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### Samsung SMART Signage

For more information about Samsung SMART Signage, visit [www.samsung.com/business](http://www.samsung.com/business) or [www.samsung.com/displaysolutions](http://www.samsung.com/displaysolutions)

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# Samsung Large-sized Display Solutions

Delivering stunning content through a large-sized impactful digital display

**SAMSUNG**

# Why large UHD displays for your business?

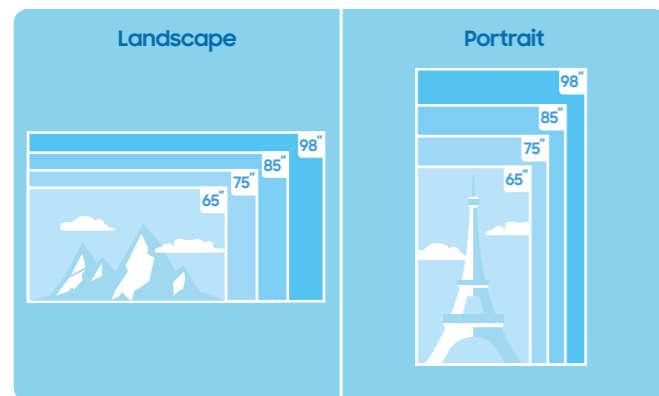
Large digital displays are becoming more popular in today's business due to its impressive size and delivery of content. Samsung, as the industry leader in digital displays, responded to the trend and designed an entire lineup of large displays that will fit the need of any business. These big displays create a modern and revitalized environment that attracts consumers to businesses. With a sleek and stylish design, these state-of-the-art displays will enhance any business with its commanding presence and exceptional size.

Samsung's large-sized displays are as impressive in size, but also present UHD-quality content creating a spectacular visual experience with outstanding graphics and images. The UHD displays present information realistically and vividly, promoting the services or products with the high-resolution images. Moreover, as more creators of content are producing UHD-quality content, UHD resolution is becoming the standard in the industry. As businesses look to purchase a large display, it should consider one that supports UHD-quality content as this is the new standard in the media industry when content is created.

Creating an endless opportunity of displays, Samsung's large-sized lineup meets and exceeds the expectation of any business. Depending on its needs, budget, space allotment or display location Samsung's large-sized displays can be incorporated to enhance any space.

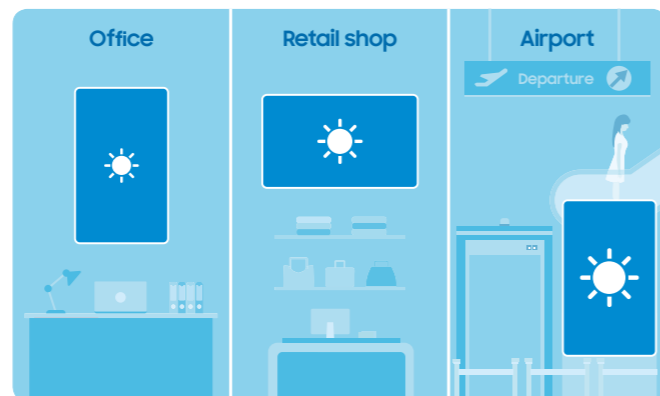


## Integrated designs for any environment



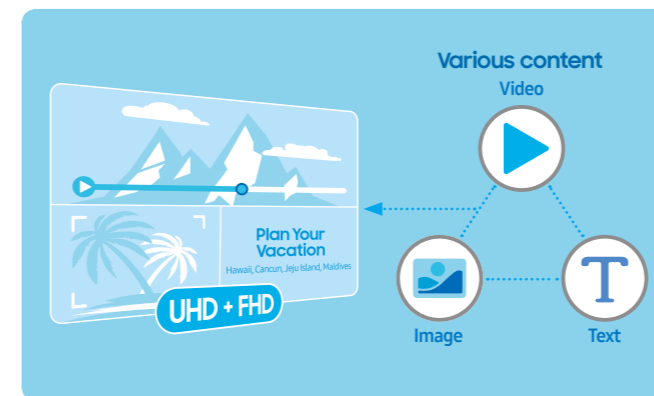
### Choose from numerous dimensions

Starting at 65" to 98", supporting both landscape and portrait mode, Samsung's large-sized displays provide the various options for businesses to select, depending on its space allotment.



