About Samsung

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 Interactive Display, SMART LED Signage, SMART Signage, and Business Monitor, visit www.samsung.com/business or www.samsung.com/displaysolutions

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Samsung Electronics Co., Ltd. 416, Maetan 3-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-772, Korea 2018-11 www.samsung.com

SAMSUNG

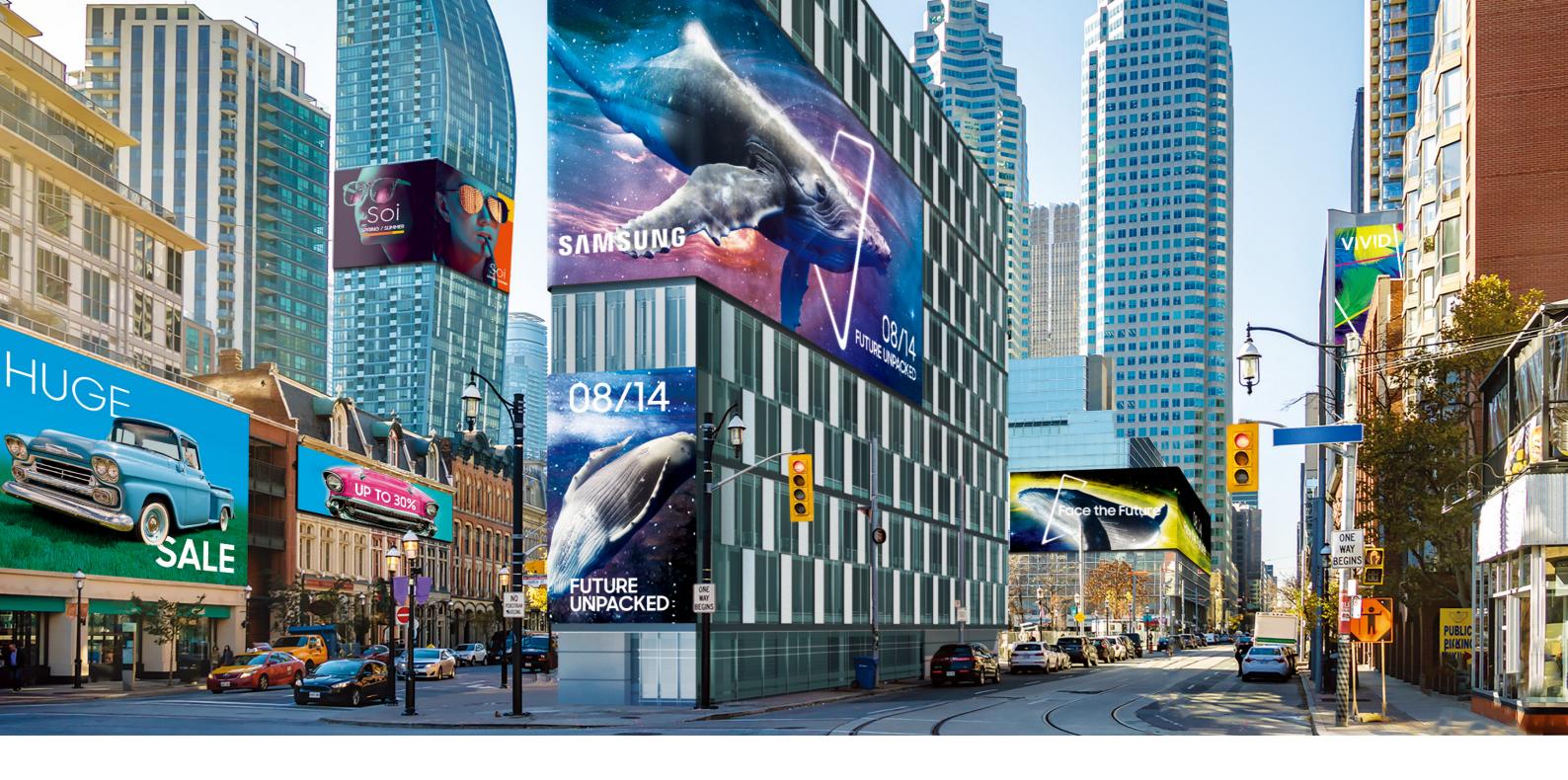


Samsung DooH Display Solutions

Discovering new opportunities for advertisement through state-of-the-art-technology

LED Signage | Outdoor Signage | SMART Signage | Interactive Display | MagicINFO Solution

SAMSUNG



The Samsung DooH Display Solution delivers real-time dynamic messaging experiences that enable

Merchandising: At retail stores, banks and even restaurants, Samsung DooH Display Solution highlight goods and services to increase sales and build brand awareness. Many popular clothing stores feature immersive branded videos with music, text and interviews in their retail locations.

