



# Samsung SMART Signage

## QBR-B series

Display any content in ultra-high definition with incredibly rich color on slim, efficient signage.

Through intelligent UHD upscaling technology, Samsung's QBR-B series performs edge restoration and noise reduction to deliver UHD picture quality even with lower resolution content. Backed by Tizen 4.0, the QBR-B series also provides reinforced capability with multiple web formats and secured protection. Additionally, its new slim design simplifies wall mounting and ensures seamless installation.

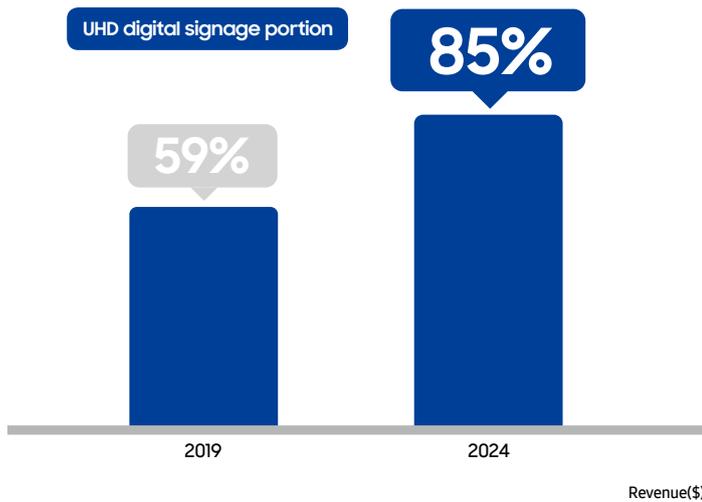
### Highlights

- Engage customers with lifelike images through ultra high-definition resolution
- Deliver UHD-level picture quality even with lower resolution content through Crystal Processor 4K supporting innovative UHD upscaling technology
- Dynamic Crystal Display allows viewers to enjoy a wider spectrum of colors, up to one billion shades
- Symmetrical, slim design simplifies installation and complements any environment
- Secure, PC-free operation through Knox and rigid three-layer protection

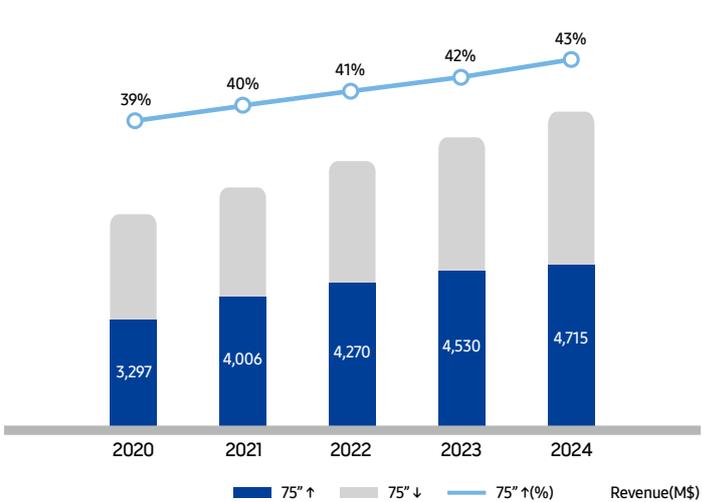
# Industry trend

With visual display technology continually improving, viewers have developed an ever-growing expectation for better – and bigger – picture quality. Users, more than ever, want to captivate customers with truly lifelike images and gain a competitive edge over their industry peers with best-in-class displays. This is reflected in the fact that UHD resolution continues to grow in popularity, becoming an essential way for brands to impress customers amid a wider variety of stunning, aesthetical visuals and content. This trend is coupled with demand for larger screen sizes, particularly in the 75-inch and above category, enabling businesses to differentiate themselves and display content in a more impactful way than ever before.

