Samsung SMART Signage Window Display

OMN, OMN-D, OMR series

Promote content with exceptional clarity in any storefront window

Thoughtful, engaging content in a storefront window has the power to engage customers and ultimately lead them into the store. Samsung's OMN/OMR series displays not only deliver an image with flawless clarity, but also are designed to maintain its superior picture quality even when exposed to direct sunlight – a common challenge for conventional in-window displays. In addition, with a slim and sleek design, the OMN/OMR series is compatible with any window layout and highlights the sophisticated and modern style of the brand. The OMN/OMR series also delivers bright and clear images while consuming a low amount of power, which positions businesses to reduce overall costs and optimize efficiency considerably.

Highlights

- Ultra-high brightness emphasizing content, regardless of the lighting conditions
- Slim and contemporary design that seamlessly integrates into any display window
- Easy content management with a built-in management solution
- Two options – one or double-sided screen – available to fit the businesses needs

SAMSUNG

Industry trend

Rich, digital content is the new norm. Static, printed billboards and signs lack the dynamic motion necessary to quickly attract the attention of passersby. As retailers are trying to win the attention of the consumer, it is vital to stand out amongst the competition. That is why a growing trend in the retail industry is the introduction of digital signage into window storefronts. Retail organizations have a very narrow window to impress, so it is critical that a customer's first impression is immediately dazzling. Retailers need digital displays with high visibility and easy-to-manage software to deliver highly impactful content that remains bright and crisp even in the face of direct sunlight – a challenge many stores face.

* "Conventional" refers to Samsung's OMD-W series.

Why Samsung OMN/OMR series?

The Samsung OMN/OMR series was designed with a storefront window display in mind. It projects clear, bright images that attract and engage audiences, increasing the probability of an in-store visit. With a modern configuration, the display as slim design and is compatible with any store widow without isrupting a customer's shopping experience. Included in the OMN/OMR series is an embedded software solution or operational efficiency and content management, ensuring retailers can manage its displays effortlessly.

Award-winning solution

AV Display Innovation of the Year

"Samsung OMN and OMN-D series, its brand new semi-outdoor displays available in 46 and 55-inch, are designed with a storefront window display in mind and capture viewers' minds with comprehensive innovation. Brilliant, vibrant images with superior picture quality, high brightness, and contrast ratio are packed in a slim and neat design..."

Displays: All Weather Displays

"Samsung's OMN Series not only delivers an image with flawless clarity but is also designed to maintain superior picture quality even when exposed to direct sunlight. With slim and sleek design, the OMN series is compatible with any window layout and can complement the style of any brand."

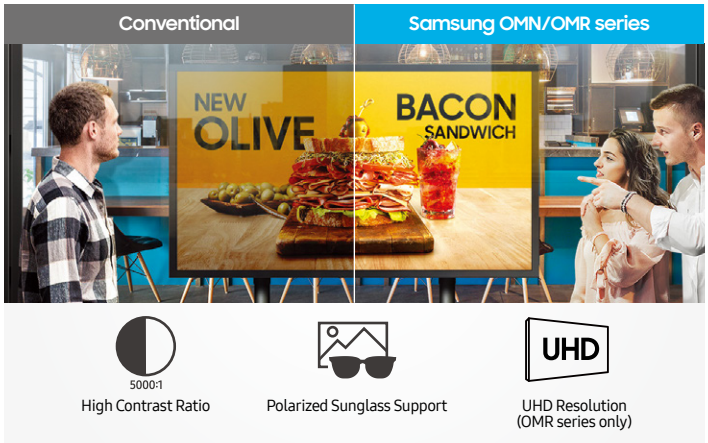
Storefront optimization with OMN/OMR series

The evolution of advertising displays in retailer's windows has dramatically changed over the years, as well as the expectations of the consumers passing by a store. Marketing began with static, printed banners, but quickly moved to digital signage as consumers became more responsive to engaging videos and images. However, early digital signage was not created for outdoor usage or direct sunlight and produced content with low visibility. Retailers then began to incorporate window display, which allowed for better visibility than the alternatives, but they were still not powerful enough to display high-quality content. Although more cost-efficient than the printed materials, the display did not perform as expected. Realizing the need for more innovative window display, Samsung designed the OMN/OMR series. Intended for retailers to deliver the most visually appealing content in any environment, the OMN/OMR series surpasses the traditional signage and engages audiences like never before.

