Specification

Small sized display

Project	Screen Size	Resolution	Bright- ness	Contrast Ratio	Operation Hour	Panel Type	IP Rating	Connectivity	SoC	S/W
QBR	13"	1920x1080	300 nit	800:1	16/7	Non-Glare	-	In: HDMI 1.4(1), HDCP 2.2, USB 2.0(1) Out: Stereo Mini Jack Ext: RS232C(In), RJ45	SSSP6	MagicINFO Player S6
QBR-T	13"	1920x1080	250 nit	600:1	16/7	Non-Glare		In: HDMI 1.4(1), HDCP 2.2, USB 2.0(1) Out: Stereo Mini Jack, Touch out(1) Ext: RS232C(In), RJ45	SSSP6	MagicINFO Player S6

Directional signage

Project	Screen Size	Resolution	Bright- ness	Contrast Ratio	Operation Hour	Panel Type	IP Rating	Connectivity	SoC	S/W
SHR	37"	1920x540	700 nit	4000:1	24/7	Non-Glare	-	In : DP1.2, HDMI(2), HDCP 2.2, USB2.0(1) Out : HDMI(1), Stereo mini Jack Ext : RS232C(In/Out), RJ45	SSSP6	MagicINFO Player S6

Business monitor

	Project	Screen Size	Flat/Curved	Aspect Ratio	Resolution	Brightness	Viewing angle	Connectivity	Eye Saver Mode
Ultra Wide	CJ89	43", 49"	Curved	32:10(43") 32:9(49")	3840 x 1200(43") 3840 x 1080(49")	300 nit	178°(H)/178°(V)	DP1.2, HDMI 2.0, USB Type-C(2), USB Hub(3.0 x1, 2.0 x 2)	Yes
	CHG90	49"	Curved	32:9	3840 x 1080	350 nit	178°(H)/178°(V)	DP1.4, Mini DP1.4, HDMI 2.0(2), USB Hub 3.0	Yes
	CH89	34"	Curved	21:9	3440 x 1440	300 nit	178°(H)/178°(V)	DP, HDMI, USB Type-C, USB Hub(3.0 X1, 2.0 x 2)	Yes
High Resolution	UH85	32"	Flat	16:9	3840 x 2160	250 nit	178°(H)/178°(V)	DP1.2(1), HDMI(2.0 x 1, 1.4 x 1), USB Hub 3.0	Yes
(UHD/QHD)	SH85	24", 27"	Flat	16:9	2560 x1440	350 nit(27") 300 nit(24")	178°(H)/178°(V)	DP, HDMI, DP Out(Daisy Chain), USB Type-C, USB Hub 2.0	Yes

MagicINFO solution

		Number of displays connec	ting to MagicINFO Server		
	<200	>5000			
OS		Windows Server®	2008 / 2012 / 2016		
CPU	Intel Xeon E3-1200 or better	Intel Xeon E5-2400 or better	Intel Xeon E5-2600 or better	Intel Xeon E5-4600 or better	
RAM	4 GB or more	8 GB or more	16 GB or more	32 GB or more	
HDD	At least 100 GB for bas	ic setup (operating system and server application) *H	eavily dependent on the amount of content data to	be stored on the server	
Network Bandwidth		64 kbps (or better		
Number of Servers	1	2	3	3 or more; dependent on scenario	

About Samsung Electronics Co., Ltd.

Samsung Electronics Co., Ltd. inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, cameras, digital appliances, medical equipment, network systems, and semiconductor and LED solutions. For the latest news, please visit the Samsung Newsroom at news.samsung.com.

For more information

For more information about Samsung SMART Signage, visit www.samsung.com/business or www.samsung.com/displaysolutions

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2019-12



Samsung Healthcare Display Solutions

Engage patients in real-time with superior picture quality

LED Signage | SMART Signage | QLED 8K Signage | Hospital TV | LYNK Solution | MagicINFO Solution

SAMSUNG SAMSUNG



Samsung Healthcare Display Solution is suited to the needs of any healthcare facility

Hospitals are mission-critical environments and clear, concise communication is important to ensure the right messages are delivered at the right time. From navigating the facility, to donor walls, to patient care facilities, there are a host of use cases within a hospital where an impactful display solution can deliver the sophisticated tools needed to communicate quickly and efficiently throughout the facility.

