



Flight Information

Gates B11-B13 →

The display is divided into several sections. On the left, there's a 'DUTY FREE' advertisement for 'LOER' featuring a woman. The main part of the display is a flight information board with columns for 'Departures' and 'Arrivals' at different times (09:00, 09:30, 09:00, 09:30). Each section includes a table with columns for TIME, FLIGHT, DESTINATION, GATE, and REMARKS. On the right, there's another 'DUTY FREE' advertisement for 'LOER' featuring a woman and a product bottle.

Samsung SMART Signage QHR Series

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

Through intelligent UHD upscaling technology, Samsung's QHR series performs edge restoration and noise reduction to deliver UHD picture quality even with lower resolution content. As an added benefit, the QHR series also features reliable, non-glare panels that provide better visibility from all angles. Backed by Tizen 4.0, the QHR series provides reinforced capability with multiple web formats and secured protection. Additionally, its new slim design simplifies wall mounting and ensures seamless installation.

Highlights

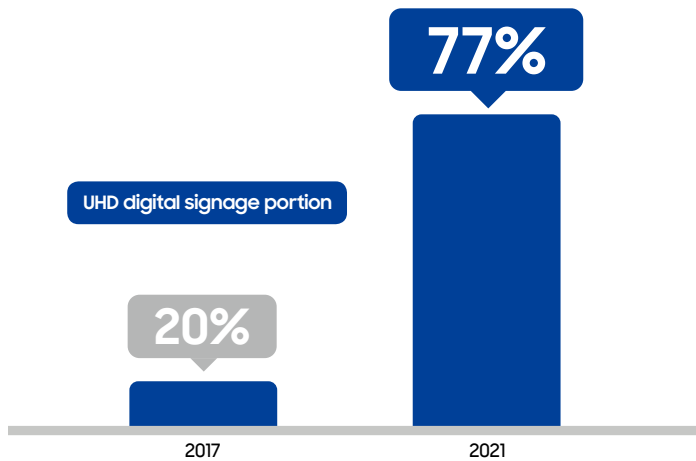
- Engage audiences with eye-catching 700 nit brightness and ultra-high-definition resolution.
- Deliver UHD-level picture quality even with lower resolution content through innovative UHD upscaling technology and unique picture-enhancing features.
- Dynamic Crystal Color allows viewers to enjoy a wider 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.

SAMSUNG

Industry trend

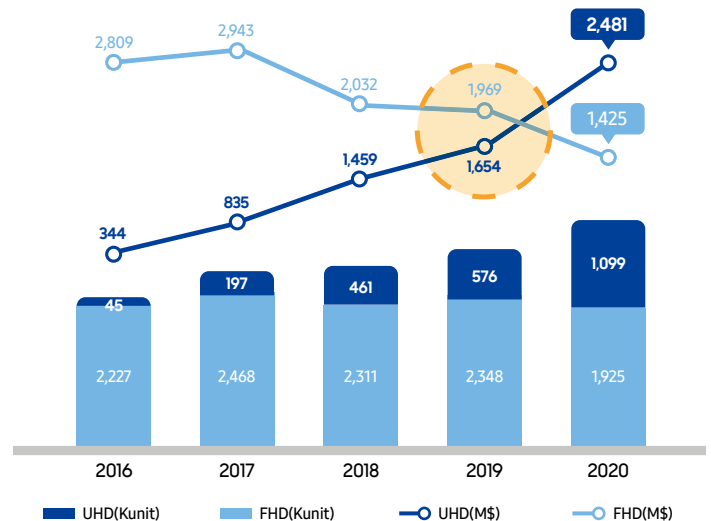
With visual display technology improving across devices, viewers have developed an ever-growing expectation for better picture quality. Additionally, the market has been flooded with a wide variety of color technologies and it's becoming increasingly important for businesses to have rich and vivid display 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 QHR series is able to upscale the low resolution content to UHD picture quality.

UHD resolution is must-have feature in the future



* Source : IHS '18.2Q Final+Forecast(\$)

UHD sales forecasted to exceed FHD in 2019



* Source : IHS '18.2Q Final+Forecast

* Note : Standalone digital signage only

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

Why Samsung's QHR series?

Samsung's superior visual display technology has positioned them as an industry leader in the digital signage market for a decade. Samsung has also been the top selling TV brand for 12 consecutive years according to IHS Markit. As the leader in the visual display industry, Samsung delivers best-in-class picture quality and the QHR series is no exception. The displays provide 700 nit brightness, rich and flawless colors, sleek and durable design, powerful performance through SSSP 6 and secure protection. Its reliable, non-glare panels provide better visibility from all angles, allowing businesses to deliver important information 24/7.

