

# Windows Collaboration Display

PN-CD701 - 4K 70" interactive display

## Productivity doesn't just depend on the time that we put in, but also on the quality of work we do – using the best possible tools.

For teamwork to be truly effective, people need to easily connect and share ideas and information in a comfortable environment – whether they are working in a meeting space, conference room or anywhere in the world.



The world's first certified Windows collaboration display from Sharp, is certified for Skype for Business and is a next generation 4K 70" interactive display that enables better space utilisation and more productive collaboration in meetings, boardrooms, training

rooms, technical reviews and almost anywhere else.

As well as using Sharp's award-winning technology, together with a built-in microphone, high quality camera and IoT sensor hub, it works seamlessly with the best Microsoft 365 collaboration tools. Furthermore, it's all backed by the cloud to deliver outstanding ease of use and enable the continual analysis of meeting room conditions and usage.

#### Walk in, plug in and work together

Setting up the technology needed for a meeting can be very time consuming and frustrating. But you simply 'plug and play' with the Windows collaboration display.

It is so simple to walk in to a room, plug in your device and start working together straight away. Just connect with the 8m long USB-C cable and it automatically switches to the right input for whatever information you want to display. You're instantly ready to start your meeting – saving up to 10 minutes\* time trying to set up connections.

This single USB-C\*\* connector, which is also used with the latest Windows and Apple Mac notebooks, provides high-speed, high-bandwidth data transfer for multiple functions, including 4K Video, internet network and application data. And it can also provide power for attached mobile devices. However, for added flexibility, a wireless connection is included for lower bandwidth data transfer and any hardware without a USB-C connection can still use the full functionality of the Windows collaboration display using a HDMI™ and USB Type B cable combination.









In addition, to the Skype for Business certification, the Windows collaboration display has received a Crestron Connected® certification which shows that employees can stay focused on more important tasks instead of spending time setting up in-room meetings.

Our Windows collaboration display has won an award for Best New Collaboration Board in the 2019 Best of ISE Awards (rAVe publications) and 2019 Top New Technology (TNT) award for displays. (CE Pro and Commercial Integrator magazines).

<sup>\*</sup>Total Economic Impact™ Study, Forrester Consulting, February 2016.

<sup>\*\*</sup> USB-C port must support DP Alt Mode (DisplayPort Alt Mode) to provide 4K Ultra HD resolution video signal.



#### Better places to meet

Creating a comfortable environment in your meeting rooms pays real dividends in terms of helping people concentrate and improving productivity. The Windows collaboration display from Sharp has in-built sensors that can connect to the Microsoft Azure Digital Twins IoT platform, and other commercially available cloud and subscription services such as **Sharp WorkSpaces\*** as part of a smart building environment.

#### **IoT** sensors

Occupancy – a motion sensor detects the presence of any people in the room. An additional artificial intelligence (AI) service can analyse this data and count the numbers of people. Further AI services could automatically switch on displays and other equipment to enable a faster setup and help improve the scheduling of room bookings. During a meeting, the sensor can also be used by another AI service to detect the location of whoever is speaking and control a three-dimensional microphone array to focus on the relevant person.

**Temperature** – its intelligent climate measurement can be used by an Al service to automatically regulate the room temperature and relative humidity to make the room feel more comfortable. By intelligently optimising the operation of the air-conditioning it also helps reduce costs.

**Light** – an ambient light sensor helps with intelligent lighting control, as it automatically measures the level of light. An Al service could then adjust the in-room lighting system with changing day and night conditions, which can reduce eye strain and may save money on wasted energy.

**Air quality** – the Windows collaboration display continually measures and analyses the ambient air quality\*\* in the meeting room and can assist another Al service in automatically adjusting the air-conditioning to provide the best possible working environment.

<sup>\*</sup> Not yet availavle in New Zealand.

<sup>\*\*</sup> Measure the levels of eCO2 (Equivalent Carbon Dioxide) and TVOC (Total Volatile Organic Compounds).



