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 customers with lifelike images through ultra high-definition resolution
- Deliver UHD-level picture quality even with lower resolution content through Crystal Processor 4K supporting advanced 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
- Reliable, non-glare panels provide better visibility from all angles, anytime of day allowing businesses to deliver accurate information 24/7
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.

**Industry trend**

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 11 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 QHR series. The signage provides rich and flawless colors, sleek and durable design, powerful performance through SSSP 6 and secured protection. Samsung’s QHR 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.

**Why Samsung’s QHR 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 11 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 QHR series. The signage provides rich and flawless colors, sleek and durable design, powerful performance through SSSP 6 and secured protection. Samsung’s QHR 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.

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* 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.

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

<table>
<thead>
<tr>
<th>Year</th>
<th>UHD digital signage portion</th>
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</thead>
<tbody>
<tr>
<td>2019</td>
<td>59%</td>
</tr>
<tr>
<td>2024</td>
<td>85%</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Year</th>
<th>75” ↑ (Revenue:$M)</th>
<th>75” ↓ (Revenue:$M)</th>
<th>75” ↑ (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>4,006</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2022</td>
<td>4,270</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2023</td>
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</tr>
<tr>
<td>2024</td>
<td>4,715</td>
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</tr>
</tbody>
</table>

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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.

### Perfect view with non-glare display
When clear visibility is essential, the QHR 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.

### 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 and QBT 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.

**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.

**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. 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.

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

**Panel**
- **Diagonal Size**: 43" (Class), 45" (Measured)
- **Type**: Edge LED BLU, Edge LED BLU
- **Resolution**: UHD (3840 x 2160)
- **Active Display Area**: 1918.4 x 1080 (4:3)
- **Brightness (Typ.)**: 700 cd/m²
- **Contrast Ratio (Typ.)**: 4000:1
- **Viewing Angle (V/H)**: 178/178
- **Response Time (Typ.):** 8ms (Typ.), 8ms (Typ.)
- **Display Colors**: 1.07B (10bit 10bit)
- **Color Gamut**: 92% (DCI-P3, CIE 1931)
- **Operation Temperature**: 24/7
- **Input**: 802.1x(WPA2 Enterprise)
- **Security**: L1 Instruction Cache (4MB), D2 Cache (2MB), D1 Cache (32KB)
- **Processor**: Cortex A72 1.7GHz Quad-Core CPU
- **Memory**: LPDDR4 1.5GHz 64bit
- **Graphics**: 2.5GB LPDDR4 1.5GHz 64bit
- **CPU**: Cortex A53 1.3GHz
- **External Memory**: 16GB (16GB Occupied by O/S, 4GB Available)
- **MicroSD**: 4GB
- **Networking**: 802.11ac
- **Certifications**: ENERGY STAR 8.0, EPEAT

**Display**
- **Speaker Type**: Built-in Speaker(10W x 2ch)
- **Sound**: Built-in Speaker(10W x 2ch), Video Wall Daisy Chain(HDCP2.2:4EA, HDCP1.4:7EA), IP5x Rating, Wi-Fi/BT
- **Tuner**: Built-in MagicInfo S6, SSSP 6.0
- **Remote Control**: Built-in MagicInfo S6, SSSP 6.0
- **USB**: USB 2.0 x 2, USB 2.0 x 2
- **HDMI**: 2.0 (Loop-out)
- **Output**: HDMI 2.0 (Loop-out)
- **Input**: HDMI 2.0 (Loop-out)
- **Audio**: HDMI 2.0 (Loop-out)
- **Power Supply**: AC 100 - 240 V~ (+/- 10%), 50/60 Hz

**Feature**
- **Design**: Slim & Light Signage with Stand
- **Multimedia**: Video Decoder - MPEG-4/1.3/2, H.263, H.264, MVC, AVC, AVCHD, AVS+, HEVC, JPEG, PNG, VBR, VPP, VDP, Audio Decoder - AC-3 (MPEG), DSD, MPES
- **Connectivity**: Built-in MagicInfo S6, SSSP 6.0
- **Video Decoder**: H.264/AVC, UHD H.264/AVC, VC-1, AVS+, HEVC, JPEG, PNG, VBR, VPP, VDP
- **Graphics**: Graphic resolution: 1920x1080
- **Input**: HDMI 2.0 (2), HDMI 2.0 (2), HDMI 2.0 (2), HDMI 2.0 (2), HDMI 2.0 (2)

**Power**
- **AC**: 100 - 240 V~ (+/- 10%), 50/60 Hz
- **Max [W/h]**: 138 TBD 160 204 314
- **BTU (Max)**: 470.6 TBD 545.6 695.6 1070.7
- **Package**: 967 x 557 x 48.3
- **Height**: 92.5mm (L), 92.5mm (W), 49.5mm (H)
- **Width**: 13.3 17.9 23.6 33.3 49
- **Depth**: 42.5 49.5 54.6 64.5 74.5
- **Memory**: LPDDR4 1.5GHz 64bit
- **Storage**: 8GB (3.88GB Occupied by O/S, 4.12GB Available)
- **Power**: 11.5mm (L), 12.5mm (W)

**Certification**
- **BMC**: ENERGY STAR 8.0, EPEAT
- **Security**: Slim & Light Signage with Stand
- **Audio**: Built-in Speaker(10W x 2ch), Video Wall Daisy Chain(HDCP2.2:4EA, HDCP1.4:7EA), IP5x Rating, Wi-Fi/BT
- **Graphics**: Graphic resolution: 1920x1080
- **Input**: HDMI 2.0 (2), HDMI 2.0 (2), HDMI 2.0 (2), HDMI 2.0 (2), HDMI 2.0 (2)

**Option**
- **Media Player**: Built-in MagicInfo S6, SSSP 6.0
- **USB**: USB 2.0 x 2, USB 2.0 x 2
- **HDMI**: 2.0 (Loop-out)
- **Audio**: HDMI 2.0 (Loop-out)
- **Power Supply**: AC 100 - 240 V~ (+/- 10%), 50/60 Hz
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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

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