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Review: 3 digital whiteboard displays for business collaboration

Meetings are made more productive by interactive displays that you can write on and share with remote participants. We review the Google Jamboard, the Microsoft Surface Hub and the InFocus Mondopad.

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Whether your business team is designing a next-gen widget or developing an online campaign, you need a place to get together, brainstorm and map out a strategy. In years past, a dry-erase whiteboard was typically where such ideas were recorded, with some obvious drawbacks. For starters, somebody had to capture all those great ideas from the whiteboard before it got erased. Worse, remote meeting attendees couldn't see the on-board action.

Today, however, such collaboration can be done with a special large display that users can present from, write on and share with meeting participants halfway around the world. With a laptop or mobile device connected wirelessly or via video cable, the touch-sensitive display acts as a giant tablet where participants can interact with each other and an array of digital materials — and easily save the results to turn into action items.

Instead of just going through a canned slideshow about how your product stacks up with a competitor, you can highlight your company's recent sales dip while showing the two products' web campaigns next to a checklist of differences. Go a step further and open CAD models of each product that can be rotated to show differences.

All the while, you can use your fingers or the included styluses to write, draw, tap, swipe and drag items around. In a very real sense, a world of creativity and collaboration are at your fingertips.

For this review, we looked at three top digital whiteboard displays suitable for conference rooms, huddle rooms or open areas in the office: the Google Jamboard, the InFocus Mondopad 6522 and the Microsoft Surface Hub. All three support local and remote access, videoconferencing, document sharing and on-screen drawing, and each has its own strengths and weaknesses.

A few notable differences: The Mondopad runs on Windows 10 Pro, the Surface Hub uses a special Windows 10 Team operating system, and the Jamboard uses a customized version of Android. You won't be able to add any apps to the Jamboard, and the Surface Hub is limited to installing software from the Microsoft Windows Store. The Mondopad, by contrast, lets you add any apps that run on Windows 10.

After five weeks of using these displays every day, running conferences and connecting remote participants, I'm convinced that this is the way to bring people and ideas together. Be warned: Priced between \$5,000 and \$9,000 (plus the cost of a stand), these displays can be budget-busters, particularly if you deploy dozens of them throughout an enterprise. That said, they can reduce travel costs and increase participants' efficiency, which goes a long way toward making up for their steep price tags.

Google Jamboard

Available only to Google G Suite customers, the Jamboard stands apart from the other two digital whiteboards in our roundup with its bright colors, rounded corners and Android-based software. It does the basics well, but it's a work in progress that needs refinements and extra features to be truly useful in the corporate world.

Measuring 53.2 x 38.5 x 8.2 in. and weighing 96 lbs., the Jamboard resembles a supersized Android tablet. The display has a red, blue or more corporate-appropriate graphite gray trim and comes with wall mounting hardware. (At press time, the Jamboard's spec sheet said the mounting hardware is included with orders placed by Sept. 30, 2017, but a company representative told us it will be included "for the foreseeable future.")

Alternatively, you can purchase an optional \$1,200 stand that lets you roll the Jamboard from room to room. Looking like mod-

ern sculpture on wheels, the stand has an integrated tray and allows the display to be tilted 15 degrees forward or back, but neither raised nor lowered.

The Jamboard's 55-in. UHD display is the best of the bunch, with 4K (3840 x 2160-pixel) resolution that delivers image details the others can't match — especially noticeable when viewing hi-res images or videos. The Jamboard delivered 305.1 candelas per square meter of brightness, falling between the brighter Microsoft Surface Hub and the dimmer InFocus Mondopad.

The Jamboard's touch screen uses infrared technology and can interpret 16 inputs at once. The included two passive styluses and eraser worked well with the screen, as did fingers and blunt objects such as a marker with the cap on. Helpfully, the pens and eraser magnetically stick to the stand's tray.

The integrated speakers point downward rather than out at the room, and they sound tinny and hollow. There's an HD webcam and a pair of microphones up top for video chats.

While the other two systems have Intel-based processors, the Jamboard is powered by Nvidia's Jetson TX1 system on a chip card with a 1.7GHz quad-core processor, 4GB of RAM, 16GB of solid state storage and an advanced discrete graphics engine with 256 individual execution units. It lacks Intel's vPro management extensions and doesn't include a Trusted Platform Module (TPM) for secure connections.