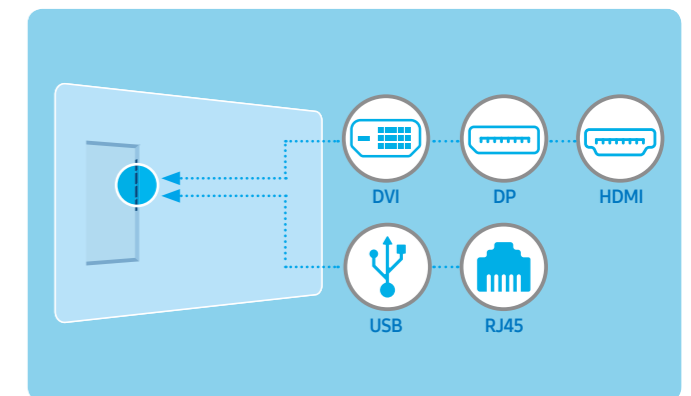
### Accommodate any display location

Samsung's large displays are available in many different brightness options, depending on the lighting needs of where the display is placed. From 350 to 700nit, users can choose the right display to ensure brilliant content delivery regardless of its location.



### Deliver multiple formats of content

Embedded in Samsung's large-sized displays, MagicIN-FO player allows businesses to deliver exquisite video, image and text content in UHD as well as FHD resolution.



### Pick the perfect connection

Samsung's large displays have various input sources to ensure seamless content playing no matter the content source. Included in the display are DVI, DP, HDMI, RJ45, USB ports.

# Samsung's lineup of large-sized displays

Samsung knows that business needs are not the same and developed a full lineup of large-sized displays in QHR, QMR, QMN, QBR and QER series. All of the displays are impressive as they are functional. Depending on the needs of the business, either of these displays would be an ideal addition to create the most up-to-date, appealing space within a business. Regardless of the size or location, Samsung's large-sized displays will deliver content with precision and brilliance.

## Series

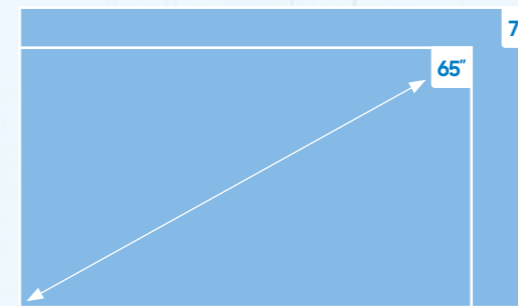


### QHR

#### View content in any light

The QHR series' impressive 700 nit brightness and reliable, non-glare panel ensures content is easily visible even in bright environments and is the ideal solution for places where clear visibility 24/7 is critical. Additionally, with intelligent UHD upscaling technology, the true-to-life visuals shown on the display are more engaging for viewers.

## Size & Key features



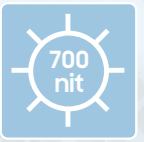
\* There are 43, 49, 55 inches also available in QHR series.



Landscape



UHD



700 nit



Portrait



24/7 Operation



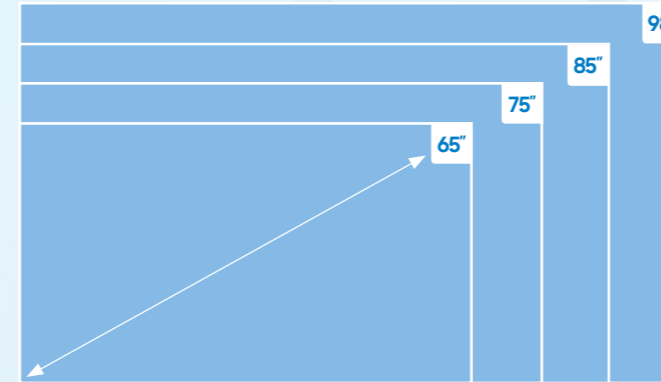
TIZEN



### QMR/QMN

#### Deliver brilliant visuals all day

The QMR/QMN series is available in sizes from 65" to 98". With 500 nit brightness, UHD picture quality and reliable, guaranteed 24/7 performance, the displays save on maintenance costs and create greater efficiencies.



\* There are 43, 49, 55 inches also available in QMR series.  
\* 65" 75" – QMR, 85" 98" – QMN



Landscape



UHD



500 nit



Portrait



24/7 Operation



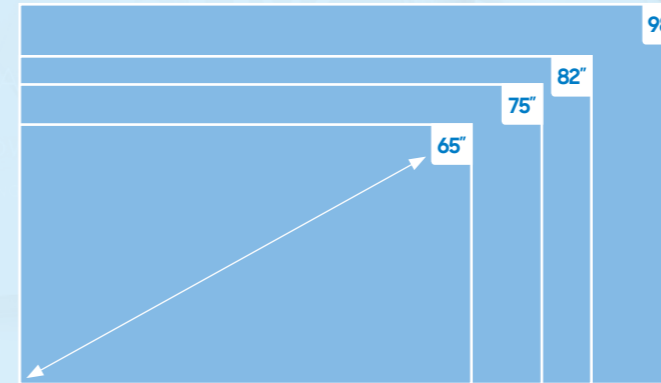
TIZEN



### QBR/QER

#### Communicate with powerful displays

The QBR/QER series helps provide businesses with a more modern look, delivering vibrant, inviting images with 350 nit brightness. Backed by the TIZEN operating system, users are assured of painless content management and seamless content transition.



