Samsung QM105D Series SMART Signage

Display business messaging in ultra-realistic detail of 5K UHD and in unique configurations of 21:9 wide screen



Highlights

- Deliver your business messaging 16/7 in 5K Ultra-High-Definition (UHD) resolution with outstanding picture quality designed for a commercial environment
- Experience high quality UHD with DisplayPort® (DP) 1.2 that supports a 60 Hz refresh rate
- Enjoy the newly introduced 21:9 aspect ratio on a 105” screen that enables wider and broader communication and more creative screen division options
- Install the display in portrait orientation easily with pivot mode
- Display any content widely with the broadest connectivity

Bring the next generation of UHD picture quality to your commercial environment

Today’s businesses, including banks, restaurants, retailers and more, are increasingly using digital signage to engage, educate and serve their customers. Commercial digital signage usage continues to increase,[1] and, because of its ability to offer clearer text and images, UHD has become the next big thing in display technology.[2]

With the latest UHD technology, businesses can leverage the next generation of ultimate picture quality for conveying more impactful messaging and information. UHD offers ultra-realistic detail, the ability to display more information on one screen.

For commercial applications, essential features, such as portrait mode and longer operational hours, are now combined with UHD clarity for the high-end commercial display.

5K UHD provides an even wider viewing experience of 5,120x2,160 resolution which is 1,280pixels wider than normal UHD resolution. This expanded resolution provides many advantages in utilizing digital signage for business needs by combining UHD content and other information in one screen or utilizing PIP, PBP mode and templates that are provided with the software.

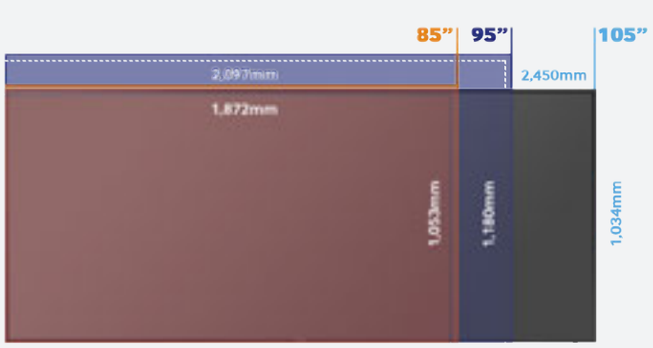


Figure 1. Size comparison of large size displays

THE NEW BUSINESS EXPERIENCE

SAMSUNG

Combine vivid, lifelike display with flexible commercial features

Display lifelike images and crisp text with a variety of media types and configurations

Samsung QM105D SMART Signage features a new design and delivers 5,120 x 2,160 resolution, multi-format PIP support, DP 1.2 support, set-back box (SBB) support, portrait or landscape orientation and reliable 16/7 operation for amazing flexibility and picture clarity in commercial settings. For example, retail stores can leverage Samsung QM105D Series with UHD to improve their brand image and showcase products in sharp detail, while corporations and arena or museum security centers can use the high-resolution displays to enhance security with stable and vivid content playback.

Attract customers and improve brand identity with UHD lifelike images and picture quality

QM105D delivers more than four times the FHD resolution on the 21:9, 105 inch screen, resulting in an accurate recreation of details. Text that displays on the QM105D in UHD is super-crisp due to its high pixel density. High-detail visuals, such as photos and videos, are made vivid and clear for a hyper-realistic and immersive visual experience.

In addition, customers can replace older video walls composed of smaller FHD displays with a single large QM105D display to eliminate the bezels and produce a seamless view of the content.

Leverage industry-leading upscale technology to ideally display various content

Because commercial UHD content display is still new within the industry, it's important for UHD displays to also deliver the range of FHD content currently in use. Samsung upscaling technology, one of the best in the industry, adjusts lower resolution content to optimally display on the UHD resolution of the QM105D display.

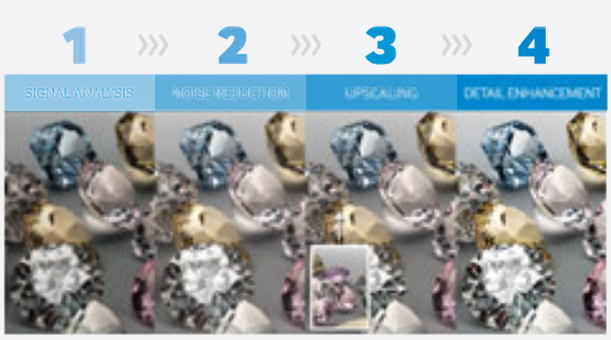


Figure 2. The ultimate details with a 4-step upscaling process, no matter what you're displaying

Display more dynamic content with various multiscreen options for greater visual impact

Now, you can provide more information through a smaller number of displays. 5K UHD offers more than four times the resolution of FHD, which means that you can display the equivalent of four FHD content screens on a single UHD panel. The QM105D features a wide array of connectivity options, including the ability to display content from four separate input devices on the same screen without the need to first merge the content on a separate PC. With QM105D Signage, no special third-party components are required.