## Ultra-high definition is the new normal \*



## Demand for bigger screens is on the rise \*\*

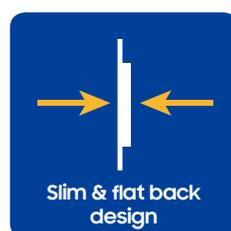


\*\*\* Source : Omdia, Public Displays Market Tracker Q1 2020, July 2020. Revenues in USD Millions. Does Not Include Consumer TVs Used as Public Displays. Not an Endorsement of Samsung Electronics Co. Ltd. Any Reliance on these results is at the third-party's own risk.

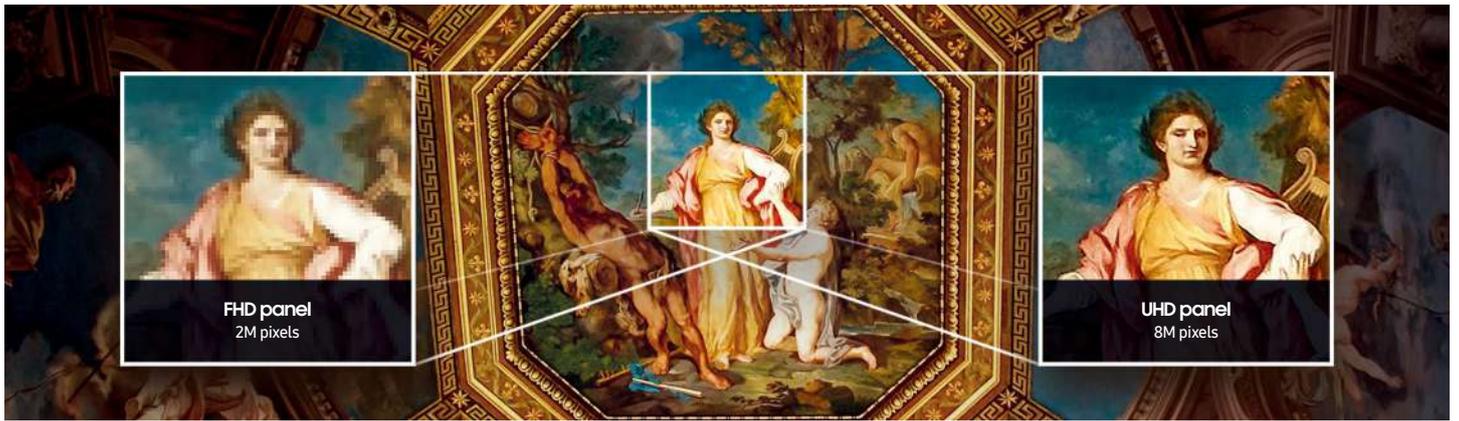
## Why Samsung's QBR-B series?

Samsung's superior visual display technology has positioned them as the industry leader in the digital signage market for a decade\* and Samsung brand having been No.1 in sales for 12 consecutive years in the display market\*\*. As an expert in picture quality in the display industry, Samsung is able to deliver best-in-class picture quality through their QBR-B series. The signage provides rich and flawless colors, sleek and durable design, powerful performance through SSSP 6 and secured protection. Samsung's QBR-B series is also able to upscale the low resolution content to UHD picture quality. For commercial displays, this technology advancement means highly visible signage with unmatched accuracy to help capture the attention of potential customers. It also means savings both in cost and time for businesses who can produce content more inexpensively at a lower resolution and still display it in stunning UHD quality.

\* Results based on Omdia(former IHS) report "Public Displays Market Tracker", 2009 – 2018. Information is not an endorsement of Samsung. Any reliance on these results is at the third party's own risk.  
 \*\* According to market research company "Omdia". Ranking in terms of shipments. Results are not an endorsement of Samsung. Any reliance on these results is at the third-party's own risk.

