



# SAMSUNG SMART SIGNAGE QHH SERIES

Transform Customer Engagement through Next-Generation QLED Composition and True-To-Life Picture Quality

With the introduction of its new quantum-dot powered QHH Series QLED Signage, Samsung has elevated the traditional content experience with more lifelike quality guaranteed to deliver an unexpected viewing environment that resonates. The QHH Series displays can showcase more than one billion colors at 100 percent color volume, and produce deep blacks, pristine whites and sharp hues that make any picture pop. And with portrait and landscape configurations available, businesses can customize the displays to meet their unique operational needs and reach the widest audience possible without any added hassle or expense. Through this next-generation presentation, Samsung's QHH Series displays deliver the enhanced brilliance, detail and realism necessary to cut through the clutter and fuel interactive, ongoing business growth.

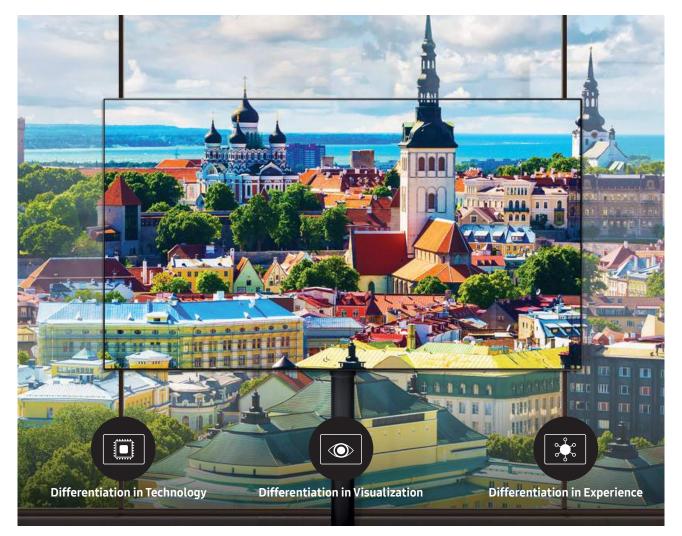
# **HIGHLIGHTS**

- Achieve exceptional picture quality through a state-of-the-art quantum dot composition
- Deliver one billion colors precisely and at 100 percent volume in any brightness setting
- Accommodate unique environment dimensions with flexible portrait and landscape configurations
- Amplify graphic performance and content security within the powerful TIZEN 3.0 operating system
- Eliminate burn-in and color presentation variation during content transitions

# SAMSUNG



# WHY QLED SIGNAGE?



#### SAMSUNG'S QLED SIGNAGE: UNLOCK NEW GROWTH OPPORTUNITIES

As businesses seek new ways to attract audiences and improve efficiency in increasingly-crowded environments, many are turning to advanced digital signage as a way to break through the clutter. By integrating quantum dot visual refinement technology, Samsung's QLED Signage offers these businesses an even greater competitive edge. An immersive high-quality picture creates a more memorable, attractive and buzzworthy customer experience. Beyond their external communication benefits, the QLED Signage displays additionally reinforce business branding through accurate and clean logo and color presentation. Through this diverse host of features, Samsung's QLED Signage is the perfect addition to generate additional revenue and strengthen customer loyalty.

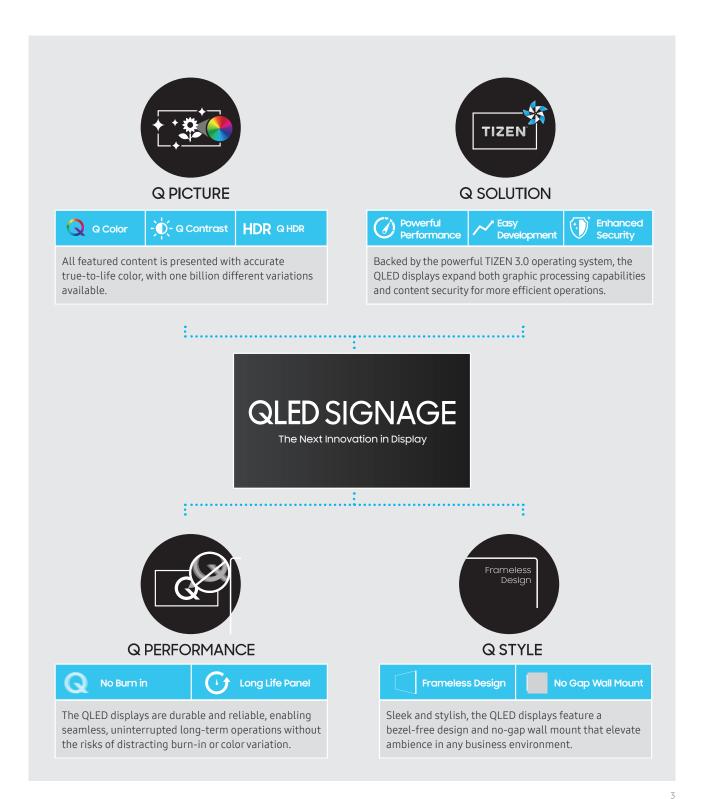
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# **QLED SIGNAGE: A VISUAL DISPLAY EVOLUTION**