	Print	Standalone*	Conventional window display*	OMN/OMR series
Brightness		350-700nit	2,500nit	**4,000nit**
Polarized sunglasses compatible			✓	✓
Resistant to direct sunlight			✓	✓
Motion visuals		✓	✓	✓
Embedded software		✓	✓	✓
Depth		about 60mm (QM49N)	about 140mm (OM46D-W)	**54.5mm (OM46N)**
Power consumption		It varies depending on models	385w** (OM46D-W)	**350w** (OM46N)**

* Here, standalone signage refers to QMN series and conventional window display refers to OMD-W series.
** Power consumption was tested at the highest brightness of each product.

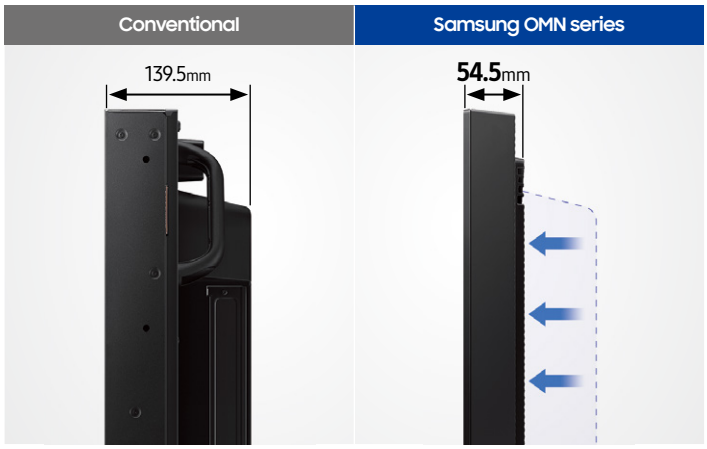
Key features



Foster brilliant presentation for all

Unlike conventional digital signage, the OMN/OMR series delivers outstanding content, regardless of outdoor elements. Featuring 4,000nit brightness and a high contrast ratio of 5,000:1, the OMN/OMR series' display remains bright and clear, delivering an uncompromised picture that will capture the attention of potential customers – even under the scrutiny of direct sunlight. In addition, blindness is removed when looking at the sign with polarized sunglasses.

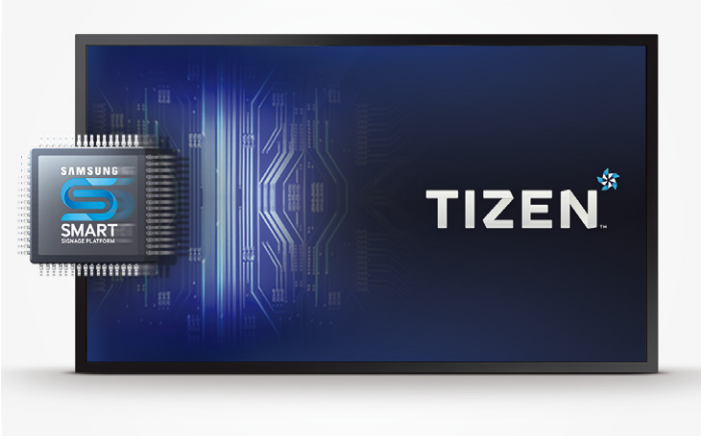
* "Conventional" refers to Samsung's OMD-W series.



Modernize space with slim design

Through innovative design, the OMN/OMR series delivers a real-to-life picture with a remarkably slim depth. Its compact size makes the display a natural extension of the store, as opposed to an addition that ties up valuable space. It also gives retailers greater flexibility in storefront design. Meanwhile, customers remain focused on rich, engaging content on a sleek, sophisticated display and not distracted by a bulky display.

* "Conventional" refers to Samsung's OMD-W series.
* Product design varies by series.



Streamline content management

Digital displays should require as little maintenance as possible – a retailer's time is valuable. The OMN/OMR series' embedded MagicINFO S Player, backed by the powerful TIZEN operating system, boosts the display's overall performance, allowing for painless content management and ensuring seamless content transition and playback. You can be sure that the content you want customers to see will be displayed when it needs to be, without interruption.

Deliver vibrant content with efficiency

For most retailers, energy efficiency is a must. It is a key component to controlling operational costs, and the OMN/OMR series addresses this very real concern. It consumes less power than conventional displays* while delivering a brilliant picture and spectacular performance. Because of the OMN/OMR series' innovative efficiency, retailers are equipped with a superior, more engaging display that gives them greater control over costs.