In addition, various PIP and split-screen scenarios are possible, far beyond just four equally separated rectangles. This flexibility enables dynamic and efficient usage scenarios, such as the display of a video conferencing system on a large part of the screen, along with reference documents from a different device on another screen area for meeting attendees, or a product image display next to a specifications list in a retail store.

PIP and split-screen in portrait mode are also supported.



Figure 3. Various PIP and PBP scenarios that supports customer's creative and productive usage

Design a sleek and aesthetic display area with the new SBB

Save time for the installation options search

To save our customer's time and efforts in finding the right installation options that satisfy the required mechanical dimension and strength, QM105D Signage comes with a dedicated wall mount option which is specially designed for it.



Figure 4. Default wall mount comes with QM105D

Choose the optimal display orientation with pivot mode

To meet the demands of traditional commercial environments, digital signage is often installed in portrait mode. Thus, it is critical that the display supports portrait installation to fit to the aesthetics of the setting while still delivering the dynamic qualities of digital signage. QM105D Signage offers pivot mode that allows it to be installed in either landscape or portrait orientation to suit the environment's needs.



Figure 4. Pivot mode to fit an aesthetic setting while delivering dynamic content.

Enjoy seamless video playback with QMD support for DP 1.2

QMD Series natively supports a high 60 Hz refresh rate that ensures seamless video playback and eliminates the choppy visual experience often observed at a lower refresh rate. The QMD Series supports DP 1.2 connectivity, which is capable of streaming UHD video content at a refresh rate of 60 Hz, delivering a high quality UHD experience.

Create a streamlined display area with the Samsung SBB extension for streamed UHD content

Due to the relative novelty of UHD in commercial display settings, few media players currently offer support for UHD streaming. To meet this demand, Samsung offers the UHD playable Set Back Box(SBB) option SBB-DI, which can attach to the back of the QMD Series. The simple installation of this SBB eliminates unnecessary wire clutter and also removes the need to create separate housing for the media player.

Features and benefits

	Benefits
UHD Resolution	Delivers four times the FHD resolution, resulting in an accurate recreation of details
Industry-leading upscaling technology	Adjusts lower FHD resolution content to display optimally on the QMD Series UHD
Support various PIP and PBP scenarios	various PIP and split-screen scenarios are possible, far beyond just four equally separated rectangles. This flexibility enables dynamic and efficient usage scenarios, such as the display of a video conferencing system on a large part of the screen, along with reference documents from a different device on another screen area for meeting attendees, or a product image display next to a specifications list in a retail store
Support for pivot mode	Enables portrait installation to fit to the aesthetics of the signage area while delivering the dynamic qualities of digital signage
QMD support for DP 1.2	Ensures seamless video playback while eliminating the choppy visual experience observed at a lower refresh rate Delivers a high quality UHD experience
SBB extension for UHD content	Supports UHD streaming Simplifies installation of SBB to the back of the QMD Series, eliminating unnecessary wire clutter and the need for separate media player housing

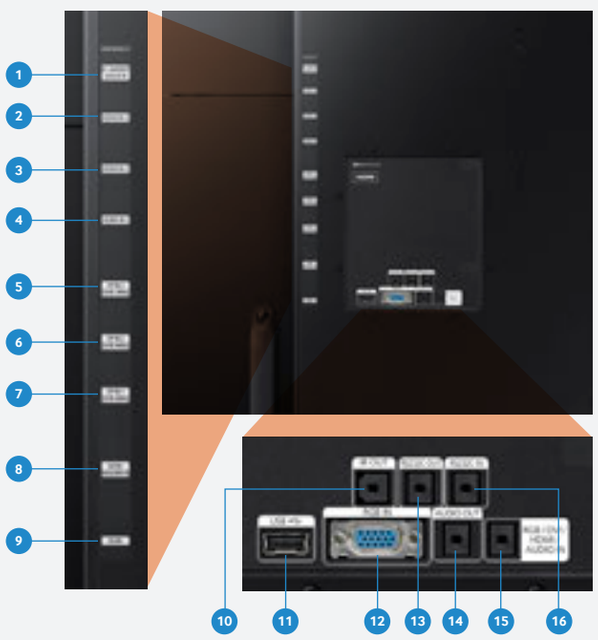
Samsung QMD Series

QMD

105"