The Jamboard has buttons for turning the display on and off, controlling the volume and for selecting the display's input. It has two HDMI 2.0 ports, an S/PDIF optical audio port, two USB 3.0 ports, one USB-C port and a micro-USB port for diagnostic purposes. Like the others, it has wired Ethernet, 802.11ac Wi-Fi and Bluetooth. There's also an NFC connection point, something the Mondopad lacks. Unlike the Mondopad and Surface Hub, the Jamboard doesn't include a wireless keyboard, but it worked well with a Rapoo E9180p wireless keyboard.

The Jamboard's internal software has a clean, efficient and functional interface that doesn't offer much to customize or adjust. You can give the board a name and location, turn finger erasing on or off, pick a Wi-Fi network and adjust the volume and brightness — but not much more.

Using the Jamboard

When you fire up the Jamboard, its welcome screen invites you to "Tap to start." This opens the whiteboard space with a choice of four pen tips (including a highlighter), five colors of digital ink and an eraser.

The scribbling and sketches show up onscreen nearly instantaneously. The Jamboard's pens slide smoothly on the screen's glass, and you can convert writing into editable text in a few seconds. Unfortunately, the display can't associate individual pens with individual colors. Its shape tool turns crudely drawn objects into hard-edge geometric shapes, like triangles and circles.

Participants in the same room can plug a laptop or tablet into the Jamboard or present wirelessly using a Chromecast device. On the downside, the stream takes up the entire screen and can't be resized to show other material.

There are free apps for iOS, Android and Chromebooks (available in the Google Play Store only if you're connecting from a Chromebook) that let local and remote attendees see the Jamboard screen on their own devices; they can also participate in the action by drawing, writing sticky notes, adding emojis and sharing items like photos. On the downside, there are no apps for Windows or Mac systems. Remote users with those types of devices can view the conference through a secure connection in a browser window, but not add their own input.

Other than using the Jamboard as a dumb display by plugging it directly into a laptop, the only way to bring up a Google Docs file or something from your Google Drive online account on the Jamboard is to do it from a connected iPad, iPhone, Chromebook or Android device running the Jamboard app. This can make getting the right items in place awkward. Plus, you can't add third-party apps to the Jamboard.

Oddly, the Jamboard couldn't load images or documents from any of the USB drives I tried; it's a feature that Google is working on. The only thing you can use a flash drive for currently is transferring a digital security certificate.

While the other two displays have all-purpose browsers, Jamboard has two search engine windows: one for images and the other for everything else. I found this two-fisted approach made me think a little too much about what I was looking for beforehand. There's no way to use a standard browser such as Chrome, Firefox, IE or Opera.

The board has a few other rough edges typical of a first-generation design. You can't share documents and run a video conference at the same time, and videos can't run full screen. Conference calls don't happen over Skype or regular old phone lines but via Google Hangouts, and you can't dial someone in over a phone line. And when you're done with a session, the Jamboard doesn't wipe your content from the system, which could be a security risk.

In conferences that included a laptop connected locally as well as an iPad and an Android phone connected remotely, the Jamboard performed well, with no slow-downs or freeze-ups. I found most tasks intuitive and effortless.

The Jamboard had the quickest startup time of the bunch, taking less than a second to wake up and show its whiteboard. But it's a power hog, using 142 watts when on and 124 watts when idle. This is because the display never turns itself off; you need to manually shut it down.

Bottom line

With a one-year warranty, Jamboard includes all you need to get started, but be aware that there's a \$600 annual software maintenance fee. At \$5,000, the Jamboard is easily the cheapest collaborative display here, but despite its streamlined operations, it's a step or two away from being ready for the corporate workplace.

InFocus Mondopad

With the ability to choose from five screen sizes and add any Windows 10 app you want, the Mondopad family from InFocus provides more flexibility than the other displays in this roundup. Ultimately, though, the weak link is the display itself.

While Google offers the Jamboard in just one size and Microsoft offers the Surface Hub in two sizes, InFocus sells five Mondopads: models with 57-in., 65-in., 70-in. and 85-in. screens, plus one with dual 40-in. screens. (The 57-in. model is being phased out.) Prices

At a Glance

Jamboard

Google

Price: \$4,999 (with stand, \$6,198), plus \$600 annual software maintenance fee

Pros: Integrated software; 4K resolution display; includes two styluses and an eraser; includes wall-mounting hardware; mobile device apps allow remote whiteboard participation

Cons: Can't load content from USB flash drive; no way to install apps; no Windows or Mac apps for remote participation; annual software fee

range from \$4,800 to \$18,500.