\* 65" 75" 98" – QBR, 82" – QER  
\* There are 43, 49, 55 inches also available in QBR series.



Landscape



UHD



350 nit



Portrait



16/7 Operation



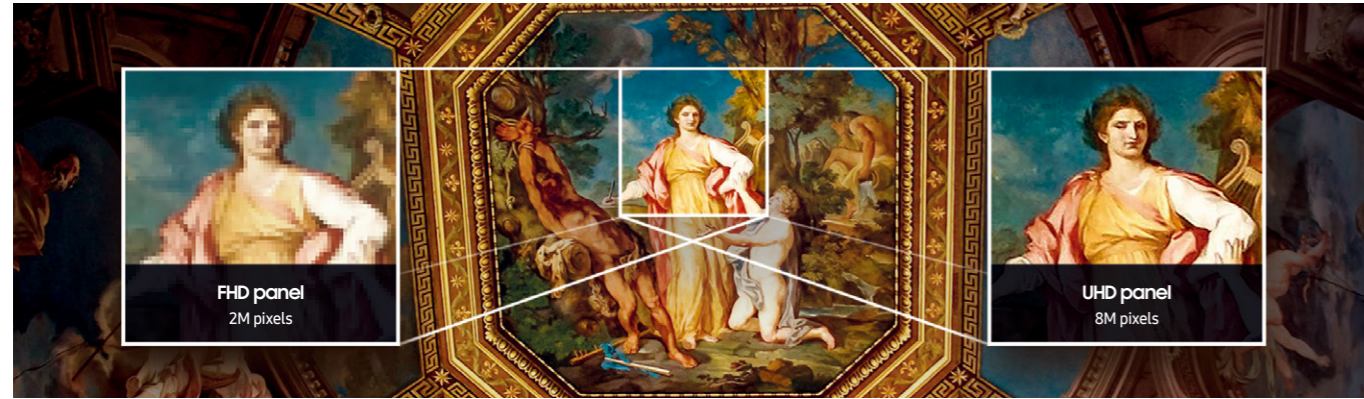
TIZEN

\* QBR 98" supports 24/7 operation

Advanced

Essential

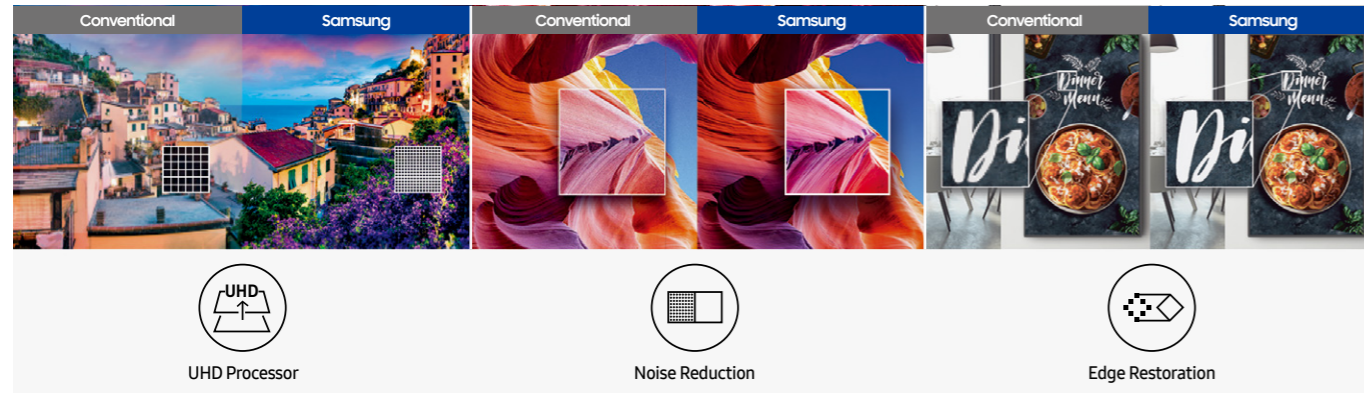
# Key features of Samsung's large-sized displays



## Incredible 4K picture quality

QHR QMR QMN QBR QER

Samsung's UHD displays are 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.