Actively using the data collected by the Windows collaboration display and making physical changes to how rooms are used and controlled is best achieved with a Facility Manager using the latest industry smart tools and technologies. Sharp is working with a number of leading businesses to build a comprehensive eco-system for the creation of smart meeting spaces that enable truly effective collaboration.

### A more natural approach.

When ideas are flowing you need to be able to work quickly and intuitively, without having to struggle with the technology.

Even in the most highly interactive meeting, the Windows collaboration display from Sharp ensures that information can be shared and captured quickly and precisely.

#### Simply much easier

With its 10-point Projected Capacitive (PCAP) touch technology and direct optical bonding, it provides a more



accurate and natural Pen-on-Paper experience. Writing on-screen is just as quick and effortless as writing on a flipchart or whiteboard. By using either a finger or pen, notes and comments can be quickly added as simple text or by drawing freehand to highlight changes and annotate the information on-screen. So, in boardroom presentations, you can quickly give the big picture overview, but also focus on key details to keep everyone engaged and 'eyes up'.

Thanks to the Windows collaboration display's exceptional responsiveness and ease of use, it also:

- Speeds-up collaboration users can work together immediately, with no training, which encourages more engagement and interactivity.
- Builds confidence users feel more confident and willing to participate and present and share information.
- Increases concentration users can focus on the delivery of content with no technical distractions.

#### Fast, precise control

The Windows collaboration display comes with a passive pen as standard. Designed with a precise 2mm tip, this powerful and ergonomic stylus sits comfortably in the hand and Passive pen enhances the Pen-on-Paper experience. It is ideal for discussing complex technical information or graphics, such as architectural plans or engineering designs, where you need to review even the smallest details. And when you're not using the pen, it attaches magnetically to the screen ensuring it is always within reach.

#### Ready when you are

Utilising the built-in motion sensors, the display will automatically switch on when motion is detected in the room, ensuring a fast meeting start. For maximum efficiency, the display will also go into standby mode when not in use.



#### All you need to do more

Business teams come in all shapes and sizes – from tactical workgroups to large-scale, established project teams – and often span both local and global locations. But to be truly effective they need to share ideas openly and inclusively.

The Windows collaboration display from Sharp has been certified for Skype for Business and is supported by Microsoft Teams. It offers the highest quality audio and video and provides the best ways to connect and collaborate using the power and productivity of Microsoft 365 at room scale.\*

 Microsoft 365 provides familiar Microsoft Office applications that enable people to be more creative, work together more effectively and have a more productive experience. It also includes advanced security and device management capabilities to help safeguard your business.

- Microsoft Teams is a complete chat, notes, attachments and online meetings solution. It includes annotation, overlay and presentation tools, along with seamless video conferencing and collaboration tools. So whether everyone is in a meeting room or spread around the world it still feels like you're all together.
- Microsoft Azure Digital Twins is an IoT platform that creates a comprehensive model of physical environments. Data from multiple IoT sensors is stored in a reliable and secure private cloud database and can be analysed, for example, with a 3<sup>rd</sup> party smart building dashboard solution, to help optimise the management of office space.

### Look and work smarter.

### Technology should not only enhance your productivity, but also your workplace.

Imagine a collaborative space where the technology is designed to ensure effortless control and collaboration, but also adds an extra touch of style. That's exactly what you get with the Windows collaboration display from Sharp.





#### Effortless device sharing

The Windows collaboration display has in-built Wireless Casting that works with Windows and Android™ devices. As a result, you can simply connect your own device to the display and easily share and display any information while controlling your PC from the touch screen.





#### Stylish design

The display has an attractive and elegant edge to edge design that looks good in even the most prestigious corporate boardroom:

- The On Screen Display (OSD) buttons are discretely located on the front for quick and easy control.
- The high quality video conferencing camera and IoT sensor hub have been integrated neatly on the top of the display.
- An integrated directional microphone picks up sound from anywhere within your meeting space.