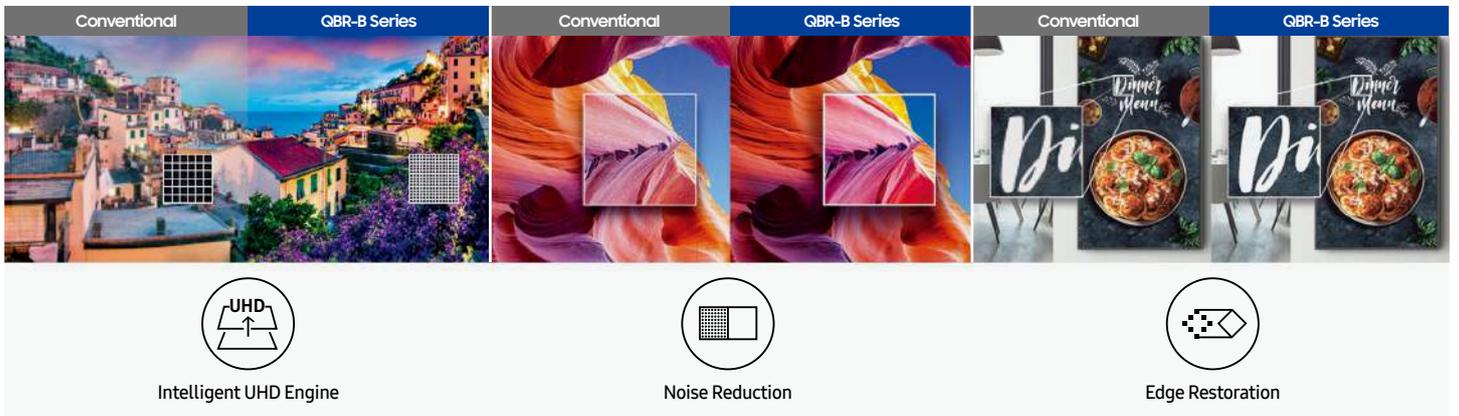


## Key features



### Incredible UHD picture quality

Samsung's new QBR-B series is able to capture customer attention by providing an incredibly clear picture, showcasing lifelike images and intricate details better than ever before thanks to ultra-high-definition 4K resolution.



### Crystal Processor 4K

Samsung's global leadership in display technology and picture quality spans more than a decade. Thanks to superior semi-conductor technology, Samsung has developed the powerful video processor available. Additionally, intelligent UHD upscaling technology is a cutting-edge solution based on Samsung's proprietary UHD Processor that allows content developed at a lower resolution to be elevated to UHD-level quality. It also performs edge restoration and noise reduction to optimize on-screen text and imagery with crisp edges and fine detail.



### Dynamic Crystal Display

Dynamic Crystal Display is what brings the incredible, lifelike color to Samsung displays. 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, critical to businesses in ensuring brand consistency across communication channels. The QBR-B series also features HDR+ functionality that converts standard definition (SDR) content to HDR quality for sharper contrast and more vivid colors.

## Key features



### Slim and symmetrical design

The all-new slim and symmetrical design of the QBR-B series significantly simplifies wall mounting the display and ensures installation is a seamless process. The display's power inlet direction has been redesigned to sit flush against the wall. The new design sets guarantees a long life cycle ensuring the QBR-B series will stand the test of time.



### Clean cable management

In a corporate or retail environment, the back of a display is often visible to customers. With the QBR-B series' new cable guide feature retailers can tuck messy cables away from view. This allows for a clean and more visually-appealing customer shopping experience.



### Samsung Workspace secured by Knox

Samsung Workspace is a powerful new feature fortified by proprietary Knox security technology allowing users to create an enhanced virtual collaboration workspace without needing a PC in the room, or any physical connection. Simply connect a keyboard and mouse to the display and immediately get to work accessing a PC remotely or web based cloud services such as Microsoft Office 365 and VMWare Horizon.



### Powerful, all-in-one solution

The Samsung Smart Signage Platform (SSSP) is an open-source, all-in-one solution embedded in Samsung Smart signage that simplifies installation and maintenance. With SSSP, there is no need for any external devices to communicate with the server or play digital media enjoying easy development, reinforced capability with multiple web formats, and secured protection.