## Intelligent UHD upscaling

QHR QMR QMN QBR QER

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 most powerful video processor available. Additionally, intelligent UHD upscaling technology is a cutting-edge solution based on Samsung's 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

QHR QMR QBR QER

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.

\* For QBR series, Dynamic Crystal Color is only supported up to 75".



## Perfect view with non-glare display

QHR QMR QMN QB98R

When clear visibility is essential, the QHR, QMR, QMN and QB98R feature 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.



## Samsung Workspace secured by Knox

QHR QMR QMN QBR QER

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

QHR QMR QMN QBR QER

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

QHR QMR QMN QBR QER

The displays feature 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.

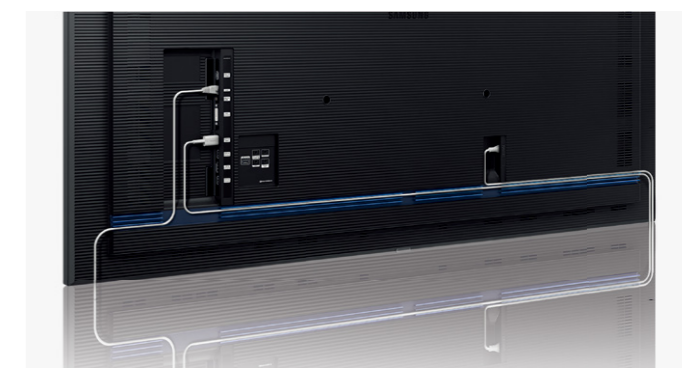
\* Image is for illustrative purposes only, specific application or program may have to be developed for the depicted usage scenario.



## Slim and symmetrical design

QHR QMR QBR

The all-new slim and symmetrical design of the QHR, QMR and QBR 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 displays will stand the test of time.



## Clean cable management

QHR QMR QBR QER

In a corporate or retail environment, the back of a display is often visible to customers. With the new cable guide feature retailers can tuck messy cables away from view. This allows for a clean and more visually-appealing customer shopping experience.

\* For QBR series, cable guide feature is only supported up to 75".  
\* Design varies by model.

# Customize your environment with Samsung's large-sized displays

From a corporate lobby to supermarket and retail store, Samsung's large-sized displays can be incorporated in various businesses. Regardless of how the displays are used, they create a highly impactful, focal point to present important information to its business.