Advertising: Across transportation venues, theaters and high-traffic public spaces, Samsung DooH Display Solutions deliver interactive advertising content for multiple brands, increasing advertising revenue. Travelers waiting at airports view diverse advertising content, supplied by a network operator, delivering visually engaging ad content to captive audiences.

Informational: For hospitality venues, healthcare facilities and educational campuses, Samsung DooH Display Solutions deliver rich digital informational and entertainment content that enhance customer experiences. An example of these immersive viewing experiences is the digital signage and content in hospital waiting rooms that feature health news and diet tips.





Merchandising

Advertising

Informational

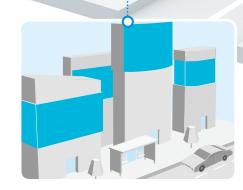
What Samsung offers

Samsung, the #1 global digital signage solution provider, offers a comprehensive portfolio of display solutions for a wide array of indoor and outdoor applications including billboards, street furniture, entrance & moving walk displays and ad-case solutions.

Way-finding

High-impact displays assist and guide guests and enhance the customer experience. Standalone signage and interactive displays can be placed in high-traffic areas with easy-to-find information to make shopping experiences more enjoyable and airports easier to navigate.

Indoor LEDs video walls encourage consumers to enter and browse. Retailers can display sale items, new product lines and provide incentives for pedestrians to come in and shop. The displays also help travelers quickly learn about top destinations or get a flavor for the region's culture. Service providers can direct passengers to transportation options, and theme parks can inform families of must-visit locations.



Billboard

Vivid outdoor LEDs engage viewers and deliver compelling content. DooH displays reinvent the billboard experience for consumers with stateof-the-art technology, while brands gain a more absorbing connection with their customers.

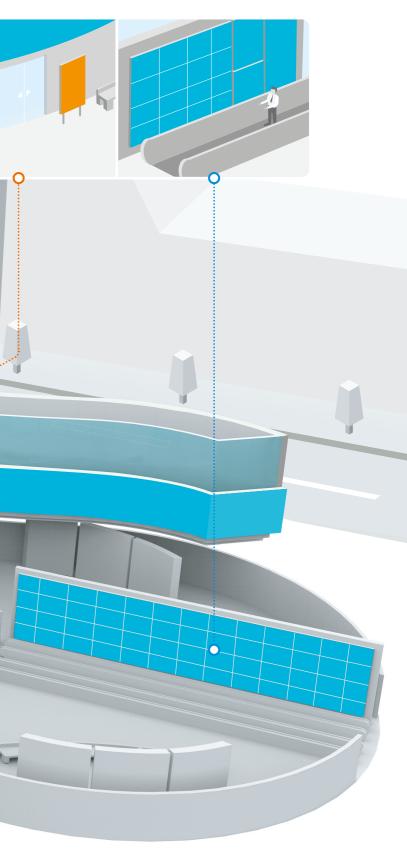
Street furniture / Bus shelter

Vibrant outdoor signage entertains and informs with dynamic ads. Waiting passengers are delivered visually engaging content from multiple brands, compelling brand interactions and purchases.

Ad-case

Standalone signage entice visitors to watch, learn and interact anywhere – whether in a mall, airport or other venue. Compelling ad content can drive customers to a specific store or restaurant, or encourage visitor to scan a QR code and buy online.

Entrance & Moving walk



Billboard

Delivering highly engaging advertising content

Vivid outdoor LEDs engage viewers and deliver compelling content. DooH displays reinvent the billboard experience for consumers with state-of-the-art technology, while brands gain a more absorbing connection with their customers.



Outdoor LED signage: XPE series



Superior image quality regardless of conditions

Samsung's XPE series LED signage delivers excellent image quality that captures audience eyes even in challenging environments. Through two-step indepth calibration, enhanced image processing and an industry-best contrast ratio, the displays deliver accurate and consistent color quality content with a high refresh rate. The XPE series also is equipped to deter light interference, and produce bright images regardless of conditions.





