 6mm thermally toughened glass
- Input Type** Finger, gloved hand and stylus (with conductive tip diameter of at least 10mm)
- Options** Various sizes and glass types available depending on the video wall display selected

INSTALLATION

- ZyBrid® edge touch sensors are manufactured from glass and are designed to fit leading brands of narrow bezel video wall displays. Clear film tabs extend from the base of the glass on two sides, with flexible connectors in two corners for attachment to the Localised ZXY500™ touch controller
- These clear film tabs are carefully folded around the sides of the video wall display, fixed into position with a suitable mechanical framing system or the touch sensor is optically bonded to the display face, and then a Associate ZXY500™ edge touch controller is attached to create a touchscreen module
- Once each touchscreen module has been mounted into the video wall, each of the Associate touchscreen module controllers are linked in series, and connected to a Primary ZXY500™ touch controller. The Primary touch controller combines the data from the individual Associate touch controller modules in the video wall and outputs an overall set of touch co-ordinates to the host computer running the video wall content

CONTROLLER

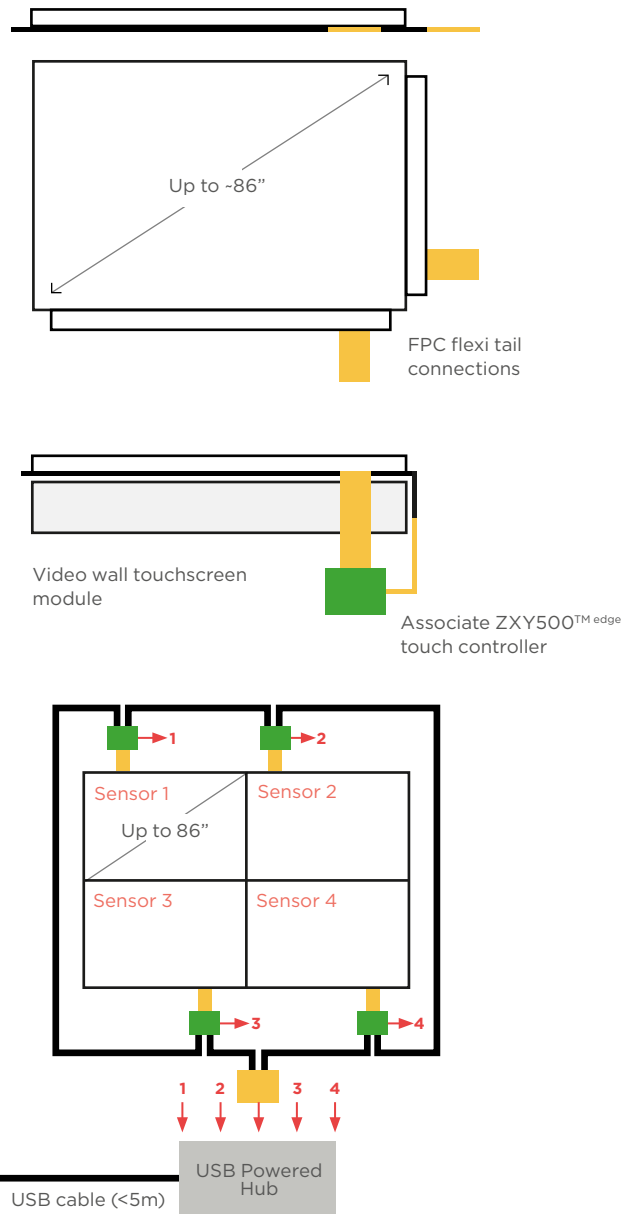
See data sheet for ZXY500™ and drawing for ZXY500™ edge controller

QUALITY

See cosmetic specification
www.zytronic.co.uk/quality-assurance/product-specification

APPROVALS

RoHS compliant, UL and CE, FCC approved



Visit www.zytronic.co.uk/support for further technical details

- Associate ZXY500™ edge controller
- Primary ZXY500™ edge controller
- Data cabling between controllers
- ➔ Power connection to USB powered Hub (5V power only)