Patients, visitors, doctors and hospital employees all need regular, up-to-date and targeted information whilst onsite. Having an easy-to-navigate experience creates a much less stressful atmosphere at a time when tensions are already running high. As hospitals increasingly look to create these enhanced experiences, hospital managers need to differentiate what they offer to stay ahead of the competition, and an innovative display solution can help them do just that.

Samsung's healthcare displays enable businesses in the hospital industry to meet the growing expectations of patients, visitors and staff. In addition, these optimized displays deliver on the most important values to the industry – differentiated experience, fast and easy communication, and productivity with reduced administration costs.

Differentiation



Deliver a differentiated overall patient experience and improve health care service through display solutions.

Communication



Provide engaging and informative content to keep staff updated, while helping patients, families and visitors easily navigate their time on site.

Productivity

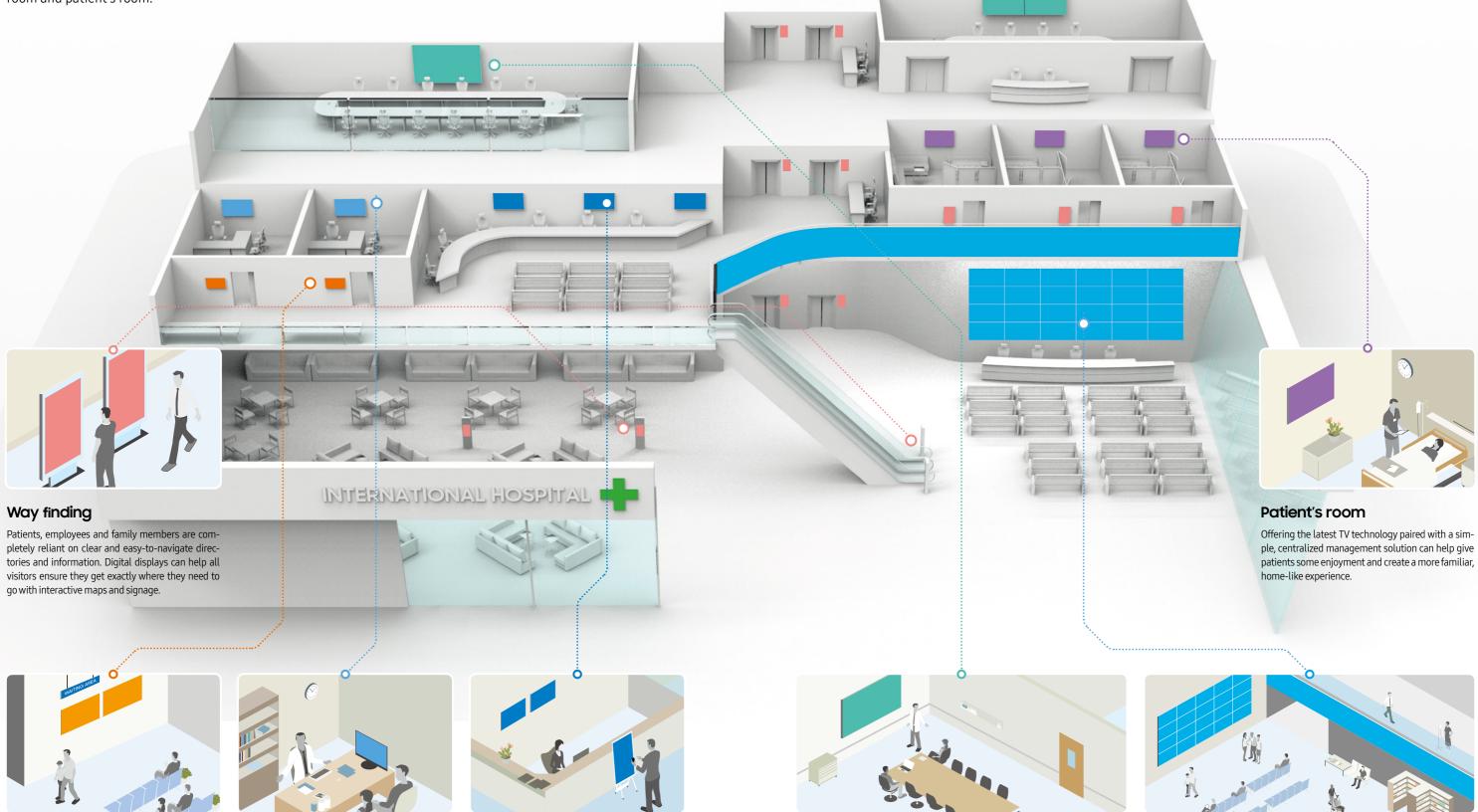


Increase hospital productivity with more efficient collaboration between doctors, staff and patients.

2

What Samsung offers

Samsung, the number one global digital signage solution provider, offers a comprehensive portfolio of display solutions for a wide array of applications including wayfinding, waiting area, lobby, station, conference room, doctor's room and patient's room.



Waiting areas

Target patients and visitors with relevant information while they are waiting to be treated, improving engagement and reducing perceived wait times by capturing their attention with displays that provide important and comforting hospital information.

Doctor's room

High-impact display solutions such as a business monitor can increase the work efficiency of a doctor's meeting with a patient, ensuring a productive and comfortable setting for both the doctor and their visitors.

Station

Create more effective individual workstations with signage and displays that improve work efficiency, collaboration and enable every workspace to become a hub for sharing timely, up-to-date information with doctors, patients and visitors.

Conference room

Utilizing the latest 8K displays featuring DICOM simulation mode allows medical teams to collaborate quickly and efficiently in conference rooms and other private meeting areas while ensuring teams can easily review patient's medical information.

Entrance & Lobby