* Conventional displays refer to Samsung's OMD-W series.

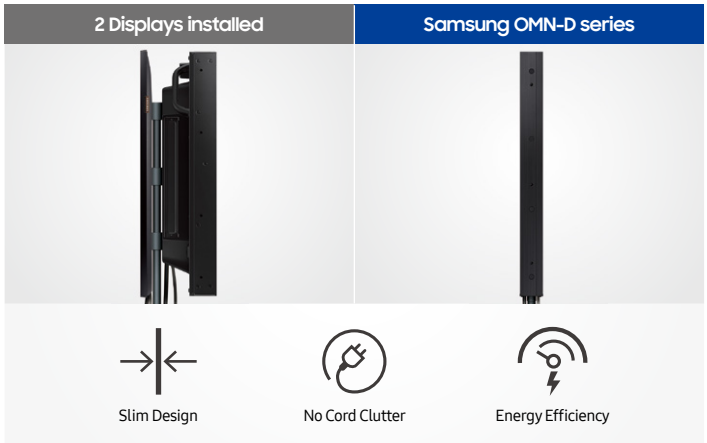
Why Samsung OMN-D series?

Samsung's OMN-D Series is a dual display with screens on both sides, allowing retailers to maximize messaging. The window-facing screen features bright visuals and prominent positioning, giving passersby motivation to enter the store. Once inside, indoor-facing displays enhance the shopping experience with content promoting sales, new merchandise and additional information about the store and its services. This single display reduces equipment and installation costs, increasing operational efficiency, compared to installing two separate displays.

Window-facing (3,000nit)	Indoor-facing (1,000nit)

Modernize space with flexible design

The OMN-D Series can be easily mounted either on a stand or hung from a ceiling, giving retailers more options for positioning. The smart design creates a clean look that promotes easier customer engagement without aesthetic distraction and offers flexibility in how valuable space on the floor is designed and utilized. With a hidden top cover, cable management is clear of clutter, and due to the slim depth, the display does not divert attention away from the store's products.



Maximize operational efficiency

With a sleek, efficient design, the OMN-D Series gives retailers the freedom to easily customize small storefront window displays. Unlike conventional displays that are both bulky and limit positioning options, the OMN-D Series frees up space, offering retailers more room to market themselves to potential customers. Additionally, the displays are easily activated with one electric power cord and one LAN cable, drastically reducing cord clutter and increasing energy efficiency.

