

Control Room Display Solutions

Always on. Always performing.

The Wall | LED Signage | Video Wall | Neo QLED 8K Signage | Crystal UHD Signage | ViewFinity | Color Expert



About Samsung Electronics Co., Ltd.

Samsung inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, and memory, system LSI, foundry and LED solutions. For the latest news, please visit the Samsung Newsroom at <http://news.samsung.com>.

For more information

For more information about Samsung Display Solutions, visit www.samsung.com/business or www.samsung.com/displaysolutions

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Deliver a clear and confident visual experience

For many years, control rooms have acted as critical information hubs for various organizations around the globe. A crucial element of any properly functioning control room is the latest display technology. To monitor multiple information streams efficiently, decision makers must be equipped with crisp and clear information, delivered with the finest level of detail for optimum outcomes. It is also critical that any display operates without any downtime, providing the reliability and operational efficiency that can make all the difference in a mission-critical environment.



Capture all detailed information in critical scenarios

When making important decisions in the moment, control room staff need all information to be delivered in perfect detail, giving them the confidence to make the best decision every time.



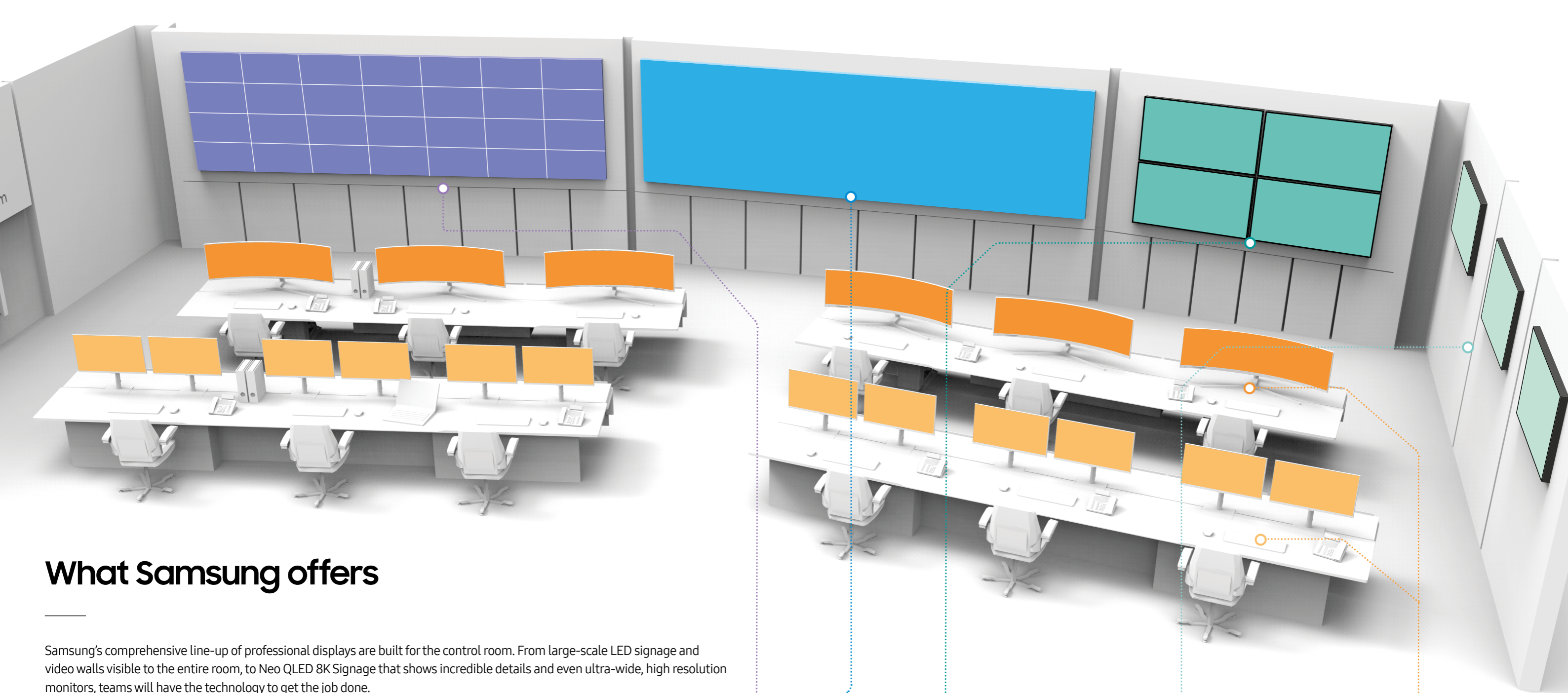
Empower the workforce to make better, faster decisions

Crisp picture quality not only helps to make better decisions, but by consolidating and providing information in one place across a range of displays, staff can continually improve and make better decisions each time.



Secure, simple and reliable

In a mission-critical environment, staff do not have the time to worry about security and reliability so require a display that is built for 24/7 use with power redundancy and security features for total peace of mind during everyday operations.

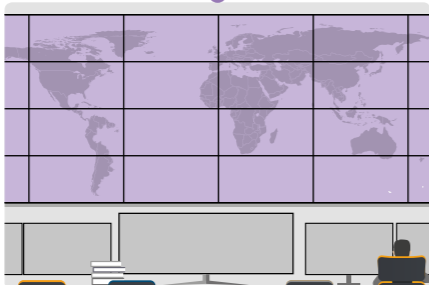


What Samsung offers

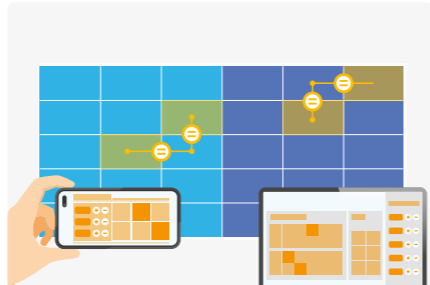
Samsung's comprehensive line-up of professional displays are built for the control room. From large-scale LED signage and video walls visible to the entire room, to Neo QLED 8K Signage that shows incredible details and even ultra-wide, high resolution monitors, teams will have the technology to get the job done.