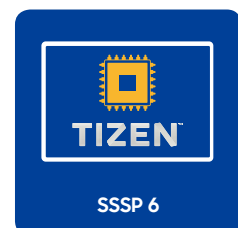
Samsung's QHR series is also able to upscale low-resolution content to UHD quality. For commercial displays, this technology advancement means highly visible signage with unmatched accuracy to help capture the attention of potential customers. It also means savings both in cost and time, as businesses can produce content at a lower cost and resolution and still display it in stunning UHD quality.

1 Results based on IHS Technology report "Public Displays Market Tracker", 2009 – 2018.

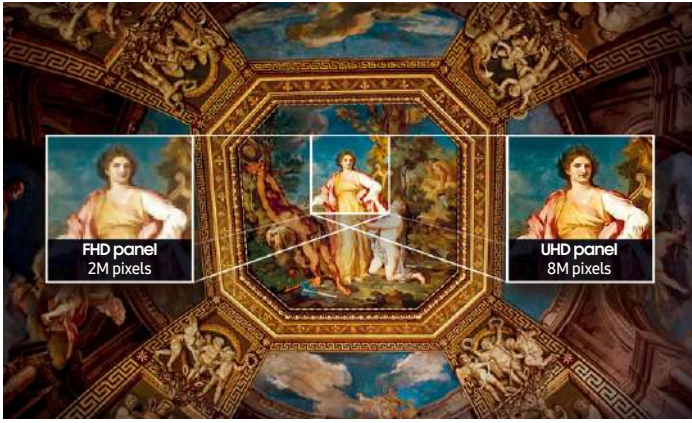
Information is not an endorsement of Samsung. Any reliance on these results is at the third party's own risk.

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

Information is not an endorsement of Samsung. Any reliance on these results is at the third party's own risk. Visit www.technology.ih.com for more details.



Key features



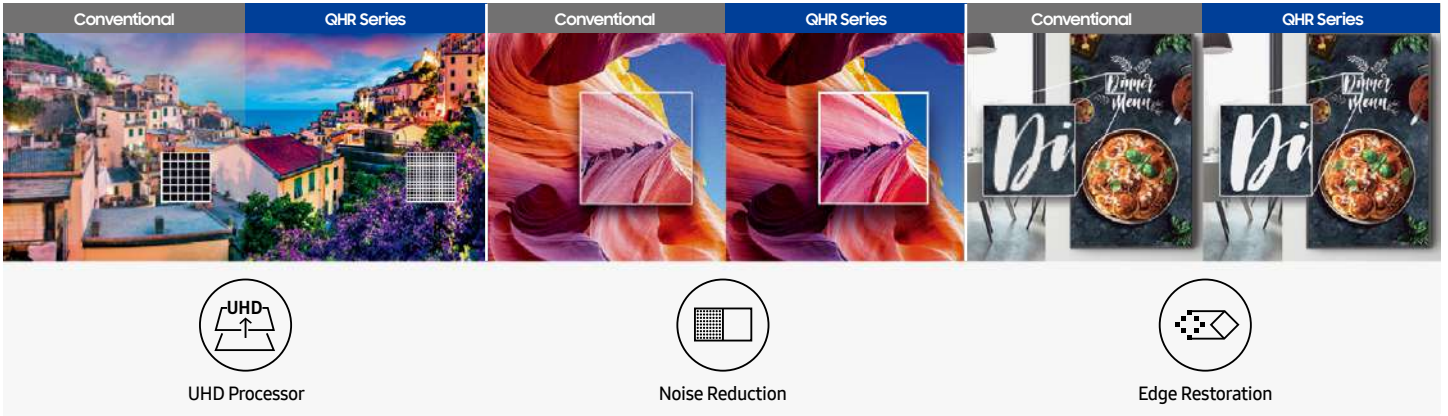
Incredible 4K picture quality

Samsung's new QHR 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.



High visibility with eye-catching brightness

Samsung's QHR series features brilliant image presentation with an impressive 700 nit brightness allowing businesses to deliver clear information 24/7. The display's non-glare panels provide better visibility regardless of ambient light, ensuring critical information is always visible.