Specifications

Model			OM46N	OM55N	OM75R
Panel	Diagonal Size	Class	46	55	75
		Measured	45.9" / 116.8cm	54.6" / 138.7cm	74.5" / 189.3cm
	Type		120Hz E-LED BLU	120Hz E-LED BLU	120Hz D-LED BLU
	Resolution		1920x1080 (16:9)	1920x1080 (16:9)	3840 x 2160 (16:9)
	Pixel Pitch(mm)		0.530 x 0.530	0.530 x 0.530	0.430 x 0.430
	Active Display Area(mm)		1018.08(H) x 572.67(V)	1209.6(H) x 680.4(V)	1650.24(H) x 928.26(V)
	Brightness(Typ.)		4,000 cd/m2	4,000 cd/m2	4,000 cd/m2
	Contrast Ratio		5,000:1	5,000:1	5,000:1
	Viewing Angle(H/V)		178/178	178/178	178/178
	Response Time(G-to-G)		6ms	6ms	6ms
	Display Colors		8 bit - 16.7M	8 bit - 16.7M	8 bit - 16.7M
	Color Gamut		72%	72%	72%
	Operation Hour		24/7	24/7	24/7
	Haze		0%	0%	0%
Display	Dynamic C/R		-	-	100,000:1
	H-Scanning Frequency		30 ~ 135kHz (DP), 15 ~ 135kHz (HDMI)	30 ~ 135kHz (DP), 15 ~ 135kHz (HDMI)	15~81KHz (HDMI), 30~135KHz (DP)
	V-Scanning Frequency		30 ~ 75Hz (DP), 24 ~ 75Hz (HDMI)	30 ~ 75Hz (DP), 24 ~ 75Hz (HDMI)	24~75Hz (HDMI), 30~75Hz (DP)
	Maximum Pixel Frequency		233.25MHz (DP), 594MHz (HDMI)	533.25MHz (DP), 594MHz (HDMI)	594MHz (HDMI), 533.25MHz(DP)
Sound	Speaker Type		N/A	N/A	N/A
Connectivity	Input	RGB	Display Port 1.2 (1)	Display Port 1.2 (1)	Display Port 1.2 (1)
		Video	HDMI2.0 (2)	HDMI2.0 (2)	HDMI2.0 (2)
		HDCP	HDCP 2.2	HDCP 2.2	HDCP 2.2
		Audio	N/A	N/A	N/A
		USB	USB 2.0 (1)	USB 2.0 (1)	USB 2.0 (1)
	Output	RGB	HDMI 2.0	HDMI 2.0	HDMI 2.0
		Video	Yes	Yes	Yes
		Audio	Stereo Mini Jack	Stereo Mini Jack	Stereo Mini Jack
		Power Out	N/A	N/A	N/A
		USB	N/A	N/A	N/A
	External Control		RS232C (In/Out), RJ45 (In/Out)	RS232C (In/Out), RJ45 (In/Out)	RS232C (In/Out), RJ45 (In)
	External Sensor		Detachable Type (IR, Ambient)	Detachable Type (IR, Ambient)	Detachable Type (IR, Ambient)
	Tuner		N/A	N/A	N/A
Power	Type		Internal	Internal	Internal
	Power Supply		AC 100 - 240 V~ (+/- 10 %), 50/60 Hz	AC 100 - 240 V~ (+/- 10 %), 50/60 Hz	AC 100 - 240 V~ (+/- 10 %), 50/60 Hz
	Power Consumption	Max[W/h]	350	450	990
		Typical[W/h]	W/W(EU) : 210, US/KOR/Etc : 330 ※ Etc: CHINA, TAIWAN, BRA, CIS	W/W(EU) : 276, US/KOR/Etc : 420 ※ Etc: CHINA, TAIWAN, BRA, CIS	411W(EU), 600W(US/KOR/ETC)
		BTU (Max)	1194	1536	3376
		Sleep mode	0.5W	0.5W	less than 0.5W
		Off mode	0.5W	0.5W	less than 0.5W
Mechanical Spec	Dimension(mm)	Set	1062 x 616.6 x 54.5 mm	1253.4 x 724.2 x 54.5 mm	1703.1 x 981.2 x 82.6
		Package	1189 x 757 x 158 mm	1420 x 879 x 178 mm	1890 x 1144 x 225
	Weight (kg)	Set	18.2kg	23.1 kg	38kg
		Package	23kg	28 kg	50.5kg
	VESA Mount		400 x 400 mm	400 x 400 mm	400 x 400 mm
	Protection Glass		N/A	N/A	N/A
	Stand Type		N/A	N/A	N/A
	Bezel Width (mm)		19.9 (even)	19.9 (even)	23.9
Operation	Operating Temperature		0°C~ 30°C (Direct Sunlight), 0°C~ 40°C (w/o Direct Sunlight)	0°C~ 30°C (Direct Sunlight), 0°C~ 40°C (w/o Direct Sunlight)	0°C~ 30°C (Direct Sunlight), 0°C~ 40°C (w/o Direct Sunlight)
	Humidity		10~80%	10~80%	10~80%