LED Signage
 Samsung's large-scale indoor LED display options including The Wall and IF series ensure optimal and uninterrupted picture quality in any mission-critical control room, enabling reliable and efficient operations with no downtime.



Video Wall
 With extremely narrow bezels, Samsung's video walls are a versatile solution to seamlessly enhance any control room, ensuring the delivery of important information around the clock in a variety of formats based on the needs of the team.



Calibration Solution
 Samsung's leading calibration tools, Color Expert LED and Color Expert Pro, ensure displays are showcasing color and visuals exactly as intended for control room staff.



Neo QLED 8K Signage
 An innovative breakthrough in display technology, Samsung's Neo QLED 8K signage delivers an unmatched, crystal clear picture with AI upscaling technology ensuring all content is showcased in 8K resolution for optimal user experience in any control room.



Crystal UHD Signage
 Samsung's premium UHD signage are displays that deliver exceptional picture quality, featuring high-brightness and non-glare panels for a clear picture regardless of ambient light within control room environments.



ViewFinity
 ViewFinity, Samsung's newest high-resolution monitors, support up to 98% of the DCI-P3 color space in addition to glare-free matte display for superior clarity that meet industry standards. The ultra-wide monitors allow professionals to work on multiple applications and documents simultaneously for maximum productivity.

The Wall

Unmatched image detail and contrast that's built to last

The Wall is the ultimate centerpiece of any control room, offering industry leading picture quality and long-lasting quality to meet the demands of any control room environment.



IWA / IWB series



Pristine black & color expression

The Wall supports every control room builds its display walls as intended. The fusion of an exceptionally black base with specialized Black Seal technology, delivers deep black levels for intense contrast and immaculate detail. Ultra Chroma technology produces vibrant and natural colors.



Black Seal technology



Wider black areas



Low reflection



Ultra Chroma technology

Pin-sharp clarity in every scene

Boasting the industry's best picture quality engine, The Wall utilizes advanced HDR picture refinement technologies – LED HDR and HDR10+ support – rendering optimum peak brightness and contrast in every single scene for precise, true-to-life imagery.



LED HDR



HDR10+ support

IWA-R series



Total display solution

The Wall is not just a screen but provides a total display solution for control rooms. Requiring nothing more than a mobile phone and a Wi-Fi connection, calibration can be done instantly. Front access to critical signage components ensures a tidy activation free of catwalk space.



Mobile calibration



Frame rate sync



Front service



High durability



Operational safeguards

The Wall features multiple operational safeguards intended to minimize screen failures including off board hot swap power supply and power/signal redundancy. These redundant systems help to ensure content interruptions are reduced as much as possible, keeping your message front and center.



Off-board power supply*



Power redundancy



Signal redundancy



NEC Class for cable

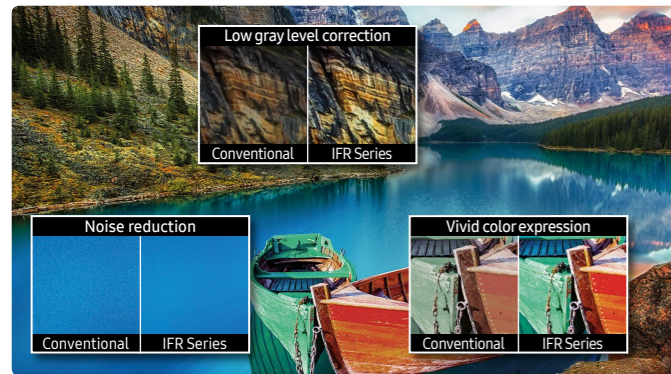
LED Signage

Taking a panoramic view of the situation

Large-scale indoor LED display options from Samsung provide a perfect view of critical information and guaranteed performance to keep the control room operational at all times.

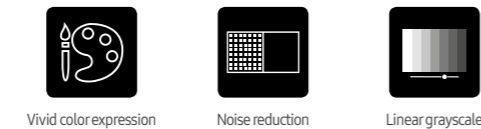


IFR series



Best-in-class LED picture quality

Samsung's IFR series ensures optimal and uninterrupted picture quality for precise information in control room environments. IFR series provides best-in-class picture quality for LED, producing images with exact color expression, reduced noise and a full range of grays and blacks.



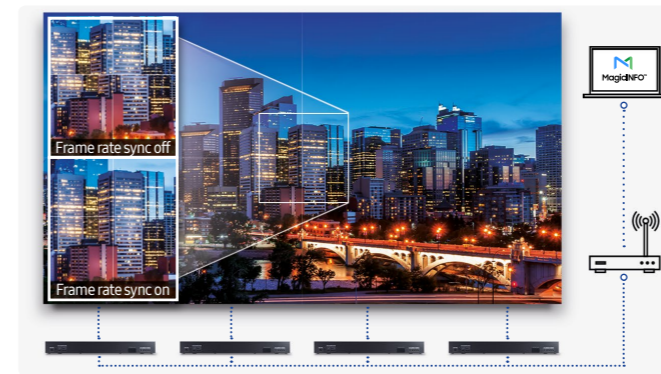
Clearly refined visuals

Utilizing a propriety algorithm, LED HDR creates true-to-life images, turning any content into HDR-level quality without requiring any special metadata. The IFR series supports HDR10+ which optimizes brightness and contrast ratio scene-by-scene to ensure each frame looks exactly as intended.