## QHR

## QMR

## QMN

## QBR

## QER

| Model                           |                                       |  | QH65R   | QH75R  | QM65R  | QM75R  | QM85N  |
|---------------------------------|---------------------------------------|--|---|--|--|--|--|
| Panel                           | Diagonal Size                         | Class  | 65  | 75   | 65   | 75   | 85   |
|                                 |                                       | Measured                                     | 64.5  | 74.5   | 64.5   | 74.5   | 84.5"/214cm  |
|                                 | Type                                  | Edge LED BLU                                 | Edge LED BLU  | Edge LED BLU                                 | Edge LED BLU                                 | Direct LED BLU   |  |
|                                 | Resolution                            | UHD (3840 x 2160)                            | UHD (3840 x 2160)   | UHD (3840 x 2160)                            | UHD (3840 x 2160)                            | 3840x2160(16-9)  |  |
|                                 | Pixel Pitch (mm)                      | 0.372 x 0.372                                | 0.42975 x 0.42975   | 0.372 x 0.372                                | 0.42975 x 0.42975                            | 0.4875 x 0.4875 (mm)   |  |
|                                 | Active Display Area                   | 1428.48 (H) x 803.52 (V)                     | 1650.24 (H) x 928.26 (V)  | 1428.48 (H) x 803.52 (V)                     | 1650.24 (H) x 928.26 (V)                     | 1872.0(H) x 1053.0(V)  |  |
|                                 | Brightness(Typ.)                      | 700nit                                       | 500nit  | 500nit                                       | 500nit                                       | 500nit   |  |
|                                 | Contrast Ratio (Typ.)                 | 4000:1                                       | 4000:1  | 4000:1                                       | 4000:1                                       | 3000:1   |  |
|                                 | 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                         | Display Colors                        | 16.7M(True Display)<br>1.07B(Dithered 10bit) | 16.7M(True Display)<br>1.07B(Dithered 10bit)  | 16.7M(True Display)<br>1.07B(Dithered 10bit) | 16.7M(True Display)<br>1.07B(Dithered 10bit) | 16.7M(True Display)<br>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)                       | 72%  |  |
|                                 | Operation Hour                        | 24/7   | 24/7  | 24/7   | 24/7   | 24/7   |  |
|                                 | Haze                                  | 25%  | 44%   | 25%  | 44%  | 44%  |  |
|                                 | Dynamic C/R                           | MEGA   | MEGA  | MEGA   | Mega   | Mega   |  |
|                                 | H-Scanning Frequency                  | 30 ~ 81kHz                                   | 30 ~ 81kHz  | 30 ~ 81kHz                                   | 30 ~ 81kHz                                   | 30 ~ 81kHz   |  |
|                                 | V-Scanning Frequency                  | 48 ~ 75Hz                                    | 48 ~ 75Hz   | 48 ~ 75Hz                                    | 48 ~ 75Hz                                    | 48 ~ 75Hz  |  |
|                                 | 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(15W +15W)   |  |
|                                 | 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)  |
| 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   |
|                                 |                                       | PowerOut                                     | 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  |  |  |
| 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  |  |
|                                 |                                       | Max[W/h]                                     | 204   | 314  | 181.5  | 231  | 495  |
|                                 | Power Consumption                     | Typical[W/h]                                 | 150   | 247  | 131  | 178  | 362  |
|                                 |                                       | Rating[W/h]                                  | 185   | 285  | 165  | 210  | 450  |
|                                 |                                       | BTU(Max)                                     | 695.6   | 1070.7                                       | 618.9  | 787.7  | 1688.0   |
|                                 |                                       | Sleep mode                                   | 0.5   | 0.5  | 0.5  | 0.5  | 0.5  |
|                                 |                                       | Off mode                                     | N/A   | N/A  | N/A  | N/A  | N/A  |
| Dimension(mm)                   | Set                                   | 1453.9 x 831.0 x 46.3                        | 1681.1 x 960.1 x 49.7   | 1453.9 x 831.0 x 46.3                        | 1681.1 x 960.1 x 49.7                        | 1903.4 x 1090.5 x 69.4 (w/o handle)<br>1903.4 x 1090.5 x 105.1 (w/ handle) |  |
| Mechanical Spec                 | Weight (kg)                           | Package                                      | 1611 x 973 x 185  | 1871 x 1127 x 223                            | 1611 x 973 x 185                             | 1871 x 1127 x 223  | 2050 x 1265 x 472  |
|                                 |                                       | Set  | 24.9  | 38.3   | 24.9   | 38.3   | 50.7   |
