

## Samsung SMART Signage QMR Series

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

Through intelligent UHD upscaling technology, Samsung's QMR series performs edge restoration and noise reduction to deliver UHD picture quality even with lower resolution content. As an added benefit, the QMR series also features reliable, non-glare panels that provide better visibility from all angles. Backed by Tizen 4.0, the QMR series 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 innovative UHD upscaling technology and unique picture-enhancing features
- Dynamic Crystal Color allows viewers to enjoy a wider spectrum of colors, up to one billion shades
- New symmetrical, slim design simplifies installation and complements any environment.
- Secure, PC-free operation through Knox and rigid three-layer protection
- Reliable, non-glare panels provide better visibility from all angles, anytime of day allowing businesses to deliver accurate information 24/7.

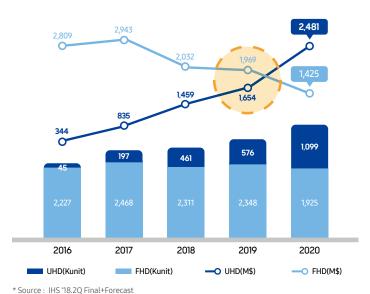


## Industry trend

With visual display technology improving across devices, viewers have developed an ever-growing expectation for better picture quality. Additionally, the market has been flooded with a wide variety of color techologies and it's becoming increasingly important for businesses to have rich and vivid display capabilities. As UHD resolution continues to grow in popularity, it is essential for businesses to deliver superb picture quality for their customers. Low quality displays and signage can create negative perceptions of a business. While much content is still being produced at a lower resolution, through Intelligent UHD upscaling technology, Samsung's QMR series is able to upscale the low resolution content to UHD picture quality.

# UHD digital signage portion 2017 2021

#### UHD resolution is must-have feature in the future UHD sales forecasted to exceed FHD in 2019



\* Source : IHS '18.20 Final+Forecast(\$)]

Consumer TVs, along with Commercial Lite and Hospitality TVs used for signage are excluded.

## Why Samsung's QMR series?

Samsung's superior visual display technology has positioned them as the industry leader in the digital signage market for a decade<sup>1</sup> and Samsung brand having been No.1 in sales for 12 consecutive years in TV by IHS Markit<sup>2</sup>. As an expert in picture quality in the display industry, Samsung is able to deliver best-in-class picture quality through their new QMR series. The signage provides rich and flawless colors, sleek and durable design, powerful performance through SSSP 6 and secured protection. Its reliable, non-glare panels provide better visibility from all angles, allowing businesses to deliver important information 24/7. Samsung's QMR 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.

1 Results based on IHS Technology 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.

2 Results based on IHS Markit, Technology Group, TV Sets Intelligence Service – Premium, Annual Unit and Annual Revenue Basis, 2006 – 2017.

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<sup>\*</sup> Note : Standalone digital signage only

## **Key features**



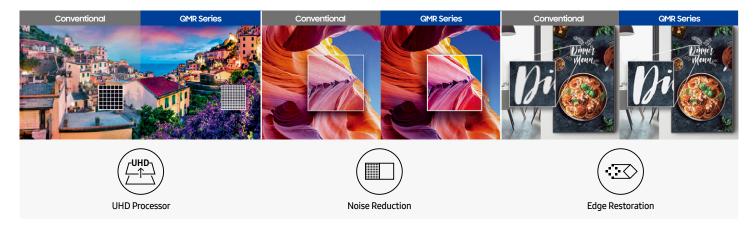
#### Incredible 4K picture quality

Samsung's new QMR 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.



#### Perfect view with non-glare display

When clear visibility is essential, the QMR series incorporates key features including up to 500 nit brightness and reliable, non-glare panels that provide better visibility from all angles, anytime of day. The display is ideal for locations such as airports and commuter stations where 24/7 access to clear and accurate information is crucial.