### Industry standard certified

QBR-B displays are EMC class B compliant, providing a safe and healthy viewing environment by meeting strict standards of electromagnetic wave emission and assuring reliable operation even near other electronic equipment. The displays are also registered by EPEAT, the global ecolabel for IT, confirming the hardware is sustainable for the full product lifecycle, from design and production to energy use and recycling.

# Specifications

Model			QB43R-B	QB50R-B	QB55R-B
Panel	Diagonal Size	Class	43	50	55
		Measured	42.5	49.5	54.6
	Type	Edge LED BLU	Edge LED BLU	Edge LED BLU	
	Resolution	UHD (3840 x 2160)	UHD (3840 x 2160)	UHD (3840 x 2160)	
	Pixel Pitch (mm)	0.2451 x 0.2451	0.285 x 0.285	0.315 x 0.315	
	Active Display Area	941.184 (H) x 529.416 (V)	1095.84(H) x 616.41(V)	1209.6(H) x 680.4(V)	
	Brightness (Typ.)	350	350	350	
	Contrast Ratio (Typ.)	4000:1	4000:1	4000:1	
	Viewing Angle (H/V)	178/178	178/178	178/178	
	Response Time (G to G)	8ms(Typ.)	8ms(Typ.)	8ms(Typ.)	
	Display Colors	16.7M(True Display) 1.07B(Dithered 10bit)	16.7M(True Display) 1.07B(Dithered 10bit)	16.7M(True Display) 1.07B(Dithered 10bit)	
	Color Gamut	92% (DCI-P3, CIE1976)	92% (DCI-P3, CIE1976)	92% (DCI-P3, CIE1976)	
	Operation Hour	16/7	16/7	16/7	
	Display	Haze	2%	2%	2%
Dynamic C/R		MEGA	MEGA	MEGA	
H-Scanning Frequency		30 ~ 81kHz	30 ~ 81kHz	30 ~ 81kHz	
V-Scanning Frequency		48 ~ 75Hz	48 ~ 75Hz	48 ~ 75Hz	
Maximum Pixel Frequency		594MHz	594MHz	594MHz	
Sound	Speaker Type	Built in Speaker (10W + 10W)	Built in Speaker (10W + 10W)	Built in Speaker (10W + 10W)	
Connectivity	INPUT	RGB	DVI-D	DVI-D	DVI-D
		VIDEO	HDMI 2.0 (2)	HDMI 2.0 (2)	HDMI 2.0 (2)
		HDCP	HDCP 2.2	HDCP 2.2	HDCP 2.2
		AUDIO	Stereo Mini Jack, DVI/HDMI/Audio(Common)	Stereo Mini Jack, DVI/HDMI/Audio(Common)	Stereo Mini Jack, DVI/HDMI/Audio(Common)
		USB	USB 2.0 x 2	USB 2.0 x 2	USB 2.0 x 2
	OUTPUT	RGB	N/A	N/A	N/A
		VIDEO	N/A	N/A	N/A
		AUDIO	Stereo Mini Jack	Stereo Mini Jack	Stereo Mini Jack
		Power Out	N/A	N/A	N/A
		USB	N/A	N/A	N/A
	EXTERNAL CONTROL		RS232C(in/out) thru stereo jack, RJ45	RS232C(in/out) thru stereo jack, RJ45	RS232C(in/out) thru stereo jack, RJ45