|                                 | VESA Mount                            | Package                                      | 33.3  | 49   | 33.3   | 49   | 66.9   |
|                                 |                                       | Protection Glass                             | 400 X 400   | 400 X 400                                    | 400 X 400                                    | 400 X 400  | 600x400  |
|                                 |                                       | Stand Type                                   | N/A   | N/A  | N/A  | N/A  | N/A  |
| Bezel Width (Top/Side/Bot) (mm) | No                                    | No   | No  | No   | No   |  |  |
| Operation                       | Operating Temperature                 | 9.2mm(U/L/R), 11.2mm(B)                      | 11.5mm(U/L/R), 12.5mm(B)  | 9.2mm(U/L/R), 11.2mm(B)                      | 11.5mm(U/L/R), 12.5mm(B)                     | 13.2/13.2/19.3   |  |
|                                 | Humidity                              | 0°C~ 40°C                                    | 0°C~ 40°C   | 0°C~ 40°C                                    | 0°C~ 40°C                                    | 0°C~ 40°C  |  |
|                                 | Key                                   | 10~80%                                       | 10~80%  | 10~80%                                       | 10~80%                                       | 10~80%   |  |
| Feature                         | Special                               | H/W  | Temperature Sensor/Pivot Display, Clock Battery(168hrs Clock Keeping), Built in Speaker (10W 2ch), Video Wall Daisy Chain(HDCP2.2:4EA,HDCP1.4:7EA), 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,HDCP1.4:7EA), Wi-Fi/BT |
|                                 |                                       | S/W  | Auto Source Switching & Recovery, LFD Home UI, Button Lock, Hot key option, Plug&Play (Initial Setting)   |  |  |  | Coretex A72 1.7GHz Quad-Core CPU   |
|                                 | Internal Player (Embedded H/W)        | Processor                                    | Coretex A72 1.7GHz Quad-Core CPU  |  |  |  | Coretex A72 1.7GHz Quad-Core CPU   |
|                                 |                                       | On-Chip Cache Memory                         | L1 Instruction Cache : 48KB, L1 Data Cache : 32KB, L2 Cache : 2MB   |  |  |  | 1.7GHz   |
|                                 |                                       | Clock Speed                                  | 1.7GHz  |  |  |  | Graphic resolution : 1920x1080, Output resolution : 3840x2160 (Scale up from graphic processing result.)   |
|                                 |                                       | Main Memory Interface                        | 2.5GB   |  |  |  | 2.5GB  |
|                                 |                                       | Graphics                                     | LPDDR4 1.5GHz 64bit   |  |  |  | LPDDR4 1.5GHz 64bit  |
|                                 |                                       | Storage (FDM)                                | Graphic resolution : 1920x1080, Output resolution : 3840x2160 (Scale up from graphic processing result.)  |  |  |  | 8GB (3.88GB Occupied by O/S, 4.12GB Available)   |
|                                 |                                       | Multimedia                                   | 8GB (3.88GB Occupied by O/S, 4.12GB Available)  |  |  |  | *Video Decoder : MPEG-1/2/4, H.263, H.264/AVC, VC-1, AVS+, HEVC, JPEG, PNG, VP8, VP9 *Audio Decoder : AC3 (DD), MPEG   |
|                                 |                                       | IO Ports                                     | *Video Decoder : MPEG-1/2/4, H.263, H.264/AVC, UHDTV2/AVC, VC-1, AVS+, HEVC, JPEG, PNG, VP8, VP9 *Audio Decoder : AC3 (DD), MPEG  |  |  |  | USB 2.0  |
| Operating System                | USB 2.0                               |  |   |  | Tizen 4.0 (VDLinux)                          |  |  |
| Certification                   | Safety                                | 60950-1                                      | 60950-1   | 60950-1                                      | 60950-1                                      | 60950-1  |  |
|                                 | EMC                                   | Class B                                      | Class B   | Class B                                      | Class A                                      | Class A  |  |
|                                 | Environment                           | ENERGY STAR 8.0, Epeat                       | N/A   | ENERGY STAR 7.0 (USA), Epeat                 | ENERGY STAR 7.0 (USA), Epeat                 | N/A  |  |
| Accessories                     | Included                              | Stand  | No  | No   | No   | No   |  |
|                                 |                                       | Mount  | WMN4277SE   | WMN4277SE, WMN6575SE                         | WMN4277SE                                    | WMN4277SE, WMN6575SE   | WMN8200SD  |
|                                 | Optional                              | Specialty                                    | CLM450K   | CLM450K                                      | CLM450K                                      | CLM450K  | -  |
|                                 |                                       | Media Player                                 | N/A   | N/A  | N/A  | N/A  | N/A  |
|                                 |                                       | Media Player                                 | N/A   | N/A  | N/A  | N/A  | N/A  |