High Brightness





Superior Contras



High reliability with proactive expert support

Each XPE series signage undergoes rigorous environmental testing to ensure uninterrupted performance. C3 Contamination and lonograph testing deters circuit contamination and extends shelf-life. Complementary Climate and Humidity and Salt Fog Chamber exposure additionally ensures performance in variable weather conditions and wet and corrosive elements. In addition to enhanced durability, from inception to installation, Samsung makes the easy outdoor signage experience easy, providing round-the-clock service.









Street furniture / Bus shelter

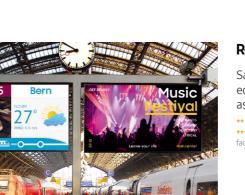
Capturing viewers and increasing advertising revenue

Vibrant outdoor signage entertains and informs with dynamic ads. Waiting passengers are delivered visually engaging content from multiple brands, compelling brand interactions and purchases.



Outdoor signage: OHF / OHN / OHN-D series







High Durability





Deformation Proo

End-to-end Proie Management

Unsurpassable visibility

Samsung's outdoor signage allows for exceptional, consistent content delivery with maximum 3,300 nit brightness* and 24/7 performance for outdoor display at airport. With a built-in dimming sensor, the display automatically adjusts the brightness based on the external lighting environment, saving operating expenses and power consumption.

* Brightness varies by model









Resistant to outdoor elements

Samsung outdoor signage is verified to perform in outdoor settings. IP56-rated protection** ensures the signage will withstand physical impact as well as dust***, humidity or other outdoor elements that could affect the display.

** Additional glass needed for kit type

*** Ingress of dust is not entirely prevented, but will not accumulate in suffi cient quantities to interfere with the satis actory operation of the equipment









Entrance & Moving walk

Enhancing customer experiences with rich digital content

Indoor LEDs video walls encourage consumers to enter and browse. Retailers can display sale items, new product lines and provide incentives for pedestrians to come in and shop. The displays also help travelers quickly learn about top destinations or get a flavor for the region's culture. Service providers can direct passengers to transportation options, and theme parks can inform families of must-visit locations.

GLIPS & LINGERING SCENT

Indoor LED signage: IF series



Showcase brilliant true-to-life imagery

Through in-depth color management, Samsung's IF series 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.









A hook-based design allows IF Series 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 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.







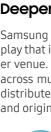
Catwalk Space fr





Video wall display signage: UHF-E, VMR-U, UHF5 series







Building a visually appealing video wall that is customizable to any malls, terminals, airports and stores 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 distractions. An easy to understand installation guide elevates steps during installation.







Deeper visual impact with thin bezel

Samsung created the extreme narrow bezel video wall to be a robust display that is impactful to pedestrians moving through a mall, airport or other venue. 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.









Securely stabilized in any configuration







Ad-case

Driving customer engagement and purchases

Standalone signage entice visitors to watch, learn and interact anywhere - whether in a mall, airport or other venue. Compelling ad content can drive customers to a specific store or restaurant, or encourage visitor to scan a QR code and buy online.



QLED 8K signage: QPR-8K series



Spectacular 33-million-pixel resolution

100% Color volume

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 business environment.

Peak Brightness



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 advertisement, 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.









Quantum HDF

Way-finding

Informing and entertaining customers with interactive content

High-impact displays assist and guide guests and enhance the customer experience. Standalone signage and interactive displays can be placed in high-traffic areas with easy-to-find information to make shopping experiences more enjoyable and airports easier to navigate.



Interactive display: PMF-BC series



ITHO

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 10 Unique touch points* while maintaining the smooth, familiar feel of analog board or pen-and-paper writing.



High reliability & convenient management









Edge Restorati

* 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.











Samsung's PMF-BC displays are resilient and require little maintenance, yet are dependable and deliver content effortlessly. This display withstood extensive testing to validate its durability against dust, dirt, vandalism and other factors as these displays are typically used at transportation stations. Users are able to control the display, no matter their location, using infrared receivers, for continuous content.









Samsung's solutions and services

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.

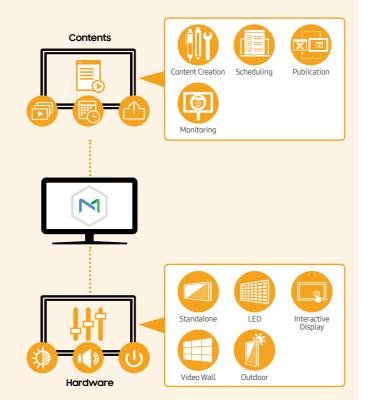


Management solution: MagicINFO, SSSP solution

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.