Differentiate the hospital brand and display useful information such as doctor profiles, patient stories and testimonials, information about facility amenities or innovative medical approaches using indoor LED signage or a video wall solution.

4 5



Indoor LED signage: IF, IER series



THE HIGHEST STANDARD

Showcase brilliant true-to-life imagery

Through in-depth color management, Samsung's indoor LED signage has the ability to preserve constant graduation of images, ensuring pictures are true-to-life. The display uses technology that is nearly twice as high as the standard LED, showcasing information and advertisement brilliantly. The IF series contains dynamic peaking technology that elevates images while removing interference from natural lighting.









IDR Dvnami

Fine-tune Unifo

A clean, hassle-free installation

A hook-based design allows Samsung's indoor LED signage to be mount screens in a single, smooth motion. This seamless installation eliminates gaps while keeping all front and rear components visible and accessible for quick-turn maintenance. The IF, IER series' compact, durable design also can withstand damage from natural events as strong as a Level 4 earthquake, while also meeting Americans with Disabilities Act (ADA) protrusion regulations.









Video wall display: VHR-R, UHF-E, UHF5 series



Deeper visual impact with thin bezel

Samsung created the extreme narrow bezel video wall to be a robust dis¬play that is impactful to pedestrians moving through a lobby, entrance or other venue in hospital. The video wall's ultra slim bezel that yields a seamless picture across multiple screens. Samsung's video wall is a non-glare display that distributes light through the screen, while preserving the vivid pictures and original information.







cod Uniformity



Securely stabilized in any configuration

Building a visually appealing video wall that is customitions in bosnital and gives the freedom to design a distill

Building a visually appealing video wall that is customizable to any locations in hospital and gives the freedom to design a distinctive display that is exclusive to them. The video wall attaches to a surface with wall mounts sized to dimensions of the video and hidden with no dis-tractions. An easy to understand installation guide elevates steps during installation.













Way finding

Help visitors easily navigate your facility

Patients, employees and family members are completely reliant on clear and easy-to-navigate directories and information. Digital displays can help all visitors ensure they get exactly where they need to go with interactive maps and signage.