#### ELEVATE YOUR BUSINESS WITH NEXT-GENERATION CONTENT

As the world's leading digital signage company, Samsung Electronics has forged its reputation through an unwavering commitment to innovation. And while most companies simply play in the commercial display space, Samsung has redefined it. With its QLED technology ushering the next era of interaction, Samsung has created new possibilities to bring previously untapped content to the B2B space. These displays deliver the clearest and most crisp picture possible, and accommodate any setting through B2Bspecific features, including:





## **Q PICTURE**



#### SHOWCASE ONE BILLION COLORS WITH OPTIMAL PRECISION

Through compatibility with a variety of color spectra, the QHH Series displays achieve 100 percent color volume at optimal integrity for one billion different colors. This enhanced presentation brings even the most subtle visual details forward at varying levels of brightness, and fosters more realistic content within any indoor environment. As a result, retailers and other indoor businesses reliant on true-to-life product presentation can better drive purchase intent and improve customer satisfaction.

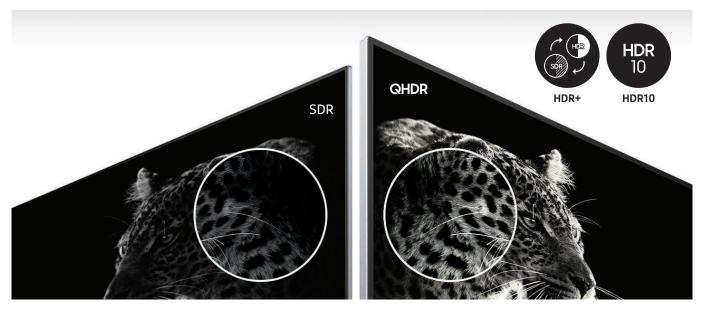


#### AMPLIFY IMMERSION THROUGH ENHANCED BRIGHTNESS AND PRESENTATION

The quantum dot integration enables Samsung's new QLED Signage to balance light and dark brightness (600nit in landscape and 500nit in portrait) and preserve gradation for a presentation that is deeper and more realistic than that offered by conventional alternatives. Through enhanced, semiconductor-based picture refinement technology, the QHH Series displays produce deeper blacks, sharper whites and more precise colors for an eye-catching picture that pops. In turn, businesses in any environment can deliver a truly immersive and captivating viewing experience without worrying about external interference.



## **Q PICTURE**



#### DELIVER ANY CUSTOMER-FACING CONTENT AT HDR QUALITY

The QHH Series displays leverage HDR picture refinement technology to deliver a range of static and motion content as intended and without compromising visual quality. This includes support for both the HDR10 picture presentation standard and HDR+ technology. Through HDR10 compatibility, indoor businesses can guarantee that all featured content meets ultra-HDR guidelines and reaches customers as clearly and brightly as possible. The complementary HDR+ functionality additionally allows businesses to surpass industry limitations by converting standard definition (SDR) content to HDR quality quickly and efficiently. This flexibility grants businesses new opportunities to create high quality, HDR-ready content amplified by sharp contrast, vivid color depth and seamless streaming.



## ENLIVEN COMMERCIAL CONTENT WITH UHD PICTURE QUALITY

Featuring state-of-the-art UHD picture quality, the QHH Series displays empower users to create and deliver impactful messaging. Each QHH Series display showcases content with four times the ultra realistic detail and clarity of standard alternatives, with a wider screen offering more space for text and imagery. When combined with performance features, such as portrait mode and extended durability, the next-level presentation makes the QHH Series ideal for any commercial setting.