I looked at the Mondopad 6522, which costs \$7,800. Easily the largest of the three I tested, it measures 59.8 x 41.1 x 3.2 in. and weighs a hefty 124 lb.; however, it packs a 65-in. display, compared to 55-in. screens on the other two.

Its black-on-black color scheme should fit into any corporate décor. The 57-in. model includes a table stand, but for the 65-in. and larger models you'll need to purchase a \$250 wall mount or a \$1,000 wheeled stand that lets you adjust the screen's height by 54 in. and tilt it by 15 degrees.

The 65-in. LCD screen provides 27% more space to work with compared to the other two, but its 1920 x 1080 HD resolution can't compare to the more detailed view of the Jamboard's UHD display. The Mondopad 6522 also has a pronounced screen-door effect that makes the black lines between pixels stand out, which can be particularly disconcerting while working with the screen close up.

At 291.7 cd/m² it's bright enough to stand up to the sun streaming in through a nearby window, but it's the dimmest of the group. As happened with the Jamboard, its shiny surface showed stray reflections.

(InFocus does offer anti-glare versions of its 57-in., 65-in. and 70-in. models as well as 70-in. and 85-in. UHD models, none of which I tested.)

The Mondopad 6522's capacitive touch array can respond to 10 touch inputs and comes with a passive rubber-dome stylus. Unfortunately, the tip tends to stick to and drag along the screen's surface, making it awkward at times to write or draw. It's easy to add another pen — any rubber-dome stylus works — but two pens can't write with individual colors.

The Mondopad includes a USB wireless keyboard and mouse. I prefer the built-in touchpad on the Surface Hub's keyboard, which is better for walking around a room while working the board; the mouse really needs a tabletop to work.

In contrast to the integrated designs of the Jamboard and Surface Hub, the Mondopad's camera and speakers are separate modules that attach above and below the display, respectively. This allows the camera to be aimed up or down and right or left. The speakers often have a hollow sound, though, and don't get as loud as the Surface Hub's do. The Mondopad has a pair of microphones on top.

The Mondopad's PC has a quad-core Intel Core i7 6700T processor. It runs at between 2.8GHz and 3.6GHz and includes Intel's vPro manageability extensions; the system also has a Trusted Platform Module (TPM). It also sports 8GB of RAM and 256GB of solid state storage, the best equipped of the bunch.

Another advantage the Mondopad has over the others is that you can easily slide the entire computer module out for cleaning, upgrades or repairs. On the downside, it had the loudest fan, which might get in the way of quiet conversation.

The Mondopad has six USB 3.0 ports and the best array of video connections in the group, with one DisplayPort, four HDMI ports, one VGA port, and composite and component video inputs, as well as two audio-in and audio-out connections. It has wired Ethernet, 802.11ac Wi-Fi and Bluetooth, but not NFC. There are three ways to stream connect: AirPlay (for iPads, iPhones and MacBooks); ControlView 2.0 (for Windows PCs, Macs, iPads, iPhones and Android devices) and Chromecast (for Android devices or anyone using the Chrome browser or compliant apps). Video from local systems can run at any size.

Using the Mondopad

The Mondopad doesn't wake itself up as the Surface Hub does. Rather, you need to tap the screen, press the power button on the side or tap the keyboard; it took about 4 and a half seconds to wake from sleep in my tests. You can set it to turn off during the night but be ready for a quick startup during work hours. The system can also be started with its remote control or via the control panel on the right, which also provides access to its menu and navigation buttons.

The display's welcome screen has a row of icons including Getting Started, View & Share, Video Meeting, Browser, Whiteboard, Extras, Reset Meeting, and Schedule. You can add your own, if you choose.

To get started, tap the Video Meeting icon on the welcome screen. You can add or pick a contact and connect over Skype, Lync (a.k.a. Skype for Business) or SIP. The Mondopad can also be used with videoconferencing services such as Lifesize via an H.323 connection.

In addition to using Skype for Business, remote participants can join in two ways. The Mondopad can connect with any phone number for audio-only calls for a reasonable \$25 a month (including 1,500 minutes of domestic calling). Plus, it works with the free InFocus 121 Video Dialer app, available for iOS, Android, Windows PCs and Macs. With the InFocus app you can videoconference in, share video and running apps, and mark things up locally that show up on the big screen, but not interact directly with the host screen.