Interactive display: PMF-BC series



Comfortable, multi-point capacitive touch communication

Through capacitive touch technology and a user-friendly design, Samsung's PMF-BC displays foster a comfortable, easy-to-navigate digital writing experience. The interactive displays can accommodate up to 10 unique touch points* while maintaining the smooth, familiar feel of analog board or pen-and-paper writing, and without interference from dust, sunlight or other natural variables.

*The number of available touch points varies depending on configuration. Connected external PCs provide the PMF-BC display with 10 touch points, while the integrated operating system supports two additional touch points.









Directional signage: SH37R series



New widescreen displays deliver clear information 24/7

Samsung's new widescreen stretched displays support 24/7 operation and unparalleled visual clarity with high brightness and non-glare panels ensuring critical information is fully visible any time of the day or night. The display's simple, straightforward design and content management ensure easy implementation with DP Loop Out and USB Playback functionality.









Waiting areas

Improve the waiting experience with engaging content

Target patients and visitors with relevant information while they are waiting to be treated, improving engagement and reducing perceived wait times by capturing their attention with displays that provide important and comforting hospital information.



UHD signage: QMR/QBR series



Intelligent UHD upscaling

Samsung's cutting-edge intelligent UHD upscaling technology performs edge restoration and noise reduction to deliver perfect UHD picture quality for hospital, even with lower resolution content. This "future-proof" solution ensures best-in-class picture quality regardless of the original content resolution.

* "Conventional" refers to the models that do not adopt UHD upscaling function







Edge Restoration



Streamlined operational efficiency











24/7



QLED 8K signage: QPR-8K series



Spectacular 33-million-pixel resolution

Samsung QLED 8K offers ground-breaking, super-high resolution, 4 times higher than 4K UHD content and 16 times higher than FHD. With more than 33 million pixels, QLED 8K provides exceptional depth and detail, resulting in a spectacularly immersive viewing experience in any environment.









8K resolut

8K AI upscaling

QLED's Quantum processor 8K uses AI-powered machine learning to compare data from millions of images to reduce noise and refine details, delivering clearer picture, improved resolution and a memorable viewing experience in stunning detail, regardless of the original source quality or format.





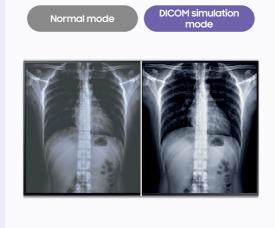


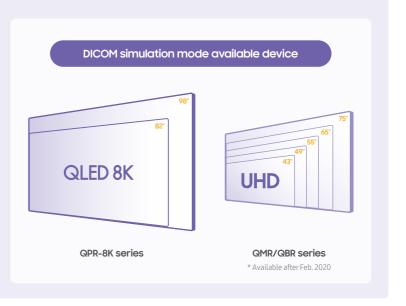




DICOM simulation mode support

Digital Imaging and Communication in Medicine (DICOM) is the widely-adopted standard for handling, storing, printing and transmitting medical imaging information. Samsung displays feature DICOM Simulation Mode, giving users the ability to reproduce grayscale medical images, such as X-rays, for non-diagnostic, reference purposes only. And with Samsung's superior display technology, images are seen in exceptional detail and clarity up to 8K resolution and 98-inches.





Station

Create hubs at every station with informative displays

By using small-sized display in front of each station throughout the hospital, work efficiency will be increased and enable every workspace to become a hub for sharing timely, up to date information to doctors, patients and visitors.

Samsung Workspace



Work smarter with virtual workspaces

With Samsung Workspace, users get enhanced wireless connectivity from their display to any PC as well as access to web-based cloud services including Microsoft Office 365 and VMware Horizon. Without needing any physical connection, users can remotely access a PC or files from a cloud server by simply connecting a keyboard and mouse to compatible Samsung SMART Signage.