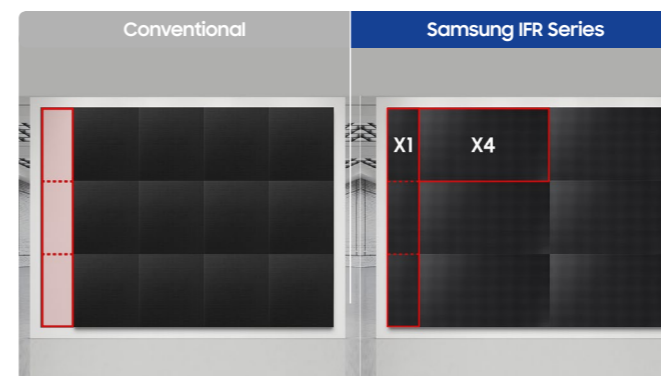
Seamless, smooth content playback

Frame rate synchronization guarantees smooth content playback without screen tearing when multiple S-boxes are connected – even when combining or splitting content across cabinets. Requiring nothing more than a mobile phone and a Wi-Fi connection, calibration can be done instantly.



Easier, cost-saving installation

The IFR Series supports two cabinet types. One version features a larger, lighter screen compared to conventional cabinets, simplifying installation. The other is a quarter of the size and provides more flexibility in design.



Video wall

Immersive, uninterrupted viewing around the clock

A video wall is often at the heart of a control room, providing clear visibility for efficient monitoring and maintenance. Samsung's video walls offer optimal brightness and long-lasting performance in any environment.



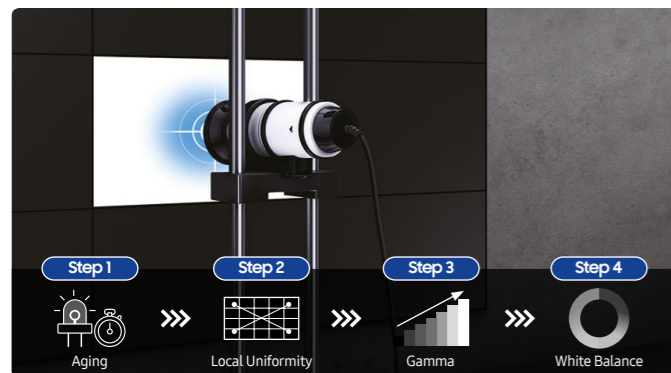
VHR-R / VMB-R / VHB-E / VMB-E / VMB-U series



Immersive viewing experience

Extreme narrow bezels enables content to be delivered as one seamless image, minimizing the visual distraction. A non-glare panel evenly distributes light throughout the screen, eliminating glare while maintaining content vibrancy and accuracy. Samsung's powerful picture enhancement technology ensures all content is vibrant and clear.

- Various bezel options
- Non-glare panel
- Wide viewing angle
- Picture enhancement technology



Screen uniformity all the time

Samsung's complete and comprehensive calibration tunes video wall displays to the optimal uniform brightness and color across multiple displays to fit any control room requirements. Every video wall display presents fine-tuned picture quality whether used as a single display or as multiple screens.

- ACM chipset*
- Factory calibration
- Color Expert Pro
- Color Expert Pro Mobile

* Local uniformity (Step 2) and ACM chipset support vary by model.



* EMC: Electromagnetic compatibility
 ** EMC Class B certification varies by video wall model
 *** ISTA: International Safe Transit Association

Long-term performance

Samsung's video wall displays allows control rooms to deliver clear information 24/7. The panel prevents screen darkening, ensuring long-term delivery of brilliant content. EMC* Class B compliant displays and ISTA-certified packaging keep both environment and delivery safe.

- 24/7 operation
- No panel darkening
- EMC Class B**
- ISTA-certified packaging***



* The Signage Player Box must be purchased separately.
 ** Samsung's special wall mount accessories must be purchased separately.