Feature	Key		High brightness Window Display Slim & Clean back design Built-in MagicInfo Player S6, SSSP 6.0	High brightness Window Display Slim & Clean back design Built-in MagicInfo Player S6, SSSP 6.0	High brightness Window Display Slim & Clean back design Built-in MagicInfo Player S7, SSSP 7.0
	Special		IP 5X rated, Polarized Sun Glasses Viewable in any direction, Portrait /Landscape Installation Support, Lamp Error Detection, Auto Brightness Control with Ambient Brightness Sensor, Temperature Sensor, RJ45 MDC, Auto Source Switching & Recovery, Clock Battery(80hrs Clock Keeping)	IP 5X rated, Polarized Sun Glasses Viewable in any direction, Portrait /Landscape Installation Support, Lamp Error Detection, Auto Brightness Control with Ambient Brightness Sensor, Temperature Sensor, RJ45 MDC, Auto Source Switching & Recovery, Clock Battery(80hrs Clock Keeping)	IP 5X rated, Polarized Sun Glasses Viewable in any direction, Portrait /Landscape Installation Support, Auto Brightness Control with Ambient Brightness Sensor, Temperature Sensor, RJ45 MDC, Auto Source Switching & Recovery, Clock Battery(80hrs Clock Keeping), WiFi Module Embedded
	Internal Player (Embedded H/W)	Processor	Coretex A72 1.7GHz Quad-Core CPU	Coretex 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
		Clock Speed	1.7GHz	1.7GHz	1.7GHz
		Main Memory Interface	2.5GB, LPDDR4 1.5GHz 64bit	2.5GB, LPDDR4 1.5GHz 64bit	2.5GB, LPDDR4 1600MHz 64bit
		Graphics	Graphic resolution : 1920x1080 / Output resolution : up to 3840x2160 (Scale up from graphic processing result.) - Supports OpenGL ES	Graphic resolution : 1920x1080 / Output resolution : up to 3840x2160 (Scale up from graphic processing result.) - Supports OpenGL ES	Graphic resolution : 1920x1080 Output resolution : 7680x4320 (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)
		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
		IO Ports	USB 2.0	USB 2.0	USB 2.0
		Operating System	Tizen 4.0 (VDLinux)	Tizen 4.0 (VDLinux)	Tizen 5.0 (VDLinux)
Certification	Safety		CB (Europe) : IEC60950-1/EN60950-1 / UL(USA) : cUL60950-1	CB (Europe) : IEC60950-1/EN60950-1 / UL(USA) : cUL60950-1	CB (Europe) : IEC60950-1/EN60950-1 / UL(USA) : cUL60950-1
	EMC		FCC (USA) Part 15, Subpart B Class A / CE (Europe) : EN55022:2006+A1:2007, EN55024:1998+A1:2001+A2:2003	FCC (USA) Part 15, Subpart B Class A / CE (Europe) : EN55022:2006+A1:2007, EN55024:1998+A1:2001+A2:2003	FCC (USA) Part 15, Subpart B Class A CE (Europe) : EN55022:2006+A1:2007, EN55024:1998+A1:2001+A2:2003
	Environment		N/A	N/A	N/A
Accessories	Included		Quick Setup Guide, Regulatory Guide, Warranty Card, Power Cord, Remote Controller, Batteries, IR, Ambient sensor	Quick Setup Guide, Regulatory Guide, Warranty Card, Power Cord, Remote Controller, Batteries, IR, Ambient sensor	Quick Setup Guide, Regulatory Guide, Warranty Card, Power Cord, Remote Controller, Batteries, IR, Ambient sensor
	Optional	Media Player	N/A	N/A	N/A