With Windows 10 Pro on board, the Mondopad feels the most familiar of the three collaborative displays. It comes with the Microsoft Office suite, including OneNote, Word, Excel and PowerPoint, and you can add any apps that run on Windows 10. I had no trouble opening files in a variety of formats (Word docs, spreadsheets, PowerPoint files, images and more) from anywhere, including Google Drive and USB drives.

In the Whiteboard interface, you choose from a pen and a highlighter in 9 ink colors. There's a tool for making perfect squares, circles and lines as well as typing onto the screen. In several conferences, I found the Mondopad 6522's large screen to be a big help because I could stretch out and not worry about being cramped. Note, though, that it's significantly taller than the other two and needs to be mounted lower to accommodate shorter presenters.

I connected with Skype for Business and SIP clients and shared video and desktops as well as dialing in an audio attendee. When done, I emailed the meeting's screens to participants and also saved them locally on a file server. The Mondopad allows archiving to a Dropbox account, and the company is working on adding access to other online repositories to the mix. Tap the Reset Meeting and everything added to the Mondopad is wiped for the sake of security.

The system performed well, except for the annoying fan. The Mondopad used 173.5 watts in active use — that makes it the most power-hungry of the three, but it also has the largest screen and the most powerful processor. Happily, its power use dropped to 31 watts in sleep mode.

Bottom line

Like the others, the Mondopad comes with a one-year warranty, but it doesn't require any annual software fee. This makes the \$7,799 system a bargain compared to the smaller Surface Hub's \$8,999. If it had a better display and wasn't quite so loud, it would be a corporate winner.

At a Glance

Mondopad 6522

InFocus

Price: \$7,799 (with stand, \$8,799)

Pros: Excellent assortment of ports; camera that you can aim; comes with stylus, keyboard and mouse; can add any Windows 10 apps

Cons: Loud fan; dull display; HD instead of UHD resolution; display has screen-door artifacts

Microsoft Surface Hub

Microsoft's Surface Hub emphasizes secure collaboration with some of the best hardware and software integration around, but it disappoints with a \$9,000 price tag.

The dark-hued Surface Hub should fit into any corporate decor. I tested the Surface Hub 55", which measures 60 x 32 x 3.5 in., making it the smallest (albeit widest) of the three; its 105-lb. heft is in the middle of the test group.

Unlike the Jamboard, the Surface Hub doesn't include wall mounting hardware, but Microsoft sells a \$380 mounting kit as well as a \$2,700 rolling stand. Unfortunately, with Microsoft's stand you can neither adjust the screen's height nor tilt it. (My review unit came with a different stand.)

Based on multi-touch technology, the Surface Hub can work with up to 100 independent touch inputs -- not that you'll ever get that many fingers onto its screen at once. Its two active styluses feel great on the screen's glass, with nearly instantaneous action, pressure sensitivity and clicky erasers on the back. The styluses charge in side holsters. The Surface Hub includes a wireless USB keyboard with a handy touchpad.

The 55-in. HD display can't compare with the Jamboard's crisp UHD display, but the **Surface Hub's display is bright, rich and vivid, and you can barely see the black lines between pixels. I particularly like the matte screen's non-reflective finish. The display registered 356.7 cd/m2 of brightness, making it the brightest of the three and more than 30% brighter than the Mondopad.**

The Surface Hub's integrated pods on the right and left side of the screen contain speakers and an HD camera. You can't combine these cameras for a panoramic view of participants, but the **Surface Hub does a cooler trick by sensing the eyes of the closest participant and activating that camera.**

The Surface Hub has an array of four microphones along its top edge. With the speakers angled outward at 30 degrees, the Surface Hub can fill a room with rich and clear audio. **It sounded the best and loudest of the three.**

Now more than two years old, the Surface Hub 55" has a quad-core Core i5 4690S processor that is being discontinued by Intel. Hopefully Microsoft will have an updated version soon. (When we asked Microsoft about it, the company declined to comment.)

The Hub comes with 8GB of RAM and a 128GB solid state storage system that uses an Xbox drive carrier for quick drive swaps. **With a Trusted Platform Module, it should fit into a company's security infrastructure,** but the unit doesn't use the Intel vPro manageability extensions built into the processor.

Microsoft also offers an 84-in. Surface Hub that ramps up the specs with UHD resolution, a Core i7 processor and a discrete Nvidia graphics card for a cool \$22,000.