#### Intelligent UHD upscaling

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 Color**

Dynamic Crystal Color 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 QMR 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 QMR 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 QMR series will stand the test of time.



#### Samsung Workspace secured by Knox

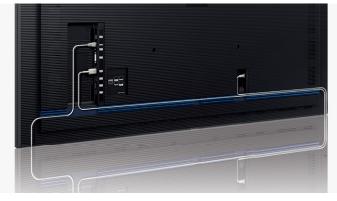
Samsung Workspace is a powerful new feature fortified by proprietary Knox security technology allowing users to create an enhanced virtual collaboration workspace without needing a PC in the room, or any physical connection. Simply connect a keyboard and mouse to the display and immediately get to work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

\* Samsung Workspace feature support may vary by region and market conditions.
\* The scheduled availability of this feature varies by model.



#### Wi-Fi and Bluetooth built-in

The QMR series features a nearly endless range of business use-cases thanks to built-in Wi-Fi and Bluetooth. Wireless connectivity allows for personalized and interactive services including enabling integration with beacon technology in store, while also simplifying how businesses showcase content.



#### **Clean cable management**

In a corporate or retail environment, the back of a display is often visible to customers. With the QMR 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.



#### 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

QMR 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.

<sup>\*</sup> Image is for illustrative purposes only, specific application or program may have to be developed for the depicted usage scenario.