Samsung Flip 2



Multifaceted collaboration in any setting

Samsung Flip offers a more versatile alternative to analog board and paper notation, centralizing all meeting needs into a single, fully-integrated idea generation forum for simultaneous interaction. Through an intuitive interface and touch-ready design, Samsung Flip fosters a smooth, natural writing experience. The Flip display also allows users to import the information from their personal devices, and share the notes via email effortlessly.



Smooth touch

Versatile Connectivity







Sharing via Email



LDAPSvnchronizatio

Small sized display



Enhanced communication in a compact display

Samsung's small sized display enables personalized and more impactful communication through its compact and versatile design. An all-in-one solution designed for professional use, small sized display improves the operational efficiency of content, while also ensuring reliable performance for any usage.









Patient's room

Provide a patient-friendly experience

Offering the latest TV technology paired with a simple, centralized management solution can help give patients some enjoyment and create a more familiar, home-like experience.

Hospital TV



In-room patient entertainment

Samsung's hospital TV line-up includes a wide range of features and specifications. With slim designs to maximize in-room space and superior image quality and usability, Samsung TV's can provide a welcome reprieve for patients.







Samsung LYNK solution



Simple and comprehensive TV management

Samsung's LYNK solution transforms in-room hospital TVs into a control and management hub, combining critical capabilities into a single solution. This integrated solution enables hospitals to operate more efficiently, allowing staff to focus on a patient's wellbeing and providing differentiated services such as streamlined information delivery channels and convenient communication options









Doctor's room

Enable increased efficiency and a productive environment

High-impact display solutions such as a business monitor can increase the work efficiency of a doctor's meeting with a patient, ensuring a productive and comfortable setting for both the doctor and their visitors.

Business monitor



Flexible Configuration

Samsung's business monitors promote productivity through ergonomic efficiency. These customizable monitors feature height-adjustable stands and pivot, swivel and tilt options that allow users to adjust positioning and place screens at eye level. If necessary, these displays also can be removed and attached to VESA-supported wall mounts for added visibility.









Management solution: MagicINFO, SSSP solution

Manage your display devices and contents comprehensively

Along with partners, Samsung provides intuitive management solutions that allow the users to have a great ability to manage and control all of the devices, creating and updating information easily and as needed.

MagicINFO solution

Samsung's comprehensive MagicINFO platform can remotely manage both hardware and software through one single-point management system. With this solution, users can conveniently create, schedule and deploy content across its entire digital signage network. MagicINFO enables content teams to update informational or advertising contents from any location at any time that creates greater user control from one central location. The platform also is compatible with a host of display types, ensuring the delivery of compelling content regardless of the operational framework.











##

Device Monitoring





or service calls.

Contents



Remote management solution



Scheduling

Publication



SSSP solution

The Samsung Smart Signage Platform (SSSP) is an, open source all-in-one solution that is embedded in Samsung's SMART signage and doesn't require any additional devices to communicate with the server and play digital media.

Managing digital signage has never been easier with SSSP platform that essentially replaces an external media player with a SoC-based app launcher. SSSP is a robust platform that is designed to give partners the freedom to create software on their Samsung displays, resulting in an integrated media player.





Space Saving











Partner's Samsung remote management solution CMS server ••• ||| ••• Content distribution

(Windows)