	EXTERNAL SENSOR		IR	IR	IR
	Tuner		N/A	N/A	N/A
Power	Type	Internal	Internal	Internal	
	Power Supply	AC100 - 240 V, 50/60 Hz	AC100 - 240 V, 50/60 Hz	AC100 - 240 V, 50/60 Hz	
	Power Consumption	Max [W/h]	110	143	143
		Typical [W/h]	67	86	108
		Rating [W/h]	100	130	130
		BTU (Max)	375.1	487.6	487.6
		Sleep mode	0.5	0.5	0.5
Off mode	N/A	N/A	N/A		
Mechanical Spec	Dimension (mm)	Set	967.5 x 557.7 x 48.3	1121.4 x 643.9 x 46.3	1235.1 x 707.9 x 46.3
		Package	1095 x 676 x 151	1269 x 784 x 152	1402 x 858 x 163
	Weight (kg)	Set	10	13.4	18.1
		Package	13.3	17.6	23.6
	VESA Mount		200 x 200	200 x 200	200 x 200
	Protection Glass		N/A	N/A	N/A
	Stand Type		Foot Stand (Optional)	Foot Stand (Optional)	Foot Stand (Optional)
Bezel Width (Top/Side/Bot) (mm)		9.2mm(U/L/R), 11.2mm(B)	9.2mm(U/L/R), 11.2mm(B)	9.2mm(U/L/R), 11.2mm(B)	
Operation	Operating Temperature	0°C - 40°C	0°C - 40°C	0°C - 40°C	
	Humidity	10 ~ 80%	10 ~ 80%	10 ~ 80%	
Feature	Key	UHD Signage Display Slim & Light Signage with Built-in MagicInfo S6, S5SP 6.0	UHD Signage Display Slim & Light Signage with Built-in MagicInfo S6, S5SP 6.0	UHD Signage Display Slim & Light Signage with Built-in MagicInfo S6, S5SP 6.0	
	Orientation	Portrait / Landscape	Portrait / Landscape	Portrait / Landscape	
	Special	H/W	Temperature Sensor/Pivot Display, Clock Battery (168hrs Clock Keeping), Built in Speaker(10W 2ch), IP5x Rating, Wi-Fi	Temperature Sensor/Pivot Display, Clock Battery (168hrs Clock Keeping), Built in Speaker(10W 2ch), IP5x Rating, Wi-Fi	Temperature Sensor/Pivot Display, Clock Battery (168hrs Clock Keeping), Built in Speaker(10W 2ch), IP5x Rating, Wi-Fi
		S/W	Auto Source Switching & Recovery, LFD Home UI, Button Lock, Hot key option, Plug&Play (Initial Setting)	Auto Source Switching & Recovery, LFD Home UI, Button Lock, Hot key option, Plug&Play (Initial Setting)	Auto Source Switching & Recovery, LFD Home UI, Button Lock, Hot key option, Plug&Play (Initial Setting)
	Internal Player (Embedded H/W)	Processor	Cortex A72 1.7GHz Quad-Core CPU	Cortex A72 1.7GHz Quad-Core CPU	Cortex A72 1.7GHz Quad-Core CPU
