Windows collaboration display

PN-CD701: 70" Class (69.5" diagonal) 4K Ultra HD interactive display

www.sharpusa.com/windows-collaboration-display

SHARP®

Always smarter meetings.

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.

Collaboration display

The Windows collaboration display from Sharp is a next generation 4K Ultra HD 70" Class (69.5" diagonal) interactive display that enables better space utilization 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 into a room, plug in your device and start working together straightaway. Just connect with its specially engineered, 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.

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

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

*Total Economic Impact™ Study, Forrester Consulting, February 2016.

** 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 built-in sensors that can connect to the Microsoft Azure Digital Twins IoT platform, 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 analyze 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 AI service to automatically regulate the room temperature and relative humidity to make the room feel more comfortable. By intelligently optimizing 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 AI 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 analyzes the ambient air quality* in the meeting room and can assist another AI service in automatically adjusting the air-conditioning to provide the best possible working environment.

* 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


Pen-on-Paper

With its 10-point Projected Capacitive (PCAP) touch technology and direct optical bonding, it provides a more accurate and natural Sharp 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. This means that, 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


Passive pen

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 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.

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 is both Microsoft Teams and Skype for Business certified. 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 analyzed, for example, by a third-party smart building dashboard solution, to help optimize the management of office space.

Certified for Microsoft Teams

Certified for Skype for Business

Microsoft Azure Certified

* The mentioned software and services are available as an additional purchase and are not included in shipping with the Windows collaboration display.

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.

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 videoconferencing camera and IoT sensor hub have been integrated neatly on the top of the display.
- An integrated directional microphone picks up sound from anywhere in your collaboration space.

Effortless device sharing

The Windows collaboration display has built-in 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.

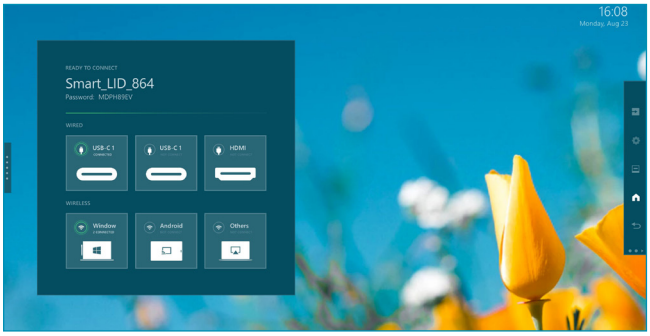


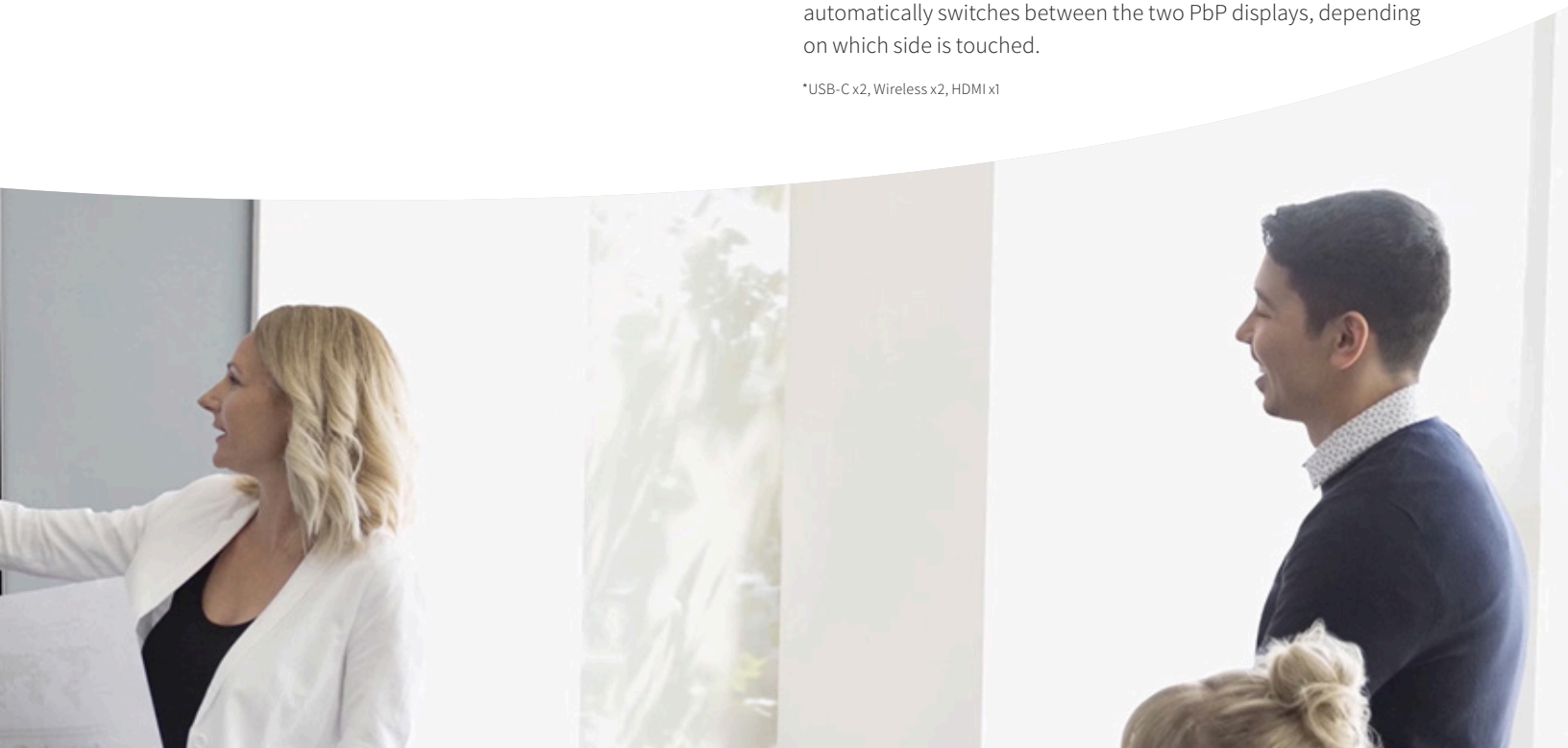
Image for illustration purposes only.