Thanks to Samsung MagicINFO Remote Management Solution, a SSSP

Partner that has its own CMS solution can perform in-depth remote

monitoring of the digital devices and eliminate the need for site visits

Specification

LED signage

Project	Pixel Pitch	Diode Type	Brightness ⁽¹⁾ (* Dynamic Peakingapplied)	Contrast Ratio	Certification	Cabinet Size	Weight	Service ⁽²⁾	IP Rating
IFJ	P1.2	Surface Mount Device	1,200 nit	4,000:1	EMC Class B, Safety 60950-1	806.4x453.6x76.7mm(LxHxD, per cabinet)	11.8kg/cabinet	Front and Parts Rear	IP20
IFJ-E	P1.2	Surface Mount Device	1,200 nit	4,000:1	EMC Class B, Safety 60950-1	806.4x453.6x76.7mm(LxHxD, per cabinet)	11.8kg/cabinet	Front and Parts Rear	IP20
IFH	P1.5, 2.0, 2.5	Surface Mount Device	1,600 nit(P1.5) 2,400 nit(P2.0, 2.5)	5000:1	EMC Class A, Safety 60950-1	480x540x65mm(LxHxD, per cabinet)	5.8kg/cabinet	Front and Rear	IP20
IFH-E	P1.5, 2.5	Surface Mount Device	1,200 nit(P1.5) 2,000 nit(P2.5)	5000:1	EMC Class A, Safety 60950-1	480x540x65mm(LxHxD, per cabinet)	5.8kg/cabinet	Front and Rear	IP20
IFH-D	P2.5, 4.0, 6.0	Surface Mount Device	2,400 nit(P2.5) 1,700 nit(P4.0) 1,800 nit(P6.0)	5000:1	EMC Class A, Safety 60950-1	480x720x65mm(LxHxD, per cabinet)	7.4kg/cabinet	Front and Parts Rear	IP20
IER	P2.5, 4.0	Surface Mount Device	1200 nit	3000:1	EMC Class A, Safety 60950-1	960x540x79.5 mm (LxHxD, per cabinet)	10.8kg/cabinet	Front	IP20

Video wall display

Project	Screen Size	Resolution	Brightness	Contrast Ratio	Operation Hour	B-to-B (mm)	Bezel Width	Connectivity
UHF-E/UHN-E	46"(UHN-E) 55"(UHF-E)	1920 x 1080	700 nit	4,000:1	24/7	1.7mm	1.15mm(U/L), 0.55mm(R/B)	In: Analog D-SUB, DVI-D, DP1.2, HDMI 2.0(2), HDCP2.2, Stereo Mini Jack Out: DP1.2(Loop-out), Stereo Mini Jack / Ext: RS232C(In/Out), RJ45
UMH-E/UMN-E	46"(UMN-E) 55"(UMH-E)	1920 x 1080	500 nit	4,000:1	24/7	1.7mm	1.15mm(U/L), 0.55mm(R/B)	In: Analog D-SUB, DVI-D, DP1.2, HDMI 2.0(2), HDCP 2.2, Stereo Mini Jack Out: DP1.2(Loop-out), Stereo Mini Jack / Ext: RS232C(In/Out), RJ45
VMR-U	46"	1920 x 1080	500 nit	3,500:1	24/7	3.5mm	2.3mm(U/L) 1.2mm(R/B)	In: DP1.2, HDMI 2.0(2), HDCP2.2, Stereo Mini Jack Out: HDMI, Stereo Mini Jack / Ext: RS232C(In/Out), RJ45
UDE-A/UDE-B	46", 55"	1920 x 1080	700 nit(UDE-A) 500 nit(UDE-B)	4,000:1(55") 3,500:1(46")	24/7	3.5mm	2.3mm(U/L), 1.2mm(R/B)	In: Analog D-SUB, DVI-D, DP1.2, HDMI 2.0(2), HDCP 2.2, Stereo Mini Jack Out: DP1.2(Loop-out), Stereo Mini Jack / Ext: RS232C(In/Out), RJ45
UHF5	46"	1920 x 1080	700 nit	4,000:1	24/7	5.5mm	3.4mm(U/L), 2.0mm(R/B)	In: DVI-D, DP1.2, HDMI 2.0(2), HDCP 2.2, Stereo Mini Jack Out: DP1.2(Loop-out), Stereo Mini Jack / Ext: RS232C(In/Out), RJ45(In)
VHR-R	55"	1920x10180	700 nit	1,100:1	24/7	0.88mm	0.44mm(Even)	In : DVI-D, DP1.2, HDMI 2.0(2), HDCP 2.2, Stereo Mini Jack Out : DP1.2(Loop-out), Stereo Mini Jack / Ext : RS232C(in/out), RJ45

QLED 8K signage

Project	Screen Size	Resolution	Brightness	Operation Hour	Connectivity	SoC	S/W
QPR-8K	82", 98"	7680 x 4320	500 nit	16/7	In: HDMI 2.0(4, Including 8K 60p input support 1), USB 2.0(3) Out: Optical(Digital Audio Out) / Ext: RS232C(In), RJ45	SSSP7	MagicINFO Player S7