There's a control panel on the right side of the Surface Hub with buttons for turning the system on and off, selecting the input and adjusting the volume and brightness. It has a good assortment of ports, ranging from four USB 2.0 and one USB 3.0 to DisplayPort, VGA and HDMI. There's a wired Ethernet connection, audio-in and -out jacks and an RJ-11 jack for connecting to a control system. Its DisplayPort can be used for connecting a separate monitor.

In addition to an NFC connection point on its right vertical bezel, the Surface Hub has Bluetooth and 802.11ac Wi-Fi. You can connect to a laptop locally with a video cable or wirelessly via Miracast, which works with Windows PCs, Android devices, and -- with AirServer software -- Macs, iPads and iPhones. These streams can run small or full-screen.

Using the Surface Hub

Unlike the other two displays, the Surface Hub has no dedicated apps for remote participants. Instead, remote attendees use Skype for Business to connect. They can share what's on their screens (including presentations and video) with the group on the big screen, but they can't mark up the Surface Hub whiteboard via Skype. Happily, you can dial out to conventional phone numbers to add audio-only attendees.

The Windows 10 Team operating system looks familiar, but is different from Windows 10 Pro, with neither a search bar nor the expected icons along the bottom. You can grab material from a USB flash drive, and the device includes standard Office apps. To use it to its fullest, the Surface Hub requires an Active Directory server, Active Directory Domain service or a business Office 365 account.

On the downside, you can only add software from Microsoft's Windows Store.

[See how Surface Hub can integrate seamlessly with your current technology.](#)

When you get within about 20 feet, the Surface Hub senses motion and starts up. In my tests it took about 9 seconds to open its welcome screen, twice as long as the Mondopad. You can choose from among the day's scheduled meetings, Skype, Whiteboard or connecting to an external video source. Below is a small Windows flag that leads to a modified Windows Start menu.

In addition to black, red, blue and green digital inks, the Surface Hub has a sparkle and multicolored ink as well as a yellow highlighter; you can't customize colors, though. There's a helpful straight-edge ruler with an angle indicator for making sketches more accurate. Its geometry tool can create



Microsoft



Microsoft

hard-edged figures. The action is nearly instantaneous and the two styluses can use different colored inks, something the other systems don't support.

The Surface Hub relies on the Edge browser. Other popular browsers, such as Opera, Chrome or Firefox, are conspicuously absent from the Windows Store, so they can't be added. Unlike the Jamboard, the Surface Hub can display multiple large and small windows with a mix of video participants and documents.

Corporate-level security is built in to the Surface Hub. When a session is done, you can either save it to a OneDrive account or email it as images and a OneNote file. After that, everything you did is wiped from the system. It takes 10 seconds to be ready for its next session.

My mock conferences involved remote participants over Skype for Business links and a locally connected laptop as well as an audio-only participant. **After using the Surface Hub for several conferences, I'm convinced it's the way to go. It neither lagged nor froze up and was always ready to call in another participant.** The system used 162 watts of power in active use that dropped to a mere 2 watts when it was idle.

On the downside, the setup I tested requires an annual \$500 software maintenance fee, although there are plans that start at less than \$100 per year. Like the others, the Surface Hub includes a one-year warranty.

[Learn how to solve your productivity puzzle with modern devices.](#)

Bottom line

Its \$9,000 price puts the Surface Hub in the stratosphere compared to the \$5,000 Jamboard. Despite this and other shortcomings, it does so much for getting people to work together that it's worth every penny for companies that can afford it.

Conclusions

The \$5,000 Jamboard offers excellent value. Its super-sharp 4K display, beautiful and functional stand, included wall-mounting hardware and mobile apps that let (some) remote participants actively interact with the whiteboard are balanced by limitations on how you connect and what you can do, such as adding apps or loading content from a USB flash drive. It's a great start at reinventing the collaboration display, but the Jamboard remains work in progress that I fervently hope Google engineers will continue to develop and expand.

At \$7,800, the InFocus Mondopad 6522 has the roomiest screen of the three, and the Mondopad family offers the widest assortment of models. It's also the most accessible computer of the group and lets you add any Windows apps you like. Its HD display, however, suffers from excessive screen-door artifacts and is the dullest of the three. What's more, its PC's cooling fan is too loud, particularly for intimate meetings.