# **Q SOLUTION**

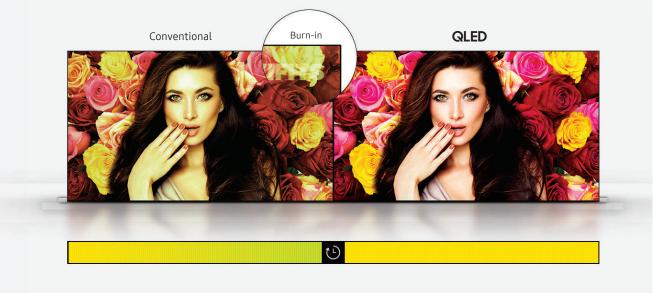


#### EXPAND OPERATIONAL CAPABILITIES THROUGH THE POWERFUL TIZEN 3.0 OS

Samsung's QLED displays are the first in its lineup to feature the fifth generation SMART Signage Platform (SSSP 5.0), powered by the versatile TIZEN 3.0 operating system. Within TIZEN 3.0, indoor business users can elevate content with advanced graphics and achieve true UHD playback through a dedicated quad core CPU. TIZEN 3.0's rigid three-layer security structure also restricts file data access to a limited user base, and perfectly accommodates government, financial and other information-based businesses reliant on information protection.

# Conventional

**Q PERFORMANCE** 



#### CAPTIVATE AUDIENCES OVER LONG DURATIONS WITHOUT INTERRUPTION

Durable and reliable, Samsung's QLED displays provide interruption-free long-term performance to meet the operational demands of various indoor settings. As content progresses, these reinforced displays deter burn-in and prevent potential viewer confusion and distraction. Additionally, each QLED display is engineered to maintain consistent color integrity even during periods of extended use. This maintenance free consistency allows business leaders to focus on other critical growth areas without worrying about content presentation quality.



## **Q STYLE**



### INCREASE IMMERSION THROUGH A FRAMELESS, EASY-TO-INSTALL DESIGN

With a pristine and sophisticated composition, the QHH Series displays add style and ambience to any indoor environment. The displays' frameless design extends the overall available viewing space while ensuring viewers' eyes remain focused on the featured content, rather than on the display itself. A no-gap wall mount further enables users to cleanly implement the QHH Series displays, all while eliminating a common source of visual distraction and conserving valuable retail space.