Connectors



1. IR / AMBIENT SENSOR
2. HDMI® IN 3
3. HDMI IN 2
4. HDMI IN 1
5. DP IN 3 (UHD 30 Hz)
6. DP IN 2 (UHD 60 Hz)
7. DP IN 1 (UHD 60 Hz) / MAGICINFO®
8. DVI IN / MAGICINFO IN
9. RJ45
10. IR OUT
11. USB
12. RGB IN
13. RS-232C OUT
14. AUDIO OUT
15. RGB/DVI/HDMI/AUDIO IN
16. RS232C IN

Samsung QMD Series

Specifications

			QM105D
Panel	Diagonal Size		105"
	Type		120Hz Slim Direct LED BLU
	Resolution		5120x2160(21:9)
	Pixel Pitch (mm)		0.1595 x 0.4785 (mm)
	Active Display Area		2449.92(H) x 1033.56(V)
	Brightness(Typ.)		500nit
	Contrast Ratio (Typ.)		4000:1
	Viewing Angle(H/V)		178/178
	Response Time (G to G)		8mS(Typ.)
	Display Colors		"16.7M(True Display) 1.07B(Ditherd 10bit)"
	Color Gamut		72%
Display	Dynamic C/R		50,000:1
	H-Scanning Frequency		30 ~ 81kHZ
	V-Scanning Frequency		48 ~ 75HZ
	Maximum Pixel Frequency		148.5MHz
Sound	Speaker type		Built-in speaker (15 W + 15 W)
Connectivity	Input	RGB	D-Sub, DVI-D, DisplayPort 1.2 (2), DisplayPort 1.1 (1)
		Video	HDMI (3)
		Audio	Stereo mini jack
	Output	RGB	N/A
		Video	N/A
		Audio	Stereo mini jack
		Power out	N/A
	External control		RS-232C (in/out), RJ45
	External sensor		IR
Power	Type		Internal
	Power supply		AC 100 - 240 V~ (+/- 10 %), 50/60 Hz
	Power consumption	On mode [W]	Typical : W/W, US, KR - 740W, EU - 715W / Rating : 900W / Max : 900W
		Sleep mode	less than 0.5W (TBD)
		Off mode	less than 0.5W (TBD)
Mechanical specifications	Weight (kg/lb)	Set	108.8kg
		Package	157.7kg
	Dimensions (mm/in.)	Set	2489.7x1073.2x105.1
		Package	2700 x 1360 x 800
	VESA mount (mm/in.)		1600x600
	Protection glass		N/A
	Stand type		Foot Stand (Included)
	Media player option type		SBB
	Bezel width (mm/in.) [Top x Side x Bottom]		19.1/19.1/19.1
Operation	Operating temperature		0℃ - 40℃
	Humidity		10 - 80%

Samsung QMD Series

Specifications

			QM105D
Feature	Key		UHD LFD display
	Special	H/W	Temperature Sensor,Clock Battery(80hrs Clock Keeping), Built in Speaker(15W 2ch)
		S/W	"FHD 4 PBP Support (2/3/4 PBP), Auto Source Switching & Recovery, LFD Home UI, Remote F/W update (MDC, MagicInfo Server) Button Lock, DDC CI, DHCP with RJ45 MDC Urgent Message by MDC, Hot key option, Plug&Play (Initial Setting)"
	Internal player (Embedded H/W)	Processor	N/A
		On-chip cache memory	
		Clock speed	
		Main memory interface	
		Graphics	
		Storage (FDM)	
		Multimedia	
		IO ports	
		Operating system	
Certification	Safety		60950-1
	EMC		Class A
Accessories	Included		Quick Setup Guide, Warranty Card, DP cable, Power Cord, Remote Controller, Batteries
	Optional	Stand	(New Stand In-box)
		Mount	New Wall Mount
		Specialty	
Media player	CPU		SBB-DI (SBB-N64DV4/CI)
	N/B		
	S/B		
	GPU		
	FDM/HDD		
	Memory	USB	
	Ethernet	Output	
	Connectivity	Others	

Legal and additional information

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For more information

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

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1 Worldwide LFD market shows CAGR of 26%. (D.Search 2013 Q2, LCD Only)

2 UHD panel shipments are forecasted to increase rapidly. (IHS 2014)

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