## Specifications

	Model		QM43R	QM49R	QM55R	QM65R	QM75R
	Diagonal Size	Class	43	49	55	65	75
		Measured	42.5	48.5	54.6	64.5	74.5
	Туре		Edge LED BLU				
	Resolution		UHD (3840 x 2160)				
	Pixel Pitch (mm)		0.2451 x 0.2451	0.093 x 0.279	0.105 x 0.315	0.372 x 0.372	0.42975 x 0.42975
	Active Display Area		941.184 (H) x 529.416 (V)	1073.78(H) x 604.00(V)	1209.6(H) x 680.4(V)	1428.48 (H) x 803.52 (V)	1650.24 (H) x 928.26 (V)
Panel	Brightness(Typ.) Contrast Ratio (Typ.)		500 4000:1	500 4000:1	500 4000:1	500 4000:1	500 4000:1
	Viewing Angle(H/V)		178/178	178/178	178/178	178/178	178/178
	Response Time (G to G)		8ms(Typ.)	8ms(Typ.)	8ms(Typ.)	8ms(Typ.)	8ms(Typ.)
	Display Colors		16.7M	16.7M	16.7M	16.7M	16.7M
	ColorGamut		92%	92%	92%	92%	92%
	Operation Hour		24/7	24/7	24/7	24/7	24/7
	Haze		44%	25%	25%	25%	44%
Display	Dynamic C/R		MEGA	MEGA	MEGA	MEGA	MEGA
	H-Scanning Frequency V-Scanning Frequency Maximum Pixel Frequency Speaker Type		30 ~ 81kHZ				
			48~75HZ	48~75HZ	48~75HZ	48 ~ 75HZ	48 ~ 75HZ
Sound			594MHz	594MHz	594MHz	594MHz	594MHz
Souriu	эреакегтуре	RGB	Built in Speaker(10W +10W) DVI-D, Display Port 1.2 (1)	Built in Speaker(10W +10W) DVI-D, Display Port1.2 (1)	Built in Speaker(10W + 10W) DVI-D, Display Port 1.2 (1)	Built in Speaker(10W + 10W) DVI-D, Display Port 1.2 (1)	Built in Speaker(10W + 10W) DVI-D, Display Port 1.2 (1)
Connectivity	INPUT	VIDEO	HDMI 2.0 (2)				
		HDCP	HDCP2.2	HDCP2.2	HDCP2.2	HDCP22	HDCP 2.2
		AUDIO	Stereo Mini Jack, DVI, HDMI				
		USB	USB 2.0 x 2				
	OUTPUT	RGB	HDMI 2.0 (Loop-out)				
		VIDEO	N/A	N/A	N/A	N/A	N/A
		AUDIO	Stereo Mini Jack				
		Power Out	N/A	N/A	N/A	N/A	N/A
		USB	N/A	N/A	N/A	N/A	N/A
	EXTERNAL CONTRO	L	RS232C(in/out) thru stereo jack, RJ45				
	EXTERNALSENSOR		IR N/A	IR N/A	IR N/A	IR N/A	IR N/A
	Tuner Type		Internal	Internal	Internal	Internal	Internal
Power	Power Supply		AC100 - 240 V~ (+/-10 %), 50/60 Hz	AC100 - 240 V~ (+/-10 %), 50/60 Hz	AC100 - 240 V~ (+/-10 %), 50/60 Hz	AC100 - 240 V~ (+/-10 %), 50/60 Hz	AC100 - 240 V~ (+/- 10 %), 50/60 Hz
	Power Consumption	Max[W/h]	110	138	143	181.5	231
		Typical[W/h]	74	103	108	131	178
		Rating[W/h]	100	125	130	165	210
		BTU(Max)	375.1	470.6	487.6	618.9	787.7
		Sleep mode	0.5	0.5	0.5	0.5	0.5
		Off mode	N/A	N/A	N/A	N/A	N/A
Mechanical Spec	Dimension(mm)	Set Package	967.5 x 557.7 x 48.3 1095 x 676 x 151	1099.2 x 631.5 x 46.3 1247 x 772 x 152	1235.1 x 707.9 x 46.3 1402 x 858 x 163	1453.9 x 831.0 x 46.3 1611 x 973 x 185	1681.1 x 960.1 x 49.7 1871 x 1127 x 223
		Set	10	13.5	1402 X 858 X 105	24.9	38.3
	Weight (kg)	Package	13.3	18	23.6	33.3	49
	VESA Mount	5	200 X 200	200 X 200	200 X 200	400 X 400	400 X 400
	Protection Glass		N/A	N/A	N/A	N/A	N/A
	Stand Type		Foot Stand (Optional)	Foot Stand (Optional)	Foot Stand (Optional)	No	No
	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)	9.2mm(U/L/R),11.2mm(B)	11.5mm(U/L/R),12.5mm(B)
Operation	Operating Temperature		0°C~ 40°C				
	Humidity		10~80%	10~80%	10~80%	10~80%	10~80%
Feature	Key		UHD Signage Display Slim & Light Signage with Built-in MagicInfo S6, SSSP 6.0	UHD Signage Display Slim & Light Signage with Built-in MagicInfo S6, SSSP 6.0	UHD Signage Display Slim & Light Signage with Built-in MagicInfo S6, SSSP 6.0	UHD Signage Display Slim & Light Signage with Built-in MagicInfo S6, SSSP 6.0	UHD Signage Display Slim & Light Signage with Built-in MagicInfo S6, SSSP 6.0