| Model                           | QM98N                                 | QB65R  | QB75R   | QB98R  | QE82R                                      |  |  |
|---------------------------------|---------------------------------------|--|---|--|--|--|--|
| Panel                           | Diagonal Size                         | Class  | 65  | 75   | 98   | 82   |  |
|                                 |                                       | Measured                                     | 64.5  | 74.5   | 97.5"/247.7cm                              | 81.5"  |  |
|                                 | Type                                  | Edge LED BLU                                 | Edge LED BLU  | Edge LED BLU                                 | Edge LED BLU                               | Edge Slim  |  |
|                                 | Resolution                            | UHD (3840 x 2160)                            | UHD (3840 x 2160)   | UHD (3840 x 2160)                            | UHD (3840 x 2160)                          | UHD (3840 x 2160)  |  |
|                                 | Pixel Pitch (mm)                      | 0.372 x 0.372                                | 0.372 x 0.372   | 0.42975 x 0.42975                            | 0.562 x 0.562 (mm)                         | 0.47025 x 0.47025  |  |
|                                 | Active Display Area                   | 1428.48 (H) x 803.52 (V)                     | 1650.24 (H) x 928.26 (V)  | 1650.24 (H) x 928.26 (V)                     | 2158.848(H) x 1214.352(V)                  | 1805.76(H) x 1015.74(V)  |  |
|                                 | Brightness(Typ.)                      | 500nit                                       | 350nit  | 350nit                                       | 350nit                                     | 350nit   |  |
|                                 | Contrast Ratio (Typ.)                 | 4000:1                                       | 4000:1  | 4000:1                                       | 4000:1                                     | 6000:1   |  |
|                                 | Viewing Angle(H/V)                    | 178/178                                      | 178/178   | 178/178                                      | 178/178                                    | 178/178  |  |
|                                 | Response Time (G to G)                | 6ms (Typ)                                    | 8ms (Typ.)  | 8ms (Typ.)                                   | 6ms (Typ)                                  | 6ms (Typ.)   |  |
| Display                         | Display Colors                        | 16.7M(True Display)<br>1.07B(Dithered 10bit) | 16.7M(True Display)<br>1.07B(Dithered 10bit)  | 16.7M(True Display)<br>1.07B(Dithered 10bit) | 16.7M(True Display), 1.07B(Dithered 10bit) | 16.7M  |  |
|                                 | Color Gamut                           | 92% (DCI-P3, CIE 1976)                       | 92% (DCI-P3, CIE 1976)  | 92% (DCI-P3, CIE 1976)                       | 72%  | 72%  |  |
|                                 | Operation Hour                        | 24/7   | 24/7  | 24/7   | 24/7                                       | 24/7   |  |
|                                 | Haze                                  | 25%  | 2%  | 2%   | 25%  | 2%   |  |
|                                 | Dynamic C/R                           | MEGA   | MEGA  | MEGA   | Mega                                       | MEGA   |  |
|                                 | H-Scanning Frequency                  | 30 ~ 81kHz                                   | 30 ~ 81kHz  | 30 ~ 81kHz                                   | 30 ~ 81kHz                                 | 30 ~ 81kHz   |  |
|                                 | V-Scanning Frequency                  | 48 ~ 75Hz                                    | 48 ~ 75Hz   | 48 ~ 75Hz                                    | 48 ~ 75Hz                                  | 48 ~ 75Hz  |  |
|                                 | Maximum Pixel Frequency               | 594MHz                                       | 594MHz  | 594MHz                                       | 594MHz                                     | 594MHz   |  |
|                                 | Speaker Type                          | Built in Speaker(10W +10W)                   | Built in Speaker(10W +10W)  | Built in Speaker(15W +15W)                   | 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  |
| VIDEO                           |                                       |  | 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  |  |
| AUDIO                           |                                       |  | Stereo mini Jack, DVI, HDMI   | Stereo Mini Jack, DVI/HDMI/Audio(Common)     | Stereo Mini Jack, DVI/HDMI/Audio(Common)   | Stereo mini Jack, DVI, HDMI  |  |
| USB                             |                                       |  | USB 2.0 x 2   | USB 2.0 x 2 (Loop-out)                       | USB 2.0 x 2                                | USB 2.0 x 2  |  |
| Output                          |                                       | RGB  | HDMI 2.0 (Loop-out)   | N/A  | HDMI 2.0 (Loop-out)                        | N/A  |  |
|                                 |                                       | VIDEO  | N/A   | N/A  | N/A  | N/A  |  |
|                                 |                                       | AUDIO  | Stereo mini Jack  | Stereo Mini Jack                             | Stereo Mini Jack                           | Stereo mini Jack   |  |
|                                 |                                       | PowerOut                                     | N/A   | N/A  | N/A  | N/A  |  |
|                                 |                                       | USB  | 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  |  |  |
| 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  |  |
|                                 |                                       | Max[W/h]                                     | 204   | 314  | 181.5                                      | 231  | 495  |
|                                 | Power Consumption                     | Typical[W/h]                                 | 150   | 247  | 131  | 178  | 362  |
|                                 |                                       | Rating[W/h]                                  | 185   | 285  | 165  | 210  | 450  |
|                                 |                                       | BTU(Max)                                     | 695.6   | 1070.7                                       | 618.9                                      | 787.7  | 1688.0   |