SSSP solution

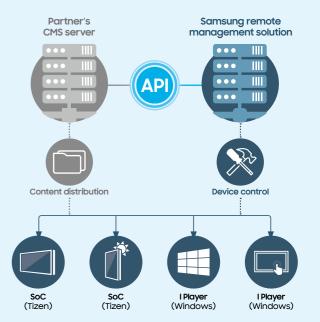
For a Samsung Smart Signage Platform(SSSP) partner that has its own CMS solution, Samsung MagicINFO Remote Management Solution is a perfect fit for advanced needs. Samsung Remote Management Solution allows in-depth remote monitoring of the digital devices and eliminates the need for site visits or service calls. The Remote Management Solution platform synchronizes with users' CRM and provides a complete review of hardware and display content. Though its install package is the same with MagicINFO Server, there is a separate license key for Samsung's Remote Management Solution.





Remote management solution

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 or service calls.



Specification

LED signage

	Project	Pixel Pitch	Diode Type	Brightness ⁽¹⁾ (* Dynamic Peaking applied)	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
Indoor	IFH	P1.5, 2.0, 2.5	Surface Mount Device	1,600 nit (P1.5) 2,400 nit (P2.0, 2.5)	5,000:1	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)	5,000:1	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	1,700 nit (P4.0) 1,800 nit (P6.0)	5,000:1	EMC Class A, Safety 60950-1	480x720x65mm (LxHxD, per cabinet)	7.4kg/cabinet	Front and Parts Rear	IP20
Outdoor	XPE	P6, 8, 10	Surface Mount Device	7,500 nit	8,500:1 (P6) 10,000:1 (P8, 10)	EMC Class A, Safety 60950-1	203x203mm (LxH, per module) (P6) 264x297mm (LxH, per module) (P8) 330x165mm (LxH, per module) (P10)	0.54kg/module (P6) 1kg/module (P8) 0.69kg/module (P10)	Front Service and/or Rear Service	Silicone sealed (Module IP67, CabinetIP65) (P6, P8) Silicone sealed (IP65) (P10)
Juluoor	XAF	P6, 8, 10, 16	SMD2727 (P6) SMD3535 (P8, 10) DIP346 (P16)	6,300 nit (P6, 8) 6,750 nit (P10) 7,700 nit (P16)	3,000:1	EMC Class A, Safety 60950-1	1152x864x142mm (LxH, per cabinet) (P6, 8) 960x960x142mm (LxH, per cabinet) (P10) 960x960x154mm (LxH, per cabinet) (P16)	56kg/cabinet (P6, 8) 52kg/cabinet (P10) 55kg/cabinet (P16)	Rear	Front IP65 Rear IP45

 $^{(1)}$ Peak Value according to IDMS (Information Display Measurement Standard)