Model			OM46N-D	OM55N-D
Panel	Diagonal Size	Class	46	55
		Measured	45.9" / 116.8cm	54.6" / 138.7cm
	Type		120Hz E-LED BLU	120Hz / 60Hz E-LED BLU
	Resolution		1920x1080 (16:9)	1920x1080 (16:9)
	Pixel Pitch(mm)		0.530 x 0.530	0.530 x 0.530
	Active Display Area(mm)		1018.08(H) x 572.67(V)	1209.6(H) x 680.4(V)
	Brightness(Typ.)		3,000 / 1,000 cd/m2	3,000 / 1,000 cd/m2
	Contrast Ratio		5,000:1	5,000:1
	Viewing Angle(H/V)		178/178	178/178
	Response Time(G-to-G)		6ms	6ms(3,000nit), 8ms(1,000nit)
	Display Colors		8 bit - 16.7M	8 bit - 16.7M
	Color Gamut		72%	72%
	Operation Hour		24/7	24/7
	Haze		0%	0%
Display	H-Scanning Frequency		15 ~ 135kHz (HDMI)	15 ~ 135kHz (HDMI)
	V-Scanning Frequency		24 ~ 75Hz (HDMI)	24 ~ 75Hz (HDMI)
	Maximum Pixel Frequency		594MHz (HDMI)	594MHz (HDMI)
Sound	Speaker Type		N/A	N/A
Connectivity	Input	RGB	N/A	N/A
		Video	HDMI2.0 (2)	HDMI2.0 (2)
		HDCP	HDCP 2.2	HDCP 2.2
		Audio	N/A	N/A
		USB	USB 2.0 (2)	USB 2.0 (2)
	Output	RGB	N/A	N/A
		Video	N/A	N/A
		Audio	N/A	N/A
		Power Out	N/A	N/A
		USB	N/A	N/A
	External Control		RS232C (In), RJ45 (In)	RS232C (In), RJ45 (In)
	External Sensor		Detachable Type (IR, Ambient (Outdoor Only))	Detachable Type (IR, Ambient (Outdoor Only))
	Tuner		N/A	N/A
Power	Type		Internal	Internal
	Power Supply		AC100 - 240 V~ (+/- 10 %), 50/60 Hz	AC100 - 240 V~ (+/- 10 %), 50/60 Hz
	Power Consumption	Max[W/h]	380	500
		Typical[W/h]	W/W(EU) : 214, US/KOR/Etc : 380 ※ Etc: CHINA, TAIWAN, BRA, CIS	W/W(EU) : 290, US/KOR/ETC : 470 ※ ETC : CHINA, TAIWAN, BRA, CIS
		BTU (Max)	1297	1706
		Sleep mode	1W	1W
		Off mode	1W	1W
Mechanical Spec	Dimension(mm)	Set	619.1 x 1107.5 x 69.5 mm	726.8 x 1299 x 69.5 mm
		Package	796 x 1255 x 327 mm	940 x 1466 x 367 mm
	Weight (kg)	Set	32kg	42kg
		Package	39.5kg	52kg
	VESA Mount		N/A	N/A
	Protection Glass		N/A	N/A
	Stand Type		N/A	N/A
	Bezel Width (mm)		22.8 (even)	22.8 (even)
Operation	Operating Temperature		0°C~ 30°C (Direct Sunlight), 0°C~ 40°C (w/o Direct Sunlight)	0°C~ 30°C (Direct Sunlight), 0°C~ 40°C (w/o Direct Sunlight)
	Humidity		10~80%	10~80%
Feature	Key		Dual Display / Slim design Window Display Built-in MagicInfo Player S6, SSSP 6.0	Dual Display / Slim design Window Display Built-in MagicInfo Player S6, SSSP 6.0
	Special		IP 5X rated, Polarized Sun Glasses Viewable in any direction, Portrait Installation Support, Lamp Error Detection, Auto Brightness Control with Ambient Brightness Sensor, Temperature Sensor, RJ45 MDC, Auto Source Switching & Recovery, Clock Battery(80hrs Clock Keeping)	IP 5X rated, Polarized Sun Glasses Viewable in any direction, Portrait Installation Support, Lamp Error Detection, Auto Brightness Control with Ambient Brightness Sensor, Temperature Sensor, RJ45 MDC, Auto Source Switching & Recovery, Clock Battery(80hrs Clock Keeping)
	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	L1 Instruction Cache : 48KB, L1 Data Cache : 32KB, L2 Cache : 2MB
		Clock Speed	1.7GHz	1.7GHz
		Main Memory Interface	2.5GB, LPDDR4 1.5GHz 64bit	2.5GB, LPDDR4 1.5GHz 64bit
		Graphics	Graphic resolution : 1920x1080 / Output resolution : up to 3840x2160 (Scale up from graphic processing result.) - Supports OpenGL ES	Graphic resolution : 1920x1080 / Output resolution : up to 3840x2160 (Scale up from graphic processing result.) - Supports OpenGL ES
		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+, 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
		Operating System	Tizen 4.0 (VDLinux)	Tizen 4.0 (VDLinux)
Certification	Safety		CB (Europe) : IEC60950-1/EN60950-1 / UL(USA) : cUL60950-1	CB (Europe) : IEC60950-1/EN60950-1 / UL(USA) : cUL60950-1
	EMC		FCC (USA) Part 15, Subpart B Class A / CE (Europe) : EN55022:2006+A1:2007, EN55024:1998+A1:2001+A2:2003	FCC (USA) Part 15, Subpart B Class A / CE (Europe) : EN55022:2006+A1:2007, EN55024:1998+A1:2001+A2:2003
	Environment		N/A	N/A
Accessories	Included		Quick Setup Guide, Regulatory Guide, Warranty Card, Power Cord, Remote Controller, Batteries, IR, Ambient sensor	Quick Setup Guide, Regulatory Guide, Warranty Card, Power Cord, Remote Controller, Batteries, IR, Ambient sensor
	Optional	Media Player	N/A	N/A

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For more information

For more information about Samsung Window Display, visit
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2019-10

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