|                                 |                                       | Sleep mode                                   | 0.5   | 0.5  | 0.5  | 0.5  | 0.5  |
|                                 |                                       | Off mode                                     | N/A   | N/A  | N/A  | N/A  | N/A  |
| Dimension(mm)                   | Set                                   | 1453.9 x 831.0 x 46.3                        | 1681.1 x 960.1 x 49.7   | 1453.9 x 831.0 x 46.3                        | 1681.1 x 960.1 x 49.7                      | 1903.4 x 1090.5 x 69.4 (w/o handle)<br>1903.4 x 1090.5 x 105.1 (w/ handle) |  |
| Mechanical Spec                 | Weight (kg)                           | Package                                      | 1611 x 973 x 185  | 1871 x 1127 x 223                            | 1611 x 973 x 185                           | 1871 x 1127 x 223  | 2050 x 1265 x 472  |
|                                 |                                       | Set  | 24.9  | 38.3   | 24.9                                       | 38.3   | 50.7   |
|                                 | VESA Mount                            | Package                                      | 33.3  | 49   | 33.3                                       | 49   | 66.9   |
|                                 |                                       | Protection Glass                             | 400 X 400   | 400 X 400                                    | 400 X 400                                  | 400 X 400  | 600x400  |
|                                 |                                       | Stand Type                                   | N/A   | N/A  | N/A  | N/A  | N/A  |
| Bezel Width (Top/Side/Bot) (mm) | No                                    | No   | No  | No   | No   |  |  |
| Operation                       | Operating Temperature                 | 9.2mm(U/L/R), 11.2mm(B)                      | 11.5mm(U/L/R), 12.5mm(B)  | 9.2mm(U/L/R), 11.2mm(B)                      | 11.5mm(U/L/R), 12.5mm(B)                   | 13.2/13.2/19.3   |  |
|                                 | Humidity                              | 0°C~ 40°C                                    | 0°C~ 40°C   | 0°C~ 40°C                                    | 0°C~ 40°C                                  | 0°C~ 40°C  |  |
|                                 | Key                                   | 10~80%                                       | 10~80%  | 10~80%                                       | 10~80%                                     | 10~80%   |  |
| Feature                         | Special                               | H/W  | Temperature Sensor/Pivot Display, Clock Battery(168hrs Clock Keeping), Built in Speaker (10W 2ch), Video Wall Daisy Chain(HDCP2.2:4EA,HDCP1.4:7EA), 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,HDCP1.4:7EA), Wi-Fi/BT |
|                                 |                                       | S/W  | Auto Source Switching & Recovery, LFD Home UI, Button Lock, Hot key option, Plug&Play (Initial Setting)   |  |  |  | Coretex A72 1.7GHz Quad-Core CPU   |
|                                 | Internal Player (Embedded H/W)        | Processor                                    | Coretex A72 1.7GHz Quad-Core CPU  |  |  |  | Coretex A72 1.7GHz Quad-Core CPU   |
|                                 |                                       | On-Chip Cache Memory                         | L1 Instruction Cache : 48KB, L1 Data Cache : 32KB, L2 Cache : 2MB   |  |  |  | 1.7GHz   |
|                                 |                                       | Clock Speed                                  | 1.7GHz  |  |  |  | Graphic resolution : 1920x1080, Output resolution : 3840x2160 (Scale up from graphic processing result.)   |
|                                 |                                       | Main Memory Interface                        | 2.5GB   |  |  |  | 2.5GB  |
|                                 |                                       | Graphics                                     | LPDDR4 1.5GHz 64bit   |  |  |  | LPDDR4 1.5GHz 64bit  |
|                                 |                                       | Storage (FDM)                                | Graphic resolution : 1920x1080, Output resolution : 3840x2160 (Scale up from graphic processing result.)  |  |  |  | 8GB (3.88GB Occupied by O/S, 4.12GB Available)   |
|                                 |                                       | Multimedia                                   | 8GB (3.88GB Occupied by O/S, 4.12GB Available)  |  |  |  | *Video Decoder : MPEG-1/2/4, H.263, H.264/AVC, VC-1, AVS+, HEVC, JPEG, PNG, VP8, VP9 *Audio Decoder : AC3 (DD), MPEG   |
|                                 |                                       | IO Ports                                     | *Video Decoder : MPEG-1/2/4, H.263, H.264/AVC, UHDTV2/AVC, VC-1, AVS+, HEVC, JPEG, PNG, VP8, VP9 *Audio Decoder : AC3 (DD), MPEG  |  |  |  | USB 2.0  |
| Operating System                | USB 2.0                               |  |   |  | Tizen 4.0 (VDLinux)                        |  |  |
| Certification                   | Safety                                | 60950-1                                      | 60950-1   | 60950-1                                      | 60950-1                                    | 60950-1  |  |
|                                 | EMC                                   | Class B                                      | Class B   | Class B                                      | Class A                                    | Class A  |  |
|                                 | Environment                           | ENERGY STAR 8.0, Epeat                       | N/A   | ENERGY STAR 7.0 (USA), Epeat                 | ENERGY STAR 7.0 (USA), Epeat               | N/A  |  |
| Accessories                     | Included                              | Stand  | No  | No   | No   | No   |  |
|                                 |                                       | Mount  | WMN4277SE   | WMN4277SE, WMN6575SE                         | WMN4277SE                                  | WMN4277SE, WMN6575SE   | WMN8200SD  |
|                                 | Optional                              | Specialty                                    | CLM450K   | CLM450K                                      | CLM450K                                    | CLM450K  | -  |
|                                 |                                       | Media Player                                 | N/A   | N/A  | N/A  | N/A  | N/A  |
|                                 |                                       | Media Player                                 | N/A   | N/A  | N/A  | N/A  | N/A  |