Advanced presentation, simplified operation

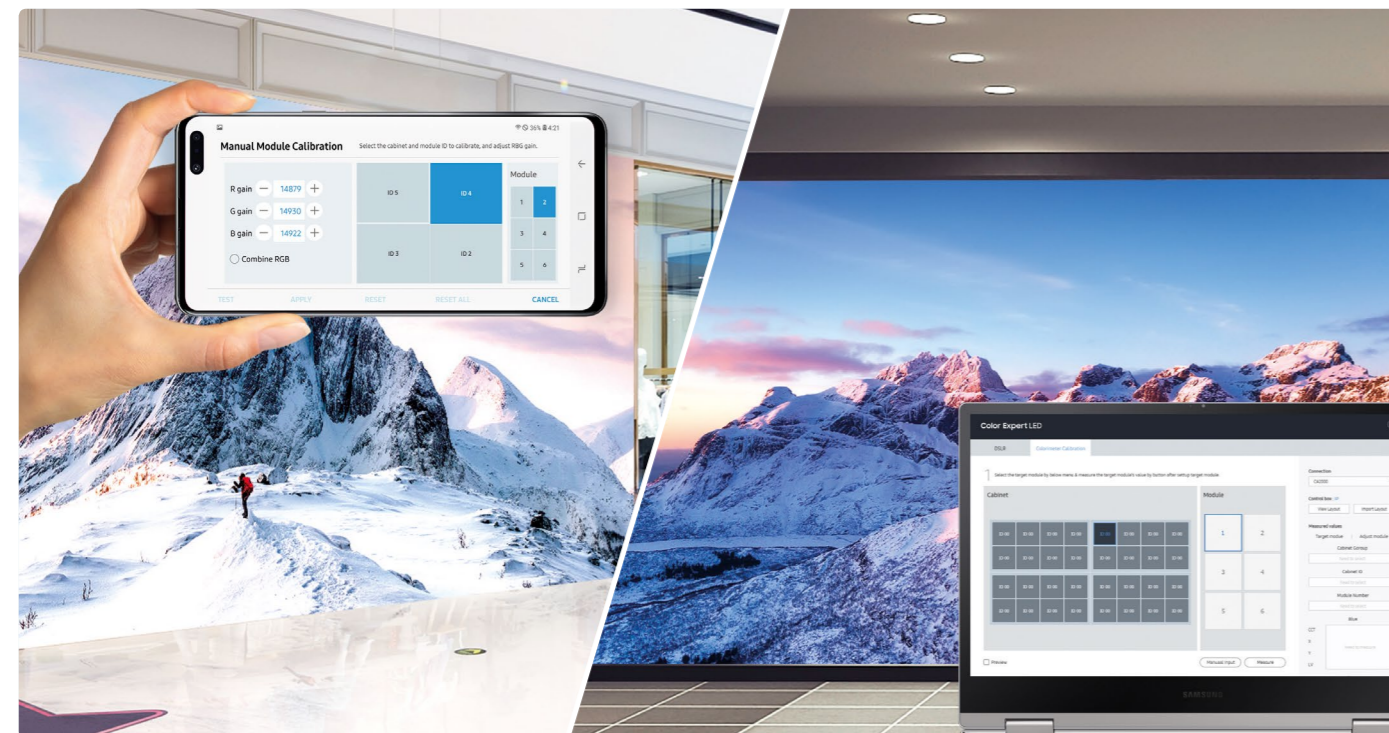
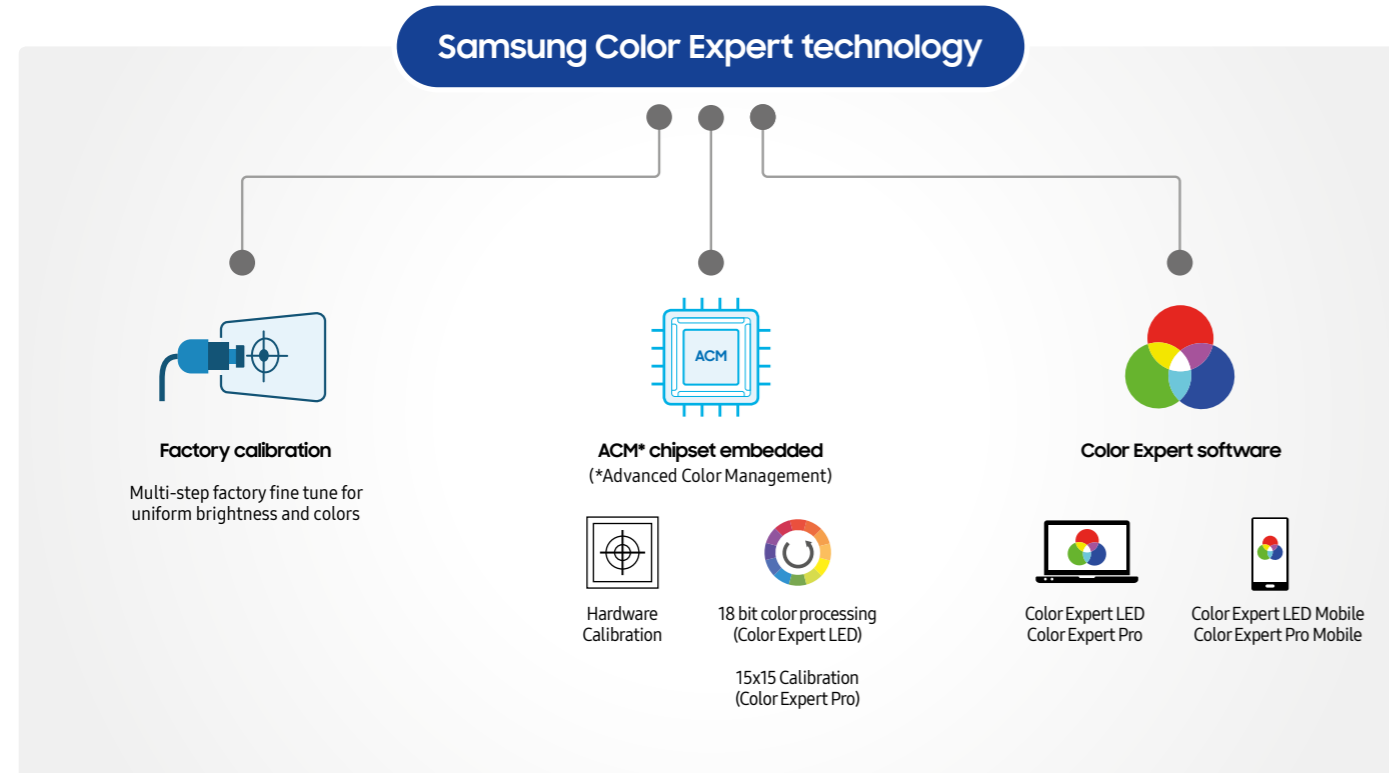
Utilizing daisy chain design through DisplayPort 1.2 or HDMI ports enable Samsung video wall displays to present UHD content on multiple screens without an external graphic card. Samsung's UHD Signage Player Box streamlines functionality by combining the media player and content management software.