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

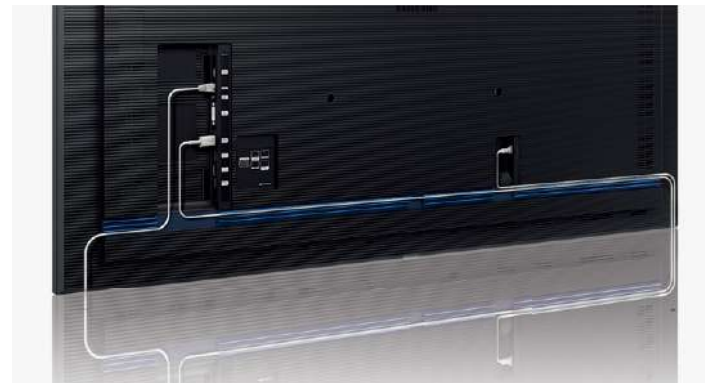
Dynamic Crystal Color is what brings the incredible, lifelike color to Samsung displays. Using 10-bit processing, the displays are able to showcase a wider spectrum of colors — up to a billion different shades — capturing subtle differences for flawless color expression, critical to businesses in ensuring brand consistency across communication channels. The QHR 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 QHR 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 QHR 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 QHR 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.

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



Powerful, all-in-one solution

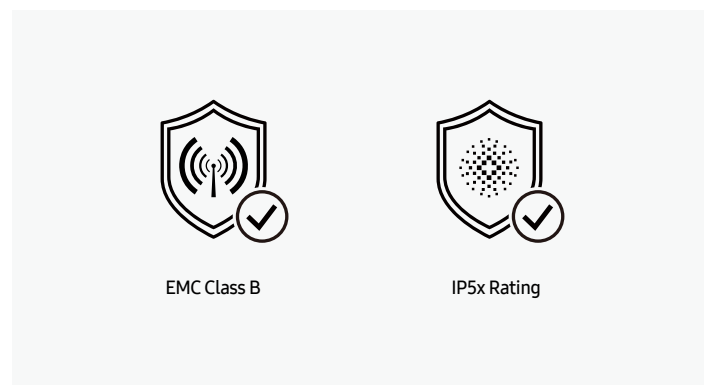
The Samsung SMART Signage Platform (SSSP) is an open-source, all-in-one solution embedded in Samsung SMART signage that simplifies installation and maintenance. With SSSP, there is no need for any external devices to communicate with the server or play digital media enjoying easy development, reinforced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



Wi-Fi and Bluetooth built-in

The QHR 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.

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



Industry standard certified

QHR 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. Additionally, IP5x rating ensures durable performance even in dusty environments.