	Special	H/W	Temperature Sensor, Pivot Display, Clock Battery (168hrs Clock Keeping), Built in Speaker (10W 2ch), Video	Temperature Sensor, Pivot Display, Clock Battery (168hrs Clock Keeping), Built in Speaker (10W 2ch), Video	Temperature Sensor, Pivot Display, Clock Battery (168hrs Clock Keeping), Built in Speaker (10W 2ch), Video	Temperature Sensor, Pivot Display, Clock Battery (168hrs Clock Keeping), Built in Speaker (10W 2ch), Video	Temperature Sensor, Pivot Display, Clock Battery (168hrs Clock Keeping), Built in Speaker (10W 2ch), Video
			Wall Daisy Chain(HDCP2.2:4EA,HD- CP1.4:7EA), IP5x Rating, Wi-Fi/BT Auto Source Switching & Recovery,	Wall Daisy Chain(HDCP2.2:4EA,HD- CP1.4:7EA), IP5x Rating, Wi-Fi/BT Auto Source Switching & Recovery,	Wall Daisy Chain(HDCP2.2:4EA,HD- CP1.4:7EA), IP5x Rating, Wi-Fi/BT Auto Source Switching & Recovery,	Wall Daisy Chain(HDCP2.2:4EA,HD- CP1.4:7EA), IP5x Rating, Wi-Fi/BT Auto Source Switching & Recovery,	Wall Daisy Chain(HDCP2.2:4EA,HD- CP1.4:7EA), IP5x Rating, Wi-Fi/BT Auto Source Switching & Recovery,
		S/W	LFD Home UI, Button Lock, Hot key				
		Processor	option, Plug&Play (Initial Setting) Coretex A721.7GHz Quad-Core CPU				
	"Internal Player (Embedded H/W)"	On-Chip	L1 Instruction Cache : 48KB				
		Cache Memory	L1 Data Cache : 32KB L2 Cache : 2MB	L1 Data Cache : 32KB L2 Cache : 2MB	L1 Data Cache : 32KB L2 Cache : 2MB	L1 Data Cache : 32KB L2 Cache : 2MB	L1 Data Cache : 32KB L2 Cache : 2MB
		Clock Speed	1.7GHz	L2 Cache : 2MB 1.7GHz	1.7GHz	1.7GHz	1.7GHz
		Main					
		Memory Interface	2.5GB LPDDR41.5GHz 64bit				
		Graphics	Graphic resolution : 1920x1080 Output resolution : 3840x2160 (Scale	Graphic resolution : 1920x1080 Output resolution : 3840x2160 (Scale	Graphic resolution : 1920x1080 Output resolution : 3840x2160 (Scale	Graphic resolution : 1920x1080 Output resolution : 3840x2160 (Scale	Graphic resolution : 1920x1080 Output resolution : 3840x2160 (Scale
		Storage (FDM)	up from graphic processing result.) 8GB (3.88GB Occupied by O/S, 4.12GB Available)	up from graphic processing result.) 8GB (3.88GB Occupied by O/S, 4.12GB Available)	up from graphic processing result.) 8GB (3.88GB Occupied by O/S, 4.12GB Available)	up from graphic processing result.) 8GB (3.88GB Occupied by O/S, 4.12GB Available)	up from graphic processing result.) 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 *Au- dio 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 *Au- dio 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 *Au- dio 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 *Au- dio 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 *Au- dio Decoder : AC3 (DD), MPEG
		IO Ports	USB 2.0				
		Operating System	Tizen 4.0 (VDLinux)				
	Safety		60950-1	60950-1	60950-1	60950-1	60950-1
Certification	EMC		Class B				
Accessories	Environment Included		ENERGY STAR 7.0 (USA) Quick Setup Guide, Warranty Card, Power Cord, Remote Controller, Batteries	ENERGY STAR 7.0 (USA) Quick Setup Guide, Warranty Card, Power Cord, Remote Controller, Batteries	ENERGY STAR 7.0 (USA), Epeat Quick Setup Guide, Warranty Card, Power Cord, Remote Controller, Batteries	ENERGY STAR 7.0 (USA), Epeat Quick Setup Guide, Warranty Card, Power Cord, Remote Controller, Batteries	ENERGY STAR 7.0 (USA), Epeat Quick Setup Guide, Warranty Card, Power Cord, Remote Controller, Batteries
	Stand		STN-L4355F	STN-L4355F	STN-L4355F	No	No
	Optional	Mount	WMN4070SE	WMN4070SE	WMN4070SE	WMN4277SE	WMN4277SE
							WMN6575SE
		Specialty Media Player	CML400XK N/A	CML400XK N/A	CML400XK N/A	CLM450K N/A	CLM450K N/A
		. icalu i tayel	11/7	11/75	19/75	13/75	11/73

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#### **SMART Signage**

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

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