		On-Chip Cache Memory	L1 Instruction Cache : 48KB L1 Data Cache : 32KB L2 Cache : 2MB	L1 Instruction Cache : 48KB L1 Data Cache : 32KB L2 Cache : 2MB	L1 Instruction Cache : 48KB L1 Data Cache : 32KB L2 Cache : 2MB
		Clock Speed	1.7GHz	1.7GHz	1.7GHz
		Main Memory Interface	2.5GB	2.5GB	2.5GB
			LPDDR4 1.5GHz 64bit	LPDDR4 1.5GHz 64bit	LPDDR4 1.5GHz 64bit
		Graphics	Graphic resolution : 1920 x 1080 Output resolution : 3840 x 2160 (Scale up from graphic processing result.)	Graphic resolution : 1920 x 1080 Output resolution : 3840 x 2160 (Scale up from graphic processing result.)	Graphic resolution : 1920 x 1080 Output resolution : 3840 x 2160 (Scale up from graphic processing result.)
		Storage (FDM)	8GB (3.88GB Occupied by O/S, 4.12GB Available)	8GB (3.88GB Occupied by O/S, 4.12GB Available)	8GB (3.88GB Occupied by O/S, 4.12GB Available)
		Multimedia	*Video Decoder : MPEG-1/2/4, H.263, H.264/AVC, UHD H.264/AVC, VC-1, AVS+, HEVC, JPEG, PNG, VP8, VP9 *Audio Decoder : AC3 (DD), MPEG	*Video Decoder : MPEG-1/2/4, H.263, H.264/AVC, UHD H.264/AVC, VC-1, AVS+, HEVC, JPEG, PNG, VP8, VP9 *Audio Decoder : AC3 (DD), MPEG	*Video Decoder : MPEG-1/2/4, H.263, H.264/AVC, UHD H.264/AVC, VC-1, AVS+, HEVC, JPEG, PNG, VP8, VP9 *Audio Decoder : AC3 (DD), MPEG
		IO Ports	USB 2.0	USB 2.0	USB 2.0
		Operating System	Tizen 4.0 (VDLinux)	Tizen 4.0 (VDLinux)	Tizen 4.0 (VDLinux)
Certification	Safety	60950-1	60950-1	60950-1	
	EMC	Class B	Class B	Class B	
	Environment	ENERGY STAR 8.0, Epeat	ENERGY STAR 8.0, Epeat	ENERGY STAR 8.0, Epeat	
	Security	802.1x(WPA2 Enterprise) : EAP-TLS, EAP-TTLS, EAP-PEAP	802.1x(WPA2 Enterprise) (201-) : EAP-TLS, EAP-TTLS, EAP-PEAP	802.1x(WPA2 Enterprise) : EAP-TLS, EAP-TTLS, EAP-PEAP	
Accessories	Included	Quick Setup Guide, Warranty Card, Power Cord, Remote Controller, Batteries	Quick Setup Guide, Warranty Card, Power Cord, Remote Controller, Batteries	Quick Setup Guide, Warranty Card, Power Cord, Remote Controller, Batteries	
	Optional	Stand	STN-L4355F	STN-L4355F	STN-L4355F
		Mount	WMN4070SE (Land Only) WMN750ME	WMN4070SE (Land Only) WMN750ME	WMN4070SE (Land Only) WMN750ME
		Specialty	CML400XK	CML400XK	CML400XK
		Media Player	N/A	N/A	N/A