- UHD resolution by daisy chain
- All-in-one operation*
- Easy installation**

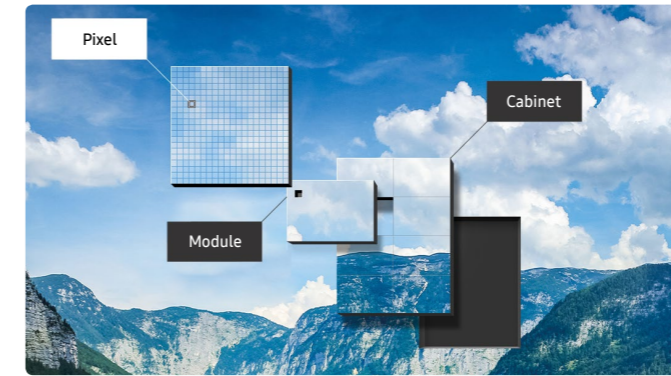
Calibration solution

Powerful calibration tools to optimize picture quality

Samsung's leading calibration tools – Color Expert LED and Color Expert Pro – offer full criteria on color calibration. Mobile calibration also offers a simplified tuning process and uniformity down to the pixel-level, meaning visuals are presented exactly as intended.



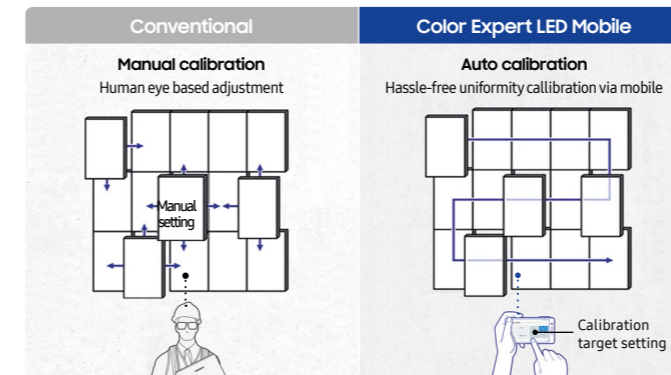
Color Expert LED



Pixel-level tuning

PC

Samsung's Color Expert LED provides pixel-level uniformity, bringing more precise and refined picture quality to life, when compared with module-level uniformity. Using professional calibration devices, the uniformity is accurate and flawless, enhancing even the subtlest details.



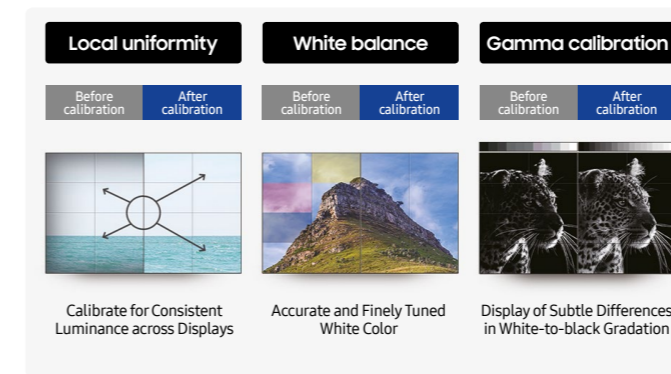
Automatic calibration

Mobile

Using just a mobile phone camera and Wi-Fi network, calibration can be done without the need for additional, expensive professional devices. Color Expert LED Mobile calibrates automatically based on a target area ensuring it does not miss any subtle differences in color and brightness.



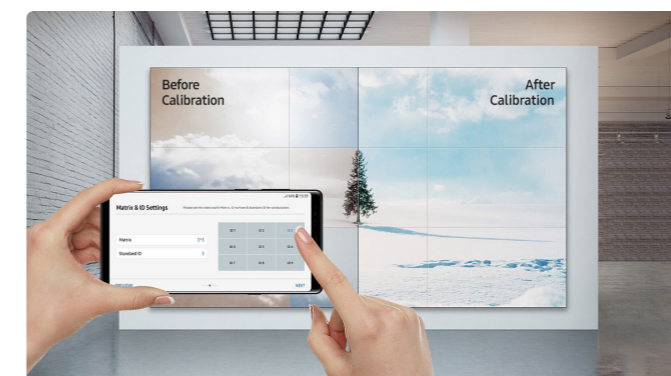
Color Expert Pro



Enhanced picture quality

PC

Color Expert Pro delivers stunning before-and-after results. White balancing options enable accurate white color. Users can calibrate for consistent luminance and color uniformity across displays. Gamma and gray scale calibration brings out subtleties, detail and depth in white-to-black gradation.



Convenient refinement

Mobile

Color Expert Pro Mobile uses the smartphone camera to quickly and easily calibrate without a professional calibrator physically connected to the video wall. This highly cost-effective solution can calibrate up to 9 sets (3x3) of displays at once – dramatically faster than one-by-one calibration methods.



*Color Expert Pro Mobile supports white balance calibration only. Local uniformity and gamma and gray scale is not supported.