# **SPECIFICATIONS**

	MODEL		QH55H	QH65H
	Diagonal Size	Class	55"	65"
	Diagonar Size	Measured	54.6" / 138.7cm	64.5" / 163.8
	Type		120Hz E-LED BLU	120Hz E-LED BLU
	Resolution		3840x2160(16:9)	3840x2160(16:9)
	Pixel Pitch (mm)		0.105 x 0.315 (mm)	0.124 x 0.372 (mm)
Panel	Active Display Area		1209.60(H) x 680.40(V)	1428.48(H) x 803.52(V)
			Landscape: 600nit(peak 1,500nit),	Landscape: 600nit(peak 1,500nit),
	Brightness(Typ.)		Portrait: 500nit (peak 1,000nit)	Portrait: 500nit (peak 1,000nit)
	Contrast Ratio (Typ.)		6000:1	6000:1
	Viewing Angle(H/V)		178/178	178/178
	Response Time (G to G)		6ms (Typ)	6ms (Typ)
	Display Colors		1.07B (True Display10bit)	1.07B (True Display10bit)
	Color Gamut		Color Volume 100% (DCI-P3)	Color Volume 100% (DCI-P3)
	Operation Hour		16/7	16/7
	Haze		0%	0%
	Dynamic C/R		Mega	Mega
Display	H-Scanning Frequency		30 ~ 81kHZ	30 ~ 81kHZ
			48 ~ 75HZ	48 ~ 75HZ
	V-Scanning Frequency			
	Maximum Pixel Frequency		594MHz	594MHz
ind	Speaker Type		Built in Speaker (10W + 10W)	Built in Speaker (10W + 10W)
	RGB		Display Port 1.2 (1)	Display Port 1.2 (1)
	Input Power	VIDEO	HDMI 2.0 (2)	HDMI 2.0 (2)
	Range	HDCP	HDCP2.2	HDCP2.2
		AUDIO	N/A	N/A
nnectivity		USB	USB 2.0 x 2	USB 2.0 x 2
	Output	Audio	HDMI #1 ARC support	HDMI #1 ARC support
	EXTERNAL CONT		RS232C(in/out), RJ45	RS232C(in/out), RJ45
	EXTERNAL SENS	OR	N/A	N/A
	Tuner		N/A	N/A
Power	Туре		Internal	Internal
	Power Supply		AC100 - 240 V~ (+/- 10 %), 50/60 Hz	AC100 - 240 V~ (+/- 10 %), 50/60 Hz
	Power Consumption	On mode [W]	122(Typical), 180(Rating), 198(Max)	144(Typical), 230(Rating), 253(Max)
		Sleep mode	less than 0.5W	less than 0.5W
		Off mode	less than 0.5W	less than 0.5W
	Dimesion(mm)			
		Set	1225.2 x 697.8 x 44.0	1444.1 x 820.9 x 44.0
		Package	1420 x 819 x 170	1585 x 958 x 178
Mechanical Spec	Weight (kg)	Set	17.3	23.9
		Package	23	32.3
	VESA Mount		400x400	400x400
	Protection Glass		N/A	N/A
	Stand Type		Foot Stand (Optional)	Foot Stand (Optional)
	Bezel Width (Top/Side/Bot) (mm)		Bezel-less Design	Bezel-less Design
			Deco Frame: 2.6mm (T/L/R) / 6.7mm (B)	Deco Frame: 2.6mm (T/L/R) / 6.7mm (B)
eration	Operating Tempe	erature	0°C~ 40°C	0°C~ 40°C
	Humidity		10~80%	10~80%
	Key		QLED Signage Display,Slim & Light Signage with Built-in MagicInfo S5, SSSP 5.0	
	H/W		Tomporature Sensor, Divet Display, Clock Batteny(169brs, Clock Keeping), Built in Speaker(10W.2cb), Wi, Ei/BT	
	Special		Temperature Sensor, Pivot Display, Clock Battery(168hrs Clock Keeping), Built in Speaker(10W 2ch), Wi-Fi/BT	
	opeciat	S/W	Auto Source Switching & Recovery, LFD Home UI, But	tton Lock, Hot key option, Plug&Play (Initial Setting)
	Service	Processor	Coretex A72 1.7GHz Quad-Core CPU	Coretex A721.7GHz Quad-Core CPU
Feature		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
		Clock Speed	1.7GHz Quad-Core CPU	1.7GHz Quad-Core CPU
		Main Memory Interface	3GB / 3ch 64bit LPDDR4 1.6GHz	3GB / 3ch 64bit LPDDR4 1.6GHz
		Graphics	2D & 3D Graphic Accelerator Data Format : 32bpp Output resolution : 3840x2160p	2D & 3D Graphic Accelerator Data Format : 32bpp Output resolution : 3840x2160p
		Character (ED) ()		
		Storage (FDM)	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/AVS+, MVC - UHD H.264/AVC, VC-1, AVS/AVS+, MVC - VPB, H.VC, JC-1, AVS/AVS+, MVC - Audio DS/FOlecoder) MPCC 4/CZ 6/cd, DD, MUC2 and attr	Video Decoder - MPEG 1/2/4, H.263, H.264/AVC - UHD H.264/AVC, VC-1, AVS/AVS+, MVC - UHD H.264/AVC, VC-1, AVS/AVS+, MVC - VBS, VPO, HEVC, JPEG Audio DSP(Decoder) MDEC 6/2, 464, DD, MMZ and be
			- MPEG, AC3, AC4, DD, MP3 and etc	- MPEG, AC3, AC4, DD, MP3 and etc
		IO Ports	USB 2.0	USB 2.0
		Operating System	Tizen 3.0 (VDLinux)	Tizen 3.0 (VDLinux)
Certification	Safety		60950-1	60950-1
	EMC		Class A	Class A
	Environment			
			ENERGY STAR 7.0 (TBD) ENERGY STAR 7.0 (TBD)	
Accessories	Included		Quick Setup Guide, Warranty Card, Power Cord, Remote Controller, Batteries	
		Stand	STN-L4655E	STN-L4655E
	Optional			
		Mount	WMN4270SD / WMN-M11E (Slim W/M)	WMN4270SD / WMN-M11E (Slim W/M)
		Specialty	CLM450D	CLM450D
		Media Player	N/A	N/A

#### About Samsung Electronics Co., Ltd.

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#### **SMART Signage**

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

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# **Assured Systems**

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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