# Specifications

Model			QB65R-B	QB75R-B	QB85R-B
Panel	Diagonal Size	Class	65	75	85
		Measured	64.5	74.5	84.5
	Type	Edge LED BLU	Edge LED BLU	Edge LED BLU	
	Resolution	UHD (3840 x 2160)	UHD (3840 x 2160)	UHD (3840 x 2160)	
	Pixel Pitch (mm)	0.372 x 0.372	0.42975 x 0.42975	0.4875 x 0.4875	
	Active Display Area	1428.48 (H) x 803.52 (V)	1650.24 (H) x 928.26 (V)	1872.0(H) x 1053.0(V)	
	Brightness (Typ.)	350	350	350	
	Contrast Ratio (Typ.)	4000:1	4000:1	4000:1	
	Viewing Angle (H/V)	178/178	178/178	178/178	
	Response Time (G to G)	8ms(Typ.)	8ms(Typ.)	8ms(Typ.)	
	Display Colors	16.7M(True Display) 1.07B(Ditherd10bit)	16.7M(True Display) 1.07B(Ditherd10bit)	16.7M(True Display) 1.07B(Ditherd10bit)	
	Color Gamut	92% (DCI-P3, CIE1976)	92% (DCI-P3, CIE1976)	92% (DCI-P3, CIE1976)	
	Operation Hour	16/7	16/7	16/7	
	Display	Haze	2%	2%	2%
Dynamic C/R		MEGA	MEGA	MEGA	
H-Scanning Frequency		30 ~ 81kHz	30 ~ 81kHz	30 ~ 81kHz	
V-Scanning Frequency		48 ~ 75Hz	48 ~ 75Hz	48 ~ 75Hz	
Sound	Maximum Pixel Frequency	594MHz	594MHz	594MHz	
	Speaker Type	Built in Speaker(10W + 10W)	Built in Speaker(10W + 10W)	Built in Speaker(10W + 10W)	
Connectivity	INPUT	RGB	DVI-D	DVI-D	DVI-D
		VIDEO	HDMI 2.0 (2)	HDMI 2.0 (2)	HDMI 2.0 (2)
		HDCP	HDCP 2.2	HDCP 2.2	HDCP 2.2
		AUDIO	Stereo Mini Jack, DVI/HDMI/Audio(Common)	Stereo Mini Jack, DVI/HDMI/Audio(Common)	Stereo Mini Jack, DVI/HDMI/Audio(Common)
	OUTPUT	USB	USB 2.0 x 2	USB 2.0 x 2	USB 2.0 x 2
		RGB	N/A	N/A	N/A
		VIDEO	N/A	N/A	N/A
		AUDIO	Stereo Mini Jack	Stereo Mini Jack	Stereo Mini Jack
		Power Out	N/A	N/A	N/A
		USB	N/A	N/A	N/A
	EXTERNAL CONTROL	RS232C(in/out) thru stereo jack, RJ45	RS232C(in/out) thru stereo jack, RJ45	RS232C(in/out) thru stereo jack, RJ45	
	EXTERNAL SENSOR	IR	IR	IR	
Tuner	N/A	N/A	N/A		
Power	Type	Internal	Internal	Internal	
	Power Supply	AC100 - 240 V, 50/60 Hz	AC100 - 240 V, 50/60 Hz	AC100 - 240 V, 50/60 Hz	
	Power Consumption	Max [W/h]	181.5	231	198
		Typical [W/h]	128	150	143
		Rating [W/h]	165	210	180
		BTU (Max)	618.9	787.7	675.2
		Sleep mode	0.5	0.5	0.5
Off mode	N/A	N/A	N/A		
Mechanical Spec	Dimension (mm)	Set	1453.9 x 831.0 x 46.3	1681.1 x 960.1 x 49.7	1897.8 x 1080.8 x 56.7
		Package	1611 x 973 x 185	1871 x 1127 x 223	2090 x 1247 x 260
	Weight (kg)	Set	24.9	38.3	48.4
		Package	33.3	49	63.7
	VESA Mount	400 X 400	400 X 400	600 X 400	
	Protection Glass	N/A	N/A	N/A	
	Stand Type	No	No	N/A	
Bezel Width (Top/Side/Bot) (mm)	9.2mm(U/L/R), 11.2mm(B)	11.5mm(U/L/R), 12.5mm(B)	10.9mm(U/L/R), 12.9mm(B)		
Operation	Operating Temperature	0°C - 40°C	0°C - 40°C	0°C - 40°C	
	Humidity	10 ~ 80%	10 ~ 80%	10 ~ 80%	
Feature	Key	UHD Signage Display Slim & Light Signage with Built-in MagicInfo S6, S5SP 6.0	UHD Signage Display Slim & Light Signage with Built-in MagicInfo S6, S5SP 6.0	UHD Signage Display Slim & Light Signage with Built-in MagicInfo S6, S5SP 6.0	
	Orientation	Landscape / Portrait	Landscape / Portrait	Landscape / Portrait	
	Special	H/W	Temperature Sensor/Pivot Display, Clock Battery(168hrs Clock Keeping), Built in Speaker(10W 2ch), IP5x Rating, Wi-Fi	Temperature Sensor/Pivot Display, Clock Battery(168hrs Clock Keeping), Built in Speaker(10W 2ch), IP5x Rating, Wi-Fi	Temperature Sensor/Pivot Display, Clock Battery(168hrs Clock Keeping), Built in Speaker(10W 2ch), IP5x Rating, Wi-Fi