Image for illustration purposes only.

Up to five\* devices can be connected simultaneously and the Touch back control enables you to control screen content from either the display or the source device. So it is ideal for dynamic workgroups discussions or interactive training sessions as it allows you to work more efficiently, encourages active involvement and provides a more effective way of learning.

The Windows collaboration display can split into two separate screens, putting it into Picture by Picture (PbP) mode. The Windows collaboration display will show up to two different connected devices out of the five possible options. The two screens can be any combination of inputs, for example, 1 USB-C + wireless 1, or HDMI + wireless 2.

Touch back is also a feature that works in PbP mode, with whichever attached device is active. Touch back control automatically switches between the two PbP displays, depending on which side is touched.

### Specifications

General	
Installation PN-CD701	Landscape
LCD Panel	
70-inch-class (69 1/2-inch [17	
Max. resolution	3840 x 2160 pixels
Max. display colours (approx.)	1.06 billion colours
Pixel pitch $(H \times V)$	0.401 x 0.401 mm
Max. brightness (average)*2	350 cd/m <sup>2</sup>
Contrast ratio	4,000 : 1
Viewing angle (H/V)	176°/176° (CR >10)
Active screen area (W $\times$ H)	1,538.9 x 865.6 mm
Response time	6 ms (grey to grey, avg.)
Backlight	W-LED, edge lit
Touchscreen	
Touch technology	Projected Capacitive (PCAP) touch
Direct optically bonded	Yes
Palm reject	Yes
PC connection port	USB (2.0) Type B x1, USB Type C x2
Power supply	Supplied from main unit
Multi touch	10 points
Protection glass	Thickness: approx. 1.9 mm* <sup>3</sup> Shock resistance: 130 cm* <sup>4</sup>
Pen	
Passive touch pen	Standard with the Windows collaboration display
Wireless Casting	
Wireless communication method	5 GHz, IEEE802.11 a/b/g/n/ac
Supported devices	Windows and Android
Computer Input	

Input/Output terminals*5 Top Side	USB (3.0) Type A x2 (1 for camera) SPDIF-In x1 (for camera) USB (3.0) Type A x2 LAN port (External Gb Ethernet) x1 Audio line-out (3.5mm-diameter mini stereo jack) x1 LAN port (Internal Gb Ethernet) x1 USB (2.0, Internal storage expansion) Type A x1 USB Type C (DP Alt Mode) output x1
<b>Speaker output</b> Built-in	12W + 12W
Power supply	100V - 240V / AC 50/60Hz
Power consumption	370W max
Environmental conditions Operating temperature Operating humidity	5°C to 35°C 20% to 80% RH (no condensation)
<b>Dimensions</b> (W x D x H) (display only)	1,623.6 x 90 x 976.4 mm
Weight (display only)	65kg
Main accessories	AC power cord, set-up manual, USB Type C (DP Alt Mode) cable (8.0 m), passive touch pen, HDMI cable, USB touchback cable

#### **Unified Communications**

Output connector	USB (3.0) Type B
Camera resolution	4K sensor with Full-HD @ 30 fps
Camera field of view	120°
Microphone	Array microphone x 4
Sound collecting distance	4-6m

#### **IoT Sensor Hub**

Output connector	USB (2.0) Type A
Al camera Resolution Colour space Field of view	1920 × 1080 @30 fps YUY2, MJPG 74.8°
Motion sensor Sensor type Detection area	Microwave 140° (Horizontal) / 70° (Vertical) 0dB level
<b>Light sensor</b> Selectable LUX ranges Processing	128/256/512/1024/2048 50/60Hz flicker noise and IR rejection
<b>Air quality sensor</b> Gas types	eCO2, TVOC
Temperature humidity	

sensor

-40°C to +100°C Temperature range 0% - 100%



Video

Plug & play Power management







HDMI x 1, USB Type C (DP Alt Mode) x2











Be Original.