Neo QLED 8K Signage

Capturing all the subtle differences

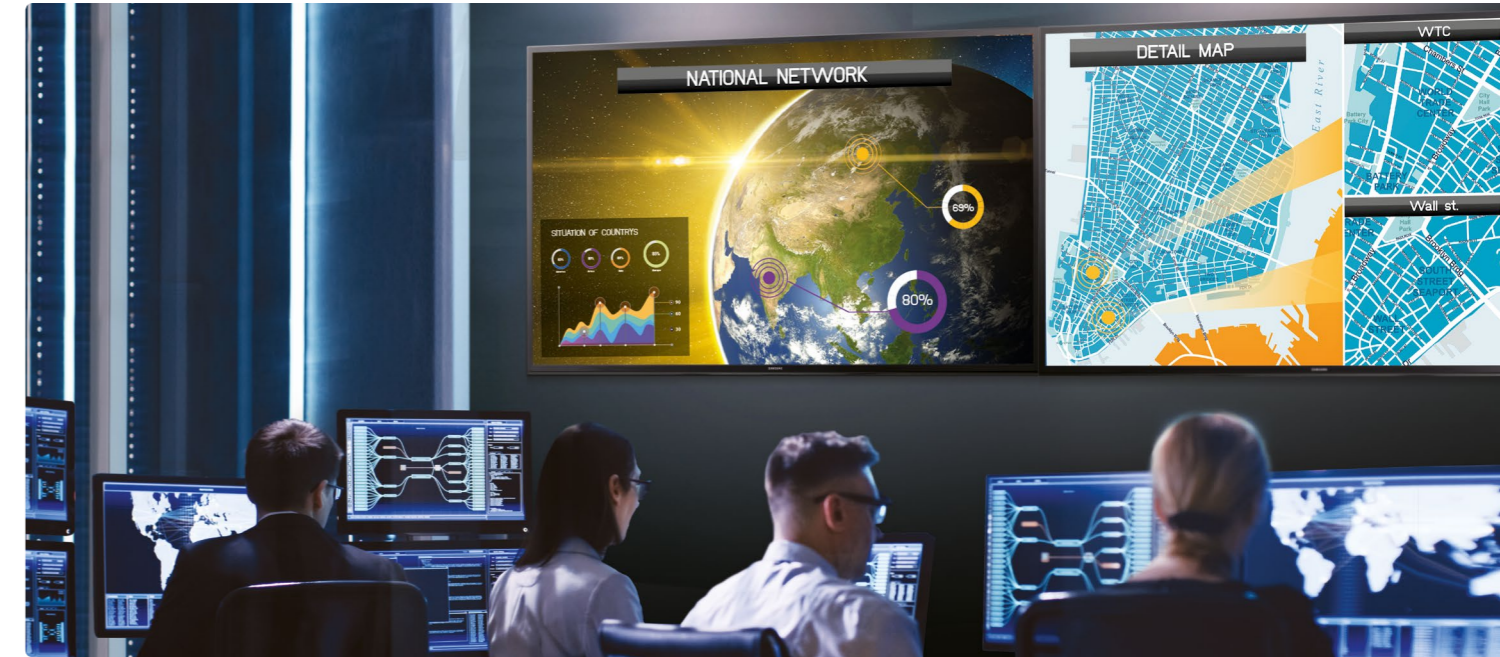
Samsung's Neo QLED 8K Signage delivers extremely accurate imagery ensuring control room staff are seeing all the details they need to on one, uniform screen, in the highest resolution.



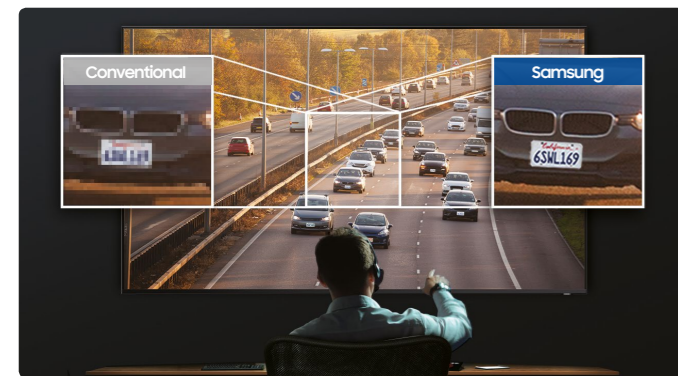
Crystal UHD Signage

Clear delivery of critical information

Samsung's Crystal UHD Signage delivers crystal clear picture, keeping control room staffs from missing any detailed information in critical scenarios.



QPA-8K series



* Native 8K content based on current 8K streaming, connectivity and decoding standards. Future and certain third-party standards not guaranteed or may require additional device/adaptor purchase. * Viewing experience using 8K AI upscaling may vary according to types of content and format. It may not apply to PC connection, and certain conditions of Game Mode.

Incredible 8K resolution

Samsung Neo QLED 8K Signage offers super high resolution with more than 33 million pixels, 4 times higher than 4K UHD content and 16 times higher than FHD. With AI-powered upscaling, control room staff are able to recognize precise detail even in low resolution.

- 8K resolution
- 8K AI upscaling
- 8K media player embedded
- 8K content playback through single HDMI

Brilliant picture quality

Samsung's Neo QLED technology ensures the delivery of 100% color volume, based on over a billion colors. Together with a peak brightness of 2,000 nits and 8K resolution, scenes appear more dynamic and impactful, bringing every detail to life in total clarity.

- Neo QLED technology
- 100% color volume with Quantum Dot
- 2,000 nit peak brightness
- No burn-in

QHB / QMB / QBB / QMR-B* / QBR-B* / QMT-B* / QBT-B* series

* QMR-B / QBR-B series are 85 inch only and QMT-B / QBT-B series are 98 inch only.



Real 4K resolution

Samsung's UHD Signage showcases intricate details thanks to 4K UHD resolution. Samsung's cutting-edge intelligent UHD upscaling technology performs edge restoration and noise reduction to deliver UHD-level picture quality for control room's use, even with lower resolution content.

- UHD resolution
- Intelligent UHD engine
- Noise reduction
- Edge restoration



* Non-glare panel is not supported on QBB Series

High visibility at all times

Samsung's UHD Signage delivers clear information 24/7, ensuring critical information is always visible. Using 10-bit processing, the displays are able to showcase a wider spectrum of colors — up to a billion different shades — capturing subtle differences for flawless color expression.

- 24/7 operation
- Non-glare panel
- High brightness
- Dynamic crystal color

ViewFinity

Optimal productivity during extended work hours

High quality monitors are crucial for productive, extended working hours in any control room. Samsung's ViewFinity monitors offer high resolution for superior clarity and glare-free matte display without the need for a monitor hood. The ultra-wide screen options in the lineup maximize worker productivity through the latest design technology.



Ultra-wide: S95UA* | S65UA



* PIP feature not supported on S95UA

Display more documents at once

The ultra-wide screen supports a number of open windows without scroll or zoom, while eliminating the clutter and inconveniences of the traditional dual monitor setups. Multi-tasking features – PIP, PBP and Easy Setting Box – allows staffs to work on more documents and applications simultaneously.