		S/W	Auto Source Switching & Recovery, LFD Home UI, Button Lock, Hot key option, Plug&Play (Initial Setting)	Auto Source Switching & Recovery, LFD Home UI, Button Lock, Hot key option, Plug&Play (Initial Setting)	Auto Source Switching & Recovery, LFD Home UI, Button Lock, Hot key option, Plug&Play (Initial Setting)
	Internal Player (Embedded H/W)	Processor	Cortex A72 1.7GHz Quad-Core CPU	Cortex A72 1.7GHz Quad-Core CPU	Cortex A72 1.7GHz Quad-Core CPU
		On-Chip Cache Memory	L1 Instruction Cache : 48KB L1 Data Cache : 32KB L2 Cache : 2MB	L1 Instruction Cache : 48KB L1 Data Cache : 32KB L2 Cache : 2MB	L1 Instruction Cache : 48KB L1 Data Cache : 32KB L2 Cache : 2MB
		Clock Speed	1.7GHz	1.7GHz	1.7GHz
		Main Memory Interface	2.5GB LPDDR4 1.5GHz 64bit	2.5GB LPDDR4 1.5GHz 64bit	2.5GB LPDDR4 1.5GHz 64bit
		Graphics	Graphic resolution : 1920 x 1080 Output resolution : 3840 x 2160 (Scale up from graphic processing result.)	Graphic resolution : 1920 x 1080 Output resolution : 3840 x 2160 (Scale up from graphic processing result.)	Graphic resolution : 1920 x 1080 Output resolution : 3840 x 2160 (Scale up from graphic processing result.)
		Storage (FDM)	8GB (3.88GB Occupied by O/S, 4.12GB Available)	8GB (3.88GB Occupied by O/S, 4.12GB Available)	8GB (3.88GB Occupied by O/S, 4.12GB Available)
		Multimedia	*Video Decoder : MPEG-1/2/4, H.263, H.264/AVC, UHD H.264/AVC, VC-1, AVS+, HEVC, JPEG, PNG, VP8, VP9 *Audio Decoder : AC3 (DD), MPEG	*Video Decoder : MPEG-1/2/4, H.263, H.264/AVC, UHD H.264/AVC, VC-1, AVS+, HEVC, JPEG, PNG, VP8, VP9 *Audio Decoder : AC3 (DD), MPEG	*Video Decoder : MPEG-1/2/4, H.263, H.264/AVC, UHD H.264/AVC, VC-1, AVS+, HEVC, JPEG, PNG, VP8, VP9 *Audio Decoder : AC3 (DD), MPEG
		IO Ports	USB 2.0	USB 2.0	USB 2.0
		Operating System	Tizen 4.0 (VDLinux)	Tizen 4.0 (VDLinux)	Tizen 4.0 (VDLinux)
Certification		Safety	60950-1	60950-1	60950-1
	EMC	Class B	Class B	Class A	
	Environment	ENERGY STAR 8.0, Epeat	ENERGY STAR 8.0, Epeat	N/A	
	Security	802.1x(WPA2 Enterprise) : EAP-TLS, EAP-TTLS, EAP-PEAP	802.1x(WPA2 Enterprise) : EAP-TLS, EAP-TTLS, EAP-PEAP	802.1x(WPA2 Enterprise) (201-) : EAP-TLS, EAP-TTLS, EAP-PEAP	
Accessories	Included	Quick Setup Guide, Warranty Card, Power Cord, Remote Controller, Batteries	Quick Setup Guide, Warranty Card, Power Cord, Remote Controller, Batteries	Quick Setup Guide, Warranty Card, Power Cord, Remote Controller, Batteries	
	Optional	Stand	-	-	-
		Mount	WMN4277SE (Land Only) WMN750ME	WMN4277SE (Land Only) WMN6575SE	WMN8200SF / WMN8200SG
		Specialty	CML450K	CML450K	-
		Media Player	N/A	N/A	N/A

## **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](https://news.samsung.com).

## **Smart Signage**

For more information about Samsung Smart Signage QBR-B series Displays, visit [www.samsung.com/business](https://www.samsung.com/business) or [www.samsung.com/displaysolutions](https://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

2021-10