UHD signage

Project	Screen Size	Resolution	Bright- ness	Contrast Ratio	Operation Hour	Panel Type	IP Rating	Connectivity	SoC	S/W
QHH	55", 65"	3840 x 2160	600 nit	6,000:1	16/7	-	-	In: DP1.2, HDMI 2.0(2), HDCP2.2, USB2.0(2) Out: HDMI #1 ARC support Ext: RS232C(In/Out), RJ45	SSSP 5	MagicINFO Player S5
QMR	43", 49", 55", 65", 75"	3840 x 2160	500 nit	6,000:1(75") 4,000:1 (43",49",55",65")	24/7	Non-Glare	IP5X Validated	In: DVI-D, DP1.2, HDMI 2.0(2), HDCP 2.2, Stereo Mini Jack, USB2.0(2) Out: HDMI 2.0(Loop-out), Stereo Mini Jack Ext: RS232C(In/Out), RJ45	SSSP 6	MagicINFO PlayerS6
QMN	85", 98"	3840 x 2160	500 nit	4,000:1(98") 3,000:1(85")	24/7	Non-Glare	-	In: DVI-D, DP1.2, HDMI 2.0(2), HDCP 2.2, Stereo Mini Jack, USB2.0(2) Out: HDMI 2.0(Loop-out), Stereo Mini Jack Ext: RS232C(In/Out), RJ45	SSSP 6	MagicINFO PlayerS6
QBR	43", 49", 55", 65", 75	3840 x 2160	350 nit	5,000:1(43") 4,700:1(49",55") 4,000:1(65",75")	16/7	-	IP5X Validated	In: DVI-D, HDMI 2.0(2), HDCP 2.2, Stereo Mini Jack, USB2.0(2) Out: Stereo Mini Jack Ext: RS232C(In/Out), RJ45	SSSP 6	MagicINFO Player S6
QEN	82"	3840 x 2160	300 nit	5,000:1	16/7	-	-	In: DVI-D, HDMI 2.0(2), HDCP 2.2, Stereo Mini Jack, USB2.0(2) Out: Stereo Mini Jack Ext: RS232C(In/Out), RJ45	SSSP 6	MagicINFO Player S6

Interactive display

Project	Screen Size	Resolution	Brightness	Contrast Ratio	Operation Hour	Touch Type	# of Touch	Connectivity	SoC	S/W
PMF-BC	32", 43", 55"	1920 x1080	300 nit (32") 350 nit (43") 400 nit (55")	5,000:1(32") 3,000:1(43") 4,000:1(55")	24/7(43",55") 16/7(32")	Capacitive touch	Max. 10 Touch	In: DVI-I(D-SUB Common), DP1.2, HDMI 2.0(2), HDCP 2.2, Stereo Mini Jack, USB 2.0(2, 1 used for touch) Out: DP1.2(Loop-out), Stereo Mini Jack, USB Type-B(2) EACH COMPANY DESCRIPTION OF THE STATE OF THE	SSSP 4	Built-in MagicInfo S4

Flip 2

Project	Screen Size	Resolution	Brightness	Contrast Ratio	Touch Type	Touch Pen Type	# of Drawing	Object Recognition Range	Connectivity
WMR	55", 65"	3840 x 2160(Landscape) 2160 x 3840 (Portrait)	350(without glass), ww0(with glass) nit	4,000 : 1 (without glass)	InGlass™ Touch	Passive Pen	4 Drawing	2mm/ 4mm / 8mm / 50mm , 1024 Level on Brush Mode	In : HDMI 2, USB 1, USB External(In/Out) 1 Out : Touch out 1, Audio out 1 Ext : RS232C, LAN, WiFi/BT

⁽¹⁾ Peak Value according to IDMS (Information Display Measurement Standard)
(2) Front Service: Front Service to Power Supply and Main Board on a cabinet level / Parts Rear Service: Power Supply and Main Board can be accessed from the rear