Ultra-wide screen



PBP



PIP



Easy Setting Box

Ultimate connectivity

The USB Type-C port powers laptops up to 90W and transfers data with a single cable for a clutter-free work environment. The monitor also allows for laptops without a LAN port to simply connect for Ethernet use. A built-in KVM switch enables users to control two computers connected to the monitor with one keyboard and mouse.



USB Type-C ports



Thunderbolt™



LAN port



KVM Switch



* The features may differ by model

High resolution: S80PB | S80UA | S60UA*



Clear even during the day

Edit and review content clearly even in bright daylight. With the world's first glare-free monitor certified by UL, the Matte Display technology enables professionals to review and edit with consistent levels of brightness and colors even without a monitor hood.



Matte Display



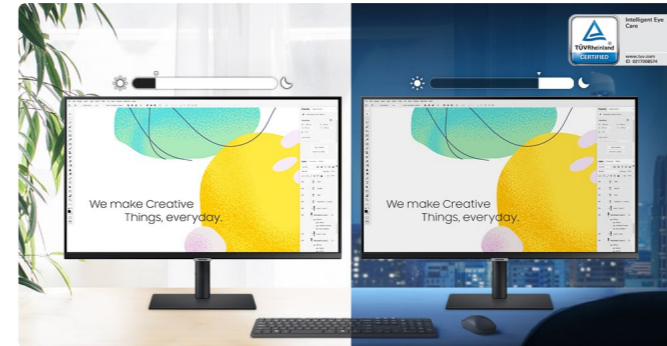
UHD resolution



1 billion colors



UHD upscaling



* Intelligent Eye Care not supported on S60UA.

Advanced ergonomics

The borderless monitor design with VESA mount compatibility allows professionals to adjust the height and angle for maximum comfort. Its TUV-certified intelligent eye-care technology protects against eye fatigue from blue light and screen flicker for a healthy work environment.



Intelligent Eye Care



Ergonomic Design

Specifications

LED Signage

Model	Project	Pixel pitch	Diode type	Brightness (Peak*/Max)	Contrast ratio**	Certification	Cabinet size (LxHxD, per cabinet)	Weight (per cabinet)	Service***	IP rating
The Wall	IWA/IWA-R	P0.8, P1.2, P1.6	Flip-chip RGB LED	1,600 nit / 500 nit (P0.8), 1,600 nit / 800 nit (P1.2), 1,400 nit / 1,000 nit (P1.6)	24,000:1 (P0.8, P1.2), 21,000:1 (P1.6)	EMC Class B, Safety 62368-1 /60950-1	806.4 x 453.6 x 36.5 mm	11.2kg	Front	IP20
	IWB	P0.6, P0.9	Flip-chip RGB LED	1,600nit / 350nit (P0.6) 1,200nit / 600nit (P0.9)	13,000:1 (P0.6) 12,000:1 (P0.9)	EMC Class B, Safety 60950-1 /60950-1	1,209.6 x 680.4 x 59.9 mm	22.1kg	Front	IP20
Indoor	IFR	P1.5, P2.0, P2.5, P4.0	Surface Mount Device (SMD)	1,600 nit / 800 nit (P1.5) 1,600 nit / 1,000 nit (P2.0) 2,400 nit / 1,200 nit (P2.5) 1,500 nit / 900 nit (P4.0)	12,000:1 (P1.5) 7,200:1 (P2.0) 10,000:1 (P2.5, P4.0)	EMC Class A, Safety 60950-1, FCC, UL, CB, KCC, RoHS	960 x 540 x 79.5 mm	11.8 kg (P1.5), 12.4 kg (P2.0, P2.5, P4.0)	Front	IP20
	IFR-F	P1.5, P2.0, P2.5, P4.0	Surface Mount Device (SMD)	1,600 nit / 800 nit (P1.5) 1,600 nit / 1,000 nit (P2.0) 2,400 nit / 1,200 nit (P2.5) 1,500 nit / 900 nit (P4.0)	12,000:1 (P1.5) 7,200:1 (P2.0) 10,000:1 (P2.5, P4.0)	EMC Class A, Safety 60950-1, FCC, UL, CB, KCC, RoHS	240 x 540 x 81 mm	3.2kg	Front	IP20

* Peak value according to IDMS (Information Display Measurement Standard)

** Contrast Ratio: Measured under 10lux light. Contrast in darkroom exceeds 1000000:1

*** Front service: Front service to power supply and main board on a cabinet level

Video wall

Model	Screen size	Screen size	Brightness	Contrast ratio	Operation hour	Certification	Connectivity	Bezel width
VHR-R	55"	1920x1080	700nit	1100:1	24/7	IP5x EMC Class A ISTA-6A	- In: DVI-D, DP1.2, HDMI 2.0(2), Stereo Mini Jack, HDCP 2.2, USB(only f/w upgrade) - Out: DP1.2(Loop-out), Stereo Mini Jack - Ext: RS232C(in/out), RJ45(in)	0.44mm(even)
VMB-R	55"	1920x1080	500nit	1100:1	24/7	IP5x EMC Class A ISTA-6A	- In: DVI-D, DP1.2, HDMI 2.0(2), Stereo Mini Jack, USB(only f/w upgrade) - Out: DP1.2(Loop-out), Stereo Mini Jack - Ext: RS232C(in/out), RJ45(in)	0.44mm(even)
VHB-E	55"	1920x1080	700nit	1000:1	24/7	IP5x EMC Class B ISTA-3A	- In: DVI-D, DP1.2, HDMI 2.0(2), Stereo Mini Jack - Out: DP1.2(Loop-out), Stereo Mini Jack - Ext: RS232C(in/out), RJ45(in)	B2B: 1.3mm(U/L), 0.44mm(R/B) A2A: 1.75mm(U/L), 0.74mm(R/B)
VMB-E	55"	1920x1080	500nit	1000:1	24/7	IP5x EMC Class B ISTA-3A	- In: DVI-D, DP1.2, HDMI 2.0(2), Stereo Mini Jack - Out: DP1.2(Loop-out), Stereo Mini Jack - Ext: RS232C(in/out), RJ45(in)	B2B: 1.3mm(U/L), 0.44mm(R/B) A2A: 1.75mm(U/L), 0.74mm(R/B)
VMB-U	46", 55"	1920x1080	500nit	1200:1	24/7	IP5x EMC Class A ISTA-6A	- In: DVI-D, DP1.2, HDMI 2.0(2), Stereo Mini Jack, USB 2.0 - Out: DP1.2(Loop-out), Stereo Mini Jack - Ext: RS232C(in/out), RJ45(in)	2.25mm(U/L), 1.25mm(R/B)