Specifications

Model			QH43R	QH49R	QH55R	QH65R	QH75R
Panel	Diagonal Size	Class	43	49	55	65	75
		Measured	42.5	48.5	54.6	64.5	74.5
	Type	Edge LED BLU	Edge LED BLU	Edge LED BLU	Edge LED BLU	Edge LED BLU	
	Resolution	UHD (3840 x 2160)	UHD (3840 x 2160)	UHD (3840 x 2160)	UHD (3840 x 2160)	UHD (3840 x 2160)	
	Pixel Pitch (mm)	0.2451 x 0.2451	0.279 x 0.279	0.315 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)	
	Brightness(Typ.)	700	700	700	700	700	
	Contrast Ratio (Typ.)	4000:1	4000:1	4000:1	4000:1	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(True Display) 1.07B(Dithered 10bit)	16.7M(True Display) 1.07B(Dithered 10bit)	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, CIE 1976)	92% (DCI-P3, CIE 1976)	92% (DCI-P3, CIE 1976)	92% (DCI-P3, CIE 1976)	92% (DCI-P3, CIE 1976)	
	Operation Hour	24/7	24/7	24/7	24/7	24/7	
	Display	Haze	44%	25%	25%	25%	44%
Dynamic C/R		MEGA	MEGA	MEGA	MEGA	MEGA	
V-Scanning Frequency		30 ~ 81KHZ	30 ~ 81KHZ	30 ~ 81KHZ	30 ~ 81KHZ	30 ~ 81KHZ	
H-Scanning Frequency		48 ~ 75HZ	48 ~ 75HZ	48 ~ 75HZ	48 ~ 75HZ	48 ~ 75HZ	
Sound	Maximum Pixel Frequency	594MHz	594MHz	594MHz	594MHz	594MHz	
	Speaker Type	Built in Speaker(10W+10W)	Built in Speaker(10W+10W)	Built in Speaker(10W+10W)	Built in Speaker(10W+10W)	Built in Speaker(10W+10W)	
Connectivity	INPUT	RGB	DVI-D, Display Port 1.2 (1)	DVI-D, Display Port 1.2 (1)	DVI-D, Display Port 1.2 (1)	DVI-D, Display Port 1.2 (1)	DVI-D, Display Port 1.2 (1)
		VIDEO	HDMI 2.0 (2)	HDMI 2.0 (2)	HDMI 2.0 (2)	HDMI 2.0 (2)	HDMI 2.0 (2)
		HDCP	HDCP2.2	HDCP2.2	HDCP2.2	HDCP2.2	HDCP2.2
		AUDIO	Stereo mini Jack, DVI, HDMI	Stereo mini Jack, DVI, HDMI	Stereo mini Jack, DVI, HDMI	Stereo mini Jack, DVI, HDMI	Stereo mini Jack, DVI, HDMI
		USB	USB 2.0 x 2	USB 2.0 x 2	USB 2.0 x 2	USB 2.0 x 2	USB 2.0 x 2
	OUTPUT	RGB	HDMI 2.0 (Loop-out)	HDMI 2.0 (Loop-out)	HDMI 2.0 (Loop-out)	HDMI 2.0 (Loop-out)	HDMI 2.0 (Loop-out)
		VIDEO	N/A	N/A	N/A	N/A	N/A
		AUDIO	Stereo mini Jack	Stereo mini Jack	Stereo mini Jack	Stereo mini Jack	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 CONTROL	RS232C(in/out) thru stereo jack, RJ45	RS232C(in/out) thru stereo jack, RJ45	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	IR	IR	
	Tuner	N/A	N/A	N/A	N/A	N/A	
	Power	Type	Internal	Internal	Internal	Internal	Internal
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]	138	143	160	204	314
		Typical[W/h]	96	99	118	150	247
		Rating[W/h]	125	130	145	185	285
		BTU(Max)	470.6	487.6	545.6	695.6	1070.7
		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	9675 x 5577 x 48.3	10992 x 6315 x 46.3	12351 x 7079 x 46.3	14539 x 8310 x 46.3	16811 x 9601 x 49.7
		Package	1095 x 676 x 151	1247 x 772 x 152	1402 x 858 x 163	1611 x 973 x 185	1871 x 1127 x 223
	Weight (kg)	Set	10	13.5	18.1	24.9	38.3
		Package	13.3	18	23.6	33.3	49
	VESA Mount	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	0°C - 40°C	0°C - 40°C	0°C - 40°C	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
		H/W	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	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	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	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	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
	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)	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)
		Processor	Cortex A72 1.7GHz Quad-Core CPU	Cortex A72 1.7GHz Quad-Core CPU	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	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	1.7GHz	1.7GHz
	Internal Player (Embedded H/W)	Main Memory Interface	2.5GB LPDDR4 1.5GHz 64bit	2.5GB LPDDR4 1.5GHz 64bit	2.5GB LPDDR4 1.5GHz 64bit	2.5GB LPDDR4 1.5GHz 64bit	2.5GB LPDDR4 1.5GHz 64bit
		Graphics	Graphic resolution : 1920x1080 Output resolution : 3840x2160 (Scale up from graphic processing result.)	Graphic resolution : 1920x1080 Output resolution : 3840x2160 (Scale up from graphic processing result.)	Graphic resolution : 1920x1080 Output resolution : 3840x2160 (Scale up from graphic processing result.)	Graphic resolution : 1920x1080 Output resolution : 3840x2160 (Scale up from graphic processing result.)	Graphic resolution : 1920x1080 Output resolution : 3840x2160 (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)	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	*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	USB 2.0	USB 2.0
		Operating System	Tizen 4.0 (VDLinux)	Tizen 4.0 (VDLinux)	Tizen 4.0 (VDLinux)	Tizen 4.0 (VDLinux)	Tizen 4.0 (VDLinux)
	Certification	Safety	60950-1	60950-1	60950-1	60950-1	60950-1
		EMC	Class B	Class B	Class B	Class B	Class B
Environment		N/A	ENERGY STAR 8.0, Epeat	ENERGY STAR 8.0, Epeat	ENERGY STAR 8.0, Epeat	N/A	
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	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	CML400XK	CML400XK	CML400XK	CML450K	CML450K
		Media Player	N/A	N/A	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.

SMART Signage

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

Copyright © 2019 Samsung Electronics Co. Ltd. All rights reserved. Samsung is a registered trademark of Samsung Electronics Co. Ltd. Specifications and designs are subject to change without notice. Non-metric weights and measurements are approximate. All data were deemed correct at time of creation. Samsung is not liable for errors or omissions. All brand, product, service names and logos are trademarks and/or registered trademarks of their respective owners and are hereby recognized and acknowledged.

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

2019-10