²⁰ 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

Outdoor signage

	Project	Screen Size	Resolution	Brightness	Contrast Ratio	Operation Hour	IP Rating	Connectivity	SoC	S/W
	OHN	85"	3840 x 2160	3,300 nit	3,000:1	24/7	IP56	In: DP1.2, HDMI 2.0(2), HDCP 2.2, USB2.0 Out: Stereo Mini Jack Ext: RS232C(In), RJ45(In)	SSSP 6	MagicINFO Player S6
Outdoor	OHN-D (Dual display)	85"	3840 x 2160	3,300 nit	3,000:1	24/7	IP56	In: DP1.2(2), HDMI 2.0(4), HDCP 2.2, USB2.0(2) Out: Stereo Mini Jack Ext: RS232C(In), RJ45(In)	SSSP 6	MagicINFO Player S6
	OHF	46", 55", 75"	1920 x 1080	3,000 nit(46") 2,500 nit(55",75")	5,000:1	24/7	IP56	In: HDMI 1.4(2), HDBaseT(LAN Common), HDCP 2.2, USB2.0 Out: Stereo Mini Jack Ext: RS232C(In/Out), RJ45(In/Out), HDBaseT	SSSP 4	MagicINFO Player S4
	OMN	46", 55"	1920 x 1080	4,000 nit	5,000:1(46") 4,000:1(55")	24/7	IP5X Validated	In: DP1.2, HDMI 2.0(2), HDCP 2.2, USB2.0 Out: HDMI 2.0, Stereo Mini Jack Ext: RS232C(In/Out), RJ45(In/Out)	SSSP 6	MagicINFO Player S6
	OMN-D (Dual Display)	46", 55"	1920 x 1080	3,000 nit(front) 1,000 nit(back)	5,000:1(46") 4,000:1(55")	24/7	IP5X Validated	In: HDMI 2.0(2), HDCP 2.2, USB2.0(2) Ext: RS232C(in), RJ45(in)	SSSP 6	MagicINFO Player S6
Semi- Outdoor	OMD-W	75"	1920 x 1080	2,500 nit	5,000:1	24/7	-	In: Analog D-SUB, DVI-D, DP1.2, HDMI(2), Compo- nent(CVBS Common), HDCP1.4, Stereo Mini Jack, USB 2.0 Out: DP1.2(Loop-out), Stereo Mini Jack Ext: RS232C(In/Out), RJ45	SSSP 2	MagicINFO Player S2
	ОМН	32"	1920 x 1080	1,000 nit	3,000:1	16/7	-	In: DP, HDMI(2), HDCP 2.2, USB(1) Out: DP1.2(Daisy Chain), Stereo Mini Jack Ext: RS232C(In/Out), RJ45(In/Out), HDBaseT(In)	SSSP 4	MagicINFO Player S4

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), HDCP 2.2, 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), HDCP 2.2, Stereo Mini Jack Out: HDMI, 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)

QLED 8K signage

Project	Screen Size	Resolution	Brightness	Operation Hour	Connectivity	SoC	S/W
QPR - 8K	82"	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 S7

UHD signage

Project	Screen Size	Resolution	Bright- ness	Contrast Ratio	Opera- tion 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), HDCP 2.2, 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), HDCP2.2, Stereo Mini Jack, USB2.0(2) Out: HDMI 2.0(Loop-out), Stereo Mini Jack Ext: RS232C(In/Out), RJ45	SSSP 6	MagicINFO Player S6
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 Player S6
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

FHD signage

Project	Screen Size	Resolution	Bright- ness	Contrast Ratio	Oper- ation Hour	Panel Type	IP Rating	Connectivity	SoC	S/W
PHF-P	43", 49", 55"	1920 x 1080	700 nit	4,000:1(49",55") 3,000:1(43")	24/7	Non-Glare	IP5X Validated	In: DVI-I, DP1.2, HDMI 2.0(2), HDCP 2.2, Stereo Mini Jack, USB2.0(2) Out: DP1.2(Loop-out), Stereo Mini Jack Ext: RS232C(In/Out), RJ45	SSSP 4	MagicINFO Player S4
PMF	32"	1920 x 1080	400 nit	5,000:1	16/7	-	IP5X Validated	In: DVI-I, DP1.2, HDMI 2.0(2), HDCP 2.2, Stereo Mini Jack, USB2.0(2) Out: DP1.2(Loop-out), Stereo Mini Jack Ext: RS232C(In/Out), RJ45	SSSP 4	MagicINFO Player S4
DCE	32", 55"	1920 x 1080	350 nit	5,000:1	16/7	-		In: D-SUB, DVI-I, HDMI1.4(2), HDCP1.4, Stereo Mini Jack, USB2.0 Out: Stereo Mini Jack Ext: RS232C(In), RJ45	Simple SoC	MagicINFO Player Lite
DCJ	43", 49"	1920 x 1080	300 nit	3,000:1	16/7	-		In: DVI-I, HDMI1.4(2), HDCP1.4, Stereo Mini Jack, USB2.0 Out: Stereo Mini Jack Ext: RS232C(In), RJ45	Simple SoC	MagicINFO Player Lite

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 x 1080	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), HDCP2.2, Stereo Mini Jack, USB 2.0(2, 1 used for touch) Out: DP1.2(Loop-out), Stereo Mini Jack, USB Type-B(2) Ext: RS232C(In/Out), RJ45	SSSP 4	Built-in MagicInfo S4

MagicINFO solution

	Number of displays connecting to MagicINFO Server									
	<200	<2000	<5000	>5000						
05		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 basic setup (oper *Heavily dependent on the amount of								
Network Bandwidth		64 kbps or better								
Number of Servers	1	2	3	3 or more; dependent on scenario						