Neo QLED 8K Signage

Model	Screen size	Resolution	Brightness	Contrast ratio	Operation hour	SoC	S/W	Connectivity
QPA-8K	65", 75", 85"	7680 x 4,320	500 nit (peak 2,000 nit)	1,500:1	16/7	SSSP9.0	MagidINFO S9	In: HDMI 2.1(HDMI4), HDMI 2.0 (HDMI1,2,3), HDCP 2.2, USB 2.0(3) Out: Optical(Digital Audio Out) Ext: RS232C(in), RJ45

Crystal UHD Signage

Model	Screen size	Resolution	Brightness	Contrast ratio	Operation hour	SoC	S/W	Panel type	IP rating	Connectivity
QHB	43", 50", 55", 65", 75"	3,840 x 2,160	700 nit	4,000:1	24/7	SSSP10.0	MagidINFO S10	Non-glare	IP5X	In: DP1.2(1), HDMI 2.0(3), USB 2.0(2) Out: Stereo Mini Jack Ext: RS232C(in/out), RJ45 Wifi, BT
QMB	43", 50", 55", 65", 75"	3,840 x 2,160	500 nit	4,000:1	24/7	SSSP10.0	MagidINFO S10	Non-glare	IP5X	In: DP1.2(1), HDMI 2.0(3), USB 2.0(2) Out: Stereo Mini Jack Ext: RS232C(in/out), RJ45 Wifi, BT
QMR-B	85"	3,840x2,160	500nit	4,000:1	24/7	SSSP6.0	MagidINFO S6	Non-glare	IP5X	In: DVI-D, DP1.2, HDMI 2.0(2), HDCP 2.2, Stereo Mini Jack, DVI, USB 2.0(2) Out: HDMI 2.0(Loop-out), Stereo Mini Jack Ext: RS232C(in/out), RJ45 Wifi
QMT	98"	3,840 x 2,160	500 nit	1,200:1	24/7	SSSP6.0	MagidINFO S6	Non-glare	-	In: DVI-D, DP1.2, HDMI 2.0(2), HDCP 2.2, Stereo Mini Jack, USB 2.0(2) Out: HDMI 2.0(Loop-out), Stereo Mini Jack Ext: RS232C(in/out), RJ45 Wifi
QBB	43", 50", 55", 65", 75"	3,840 x 2,160	350 nit	4,000:1	16/7	SSSP10.0	MagidINFO S10	-	IP5X	In: HDMI 2.0(3), USB 2.0(2) Out: Stereo Mini Jack Ext: RS232C(in/out), RJ45 Wifi, BT
QBR-B	85"	3,840x2,160	350nit	4,000:1	16/7	SSSP6.0	MagidINFO S6	-	IP5X	In: DVI-D, HDMI 2.0(2), HDCP 2.2, Stereo Mini Jack, DVI/HDMI/Audio(Com- mon), USB 2.0(2) Out: Stereo Mini Jack Ext: RS232C(in/out), RJ45 Wifi
QBT	98"	3,840 x 2,160	350 nit	1,200:1	24/7	SSSP6.0	MagidINFO S6	Non-glare	-	In: DVI-D, DP1.2, HDMI 2.0(2), HDCP 2.2, Stereo Mini Jack, USB 2.0(2) Out: HDMI 2.0(Loop-out), Stereo Mini Jack Ext: RS232C(in/out), RJ45 Wifi

ViewFinity

Model	Project	Screen size	Flat/Curved	Aspect ratio	Resolution	Brightness (Typ./Peak)	Contrast Ratio (Typ.)	Connectivity
Ultra-wide	S95UA	49"	Curved (1800R)	32:9	5,120 x 1,440	350 cd/m²	3,000:1	1x USB-C(90W), 2x HDMI(2.0), 1x DP(1.4), 3x USB 3.0, LAN port, Headphone
	S65UA	34"	Curved (1000R)	21:9	3,440 x 1,440	300 cd/m²	1,000:1	1x USB-C(90W), 1x HDMI(2.0), DP(1.2), 3x USB 3.0, LAN port, Headphone
High resolution	S80PB	27" 32"	Flat	16:9	3,840 x 2,160	350 cd/m²	1,000:1	1x USB-C(90W), 2x HDMI(2.0), 1x DP(1.4), 3x USB 3.0, LAN port, Headphone
	S80UA	27"	Flat	16:9	3,840 x 2,160	300 cd/m²	1,000:1	1x USB-C(90W), 1x HDMI(2.0), 1x DP(1.2), 3x USB 3.0, Headphone
	S60UA	24" 27"	Flat	16:9	2,560 x 1,440	300 cd/m²	1,000:1	1x USB-C(90W), 1x HDMI(1.4), 1x DP(1.2), 3x USB 3.0, LAN Port, Headphone