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.

*USB-C x2, Wireless x2, HDMI x1



Specifications

General

Installation	
PN-CD701	Landscape

LCD Panel

70" Class (69.5" diagonal) UV2A*1 LCD	
Max. resolution	3,840 x 2,160 pixels
Max. display colours (approx.)	1.06 billion colors
Pixel pitch (H x V)	0.401 x 0.401 mm
Max. brightness (average)*2	350 cd/m^2
Contrast ratio	4,000 : 1
Viewing angle (H/V)	176°/176° (CR >10)
Active screen area (W x H)	1,538.9 x 865.6 mm
Response time	6 ms (gray to gray, 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*3 Shock resistance: 130 cm*4

Pen

Passive touch pen	Standard with the Windows collaboration display

Wireless Casting

Wireless communication method	5GHz, IEEE 802.11 a/b/g/n/ac
Supported devices	Windows and Android

Computer Input

Video	HDMI™ x 1, USB Type C (DP Alt Mode) x2
Plug & play	Yes
Power management	Yes
Input/Output terminals	
Top	USB (3.0) Type A x2 (1 for camera) SPDIF-In x1 (for camera)
Side	USB (3.0 compliant) 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 compliant, Internal storage expansion) Type A x1 USB Type C (DP Alt Mode) Output x1
Service Port	USB (2.0 compliant) Type A x1 UART TX/RX port (3.5mm-diameter mini jack) x1
Speaker output	
Built-in	12 W + 12 W
Power supply	100V - 240V / AC 50/60Hz
Power consumption	370W max
Environmental conditions	
Operating temperature	41°F to 95°F / 5°C to 35°C
Operating humidity	20% to 80% RH (no condensation)
Dimensions (W x D x H) (display only)	63-29/32" x 3-17/32" x 38-7/16
Weight (display only)	143.3lbs / 65kg
Main accessories	AC power cord, battery, set-up manual, USB Type C (DP Alt Mode) compliant cable (8.0 m), HDMI cable, USB touchback cable, passive touch pen

Unified Communications

Output connector	USB (3.0) Type A
Camera resolution	4K UHD (up to 3840x2160 pixels) sensor supporting high quality, low noise video at 30fps
Camera field of view	120°
Microphone	Array microphone x 4
Sound collecting distance	13 – 20 ft

IoT Sensor Hub

Output connector	USB (2.0) Type A
AI camera	
Resolution	1,920 x 1,080 @30 fps
Color space	YUY2, MJPG
Field of view	74.8°
Motion sensor	
Sensor type	Microwave
Detection area	140°(Horizontal) / 70° (Vertical) 0dB level
Light sensor	
Selectable LUX ranges	128/256/512/1024/2048
Processing	50/60Hz flicker noise and IR rejection
Air quality sensor	
Gas types	eCO2, TVOC
Temperature humidity sensor	
Temperature range	-40°F to 212°F / -40°C to +100°C
RH range	0% - 100%

HIGH-DEFINITION MULTIMEDIA INTERFACE · 4K 3840 × 2160 Pixels · Collaboration display · Microsoft Azure Certified · Certified for Microsoft Teams · Certified for Skype for Business · Pen-on-Paper · TNT Awards ISE 2019 · AVE 2019 · CRESTRON connected

*1 UV²A stands for Ultraviolet-induced Multi-domain Vertical Alignment, a photo-alignment technology that ensures uniform alignment of liquid crystal molecules. *2 Brightness depends on input mode and other picture settings. Brightness level will decrease slightly over the lifetime of the product. Due to the physical limitations of the equipment, it is not possible to maintain a precisely constant level of brightness. *3 Including AG film on the front and AR film on the back. *4 Approximate distance at which the glass panel can withstand the impact of a 500-gram iron ball dropped on its center. *5 Use a commercially available connection cable for PC and other video connections.

SHARP

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