Microsoft's Surface Hub 55" not only has the best integration and security of the three, but it has the brightest screen and best sound as well. Although it is far from effortless to use and you can only add software via Microsoft's Windows Store, **it offers the most meeting possibilities and the best experience overall.**

That said, I have two qualms about the Surface Hub: its outdated processor and its steep \$9,000 price tag. **In the final analysis, though, it is worth every penny for its ability to bring local and remote workers together and make their time as productive as possible.**

[Learn about the portfolio of Surface devices](#)

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How we tested

To start, an assistant and I set these systems up next to each other. (Be warned, at as much as 124 lbs., these monster displays require at least two people to put them together and get them into position.) Each was used over a 5-week period.

We spent a couple of hours getting used to each system, how they work and what they're capable of. We checked out their ports and controls, then used the included styluses, erasers and keyboards.

Next, we used a Kill-A-Watt power meter to measure how much electricity each screen uses when it's working intensely and when it's idle.

This was followed by watching the same series of HD and 4K videos on each at once with a Gefen 8-way matrix video distribution system. We evaluated them for color, sharpness and contrast as well as video artifacts, audio synchronization and choppiness. We finished by measuring each display's brightness using a Minolta LM-1 light meter and a white image; we averaged measurements in nine equally spaced points.

We then ran a series of mock meetings, starting with an ad hoc walk-up

At a Glance

Surface Hub 55"

Microsoft

Price: \$8,999 (with stand, \$11,699), plus \$500 annual software maintenance fee

Pros: Strong security; OneNote integration; includes keyboard and two styluses; automatic wiping of content when done; dual camera; rule/angle tool

Cons: HD instead of UHD resolution; expensive hardware with additional annual fee; uses older processor; can only add apps through Windows Store

Comparison chart: Prices, specs, performance

	Google Jamboard	InFocus Mondopad 6522	Microsoft Surface Hub 55"
Price	\$4,999	\$7,799	\$8,999
Software maintenance fee	\$600/yr.	none	\$500/yr.
Wall mounting hardware price	included	\$250	\$380
Rolling stand price	\$1,200	\$1,000	\$2,700
Dimensions	53.2 x 38.5 x 8.3 in.	59.8 x 41.1 x 3.2 in.	60 x 32 x 3.5 in.
Weight	96 lb.	124 lb.	105 lb.
Active screen size / diagonal size	48 x 26.5 in. / 55 in.	55.8 x 31.4 in. / 65 in.	47.2 x 27.1 in. / 55 in.
Display resolution	3840 x 2160 px	1920 x 1080 px	1920 x 1080 px
Touch control tech / No. of touch points	Infrared / 16	Capacitive / 10	Capacitive / 100
Processor	Nvidia Jetson TX1 (quad-core, 1.7GHz)	Core i7 6700T (quad-core, 2.8-3.6GHz)	Core i5 4690S (quad-core, 3.2-3.9GHz)
RAM	4GB	8GB	8GB
Storage	16GB	256GB	128GB
Ports	2 USB 3.0, USB-C, HDMI, LAN, SPDIF audio, NFC, LAN, micro-USB	USB-B, 6 USB 3.0, DisplayPort, VGA, 4 HDMI, Composite, Component video, audio-in/out, RS232	USB-B, 4 USB, DisplayPort, VGA, HDMI, LAN, audio-in/out
Operating system	Custom version of Android 6.0	Windows 10 Pro	Windows 10 Team
Trusted Platform Module / vPro processor extensions	No / No	Yes / Yes	Yes / Yes
Brightness*	305.1 cd/m ²	219.7 cd/m ²	356.7 cd/m ²
Power use when on / when idle*	142 watts / 124 watts	173.5 watts / 31 watts	162 watts / 2 watts
Includes	2 passive styluses, eraser	passive stylus, wireless keyboard and mouse	2 active styluses, wireless keyboard with touchpad
Stand height / tilt adjustment	No / Yes	Yes / Yes	No / No
Warranty	1 year	1 year	1 year

* Results from author's tests

meeting where all we wanted to do was fill an empty white space with doodles, sketches, images and marketing phrases. Here, we concentrated on the quality of the touch screen, the colors and accessories available.

The next set of conferences used the system's web browser to bring in maps and images and display online videos. This culminated in a four-way conference with a local cabled participant (using an HP EliteBook Folio) as well as two remote attendees with an iPad Mini (Wi-Fi connected) and a Samsung Galaxy S8 (connected via the TMobile LTE network); finally, where it was available, we dialed in an audio participant. During the conference, we shared documents and marked them up on the big screen.

Finally, with the meeting over, we concentrated on creating an archive of its contents. We compared how the screens were saved and distributed to participants.