Samsung Smart LED Signage

IF SERIES

Captivate Indoor Audiences
through Comprehensive Display Solutions

SAMSUNG

Game-Changing Indoor Business Ideas, Brought to Life

As businesses seek new strategies to enliven the indoor customer experience, high-resolution LED content continues to emerge as a go-to upgrade. Samsung's IF Series displays are the comprehensive solution for an improved LED experience. By streamlining installation, presentation and management, businesses can create and share powerful content with minimal hassle.
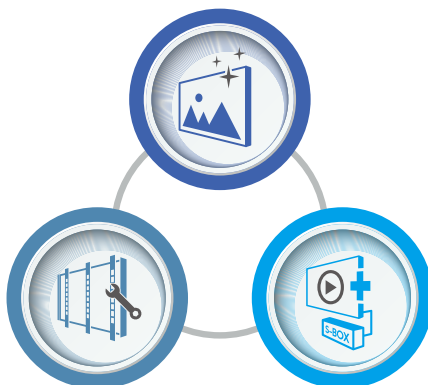
LED Signage IF Series

A Differentiated
Visual Experience

Direct Mount™ Kit
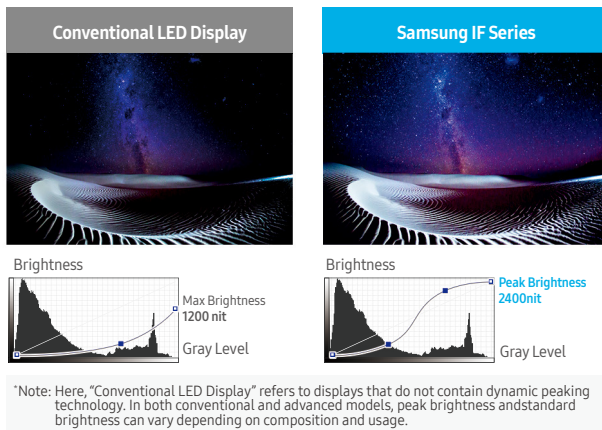
Clean, Hassle-Free
Installation

LED Signage Box (S-Box)

Streamlined
Content Management

PIONEERING HDR-POWERED VISUAL INNOVATION

Samsung's IF Series bring market-leading video processing tools together with High Dynamic Range (HDR) picture refinement technology to maximize brightness and fine-tune overall picture presentation. This unique combination fosters a cutting-edge, next-generation viewing arena in any environment.

Conventional LED Display | Samsung IF Series

Brightness — Max Brightness 1200 nit — Gray Level

Brightness — Peak Brightness 2400nit — Gray Level

*Note: Here, "Conventional LED Display" refers to displays that do not contain dynamic peaking technology. In both conventional and advanced models, peak brightness andstandard brightness can vary depending on composition and usage.
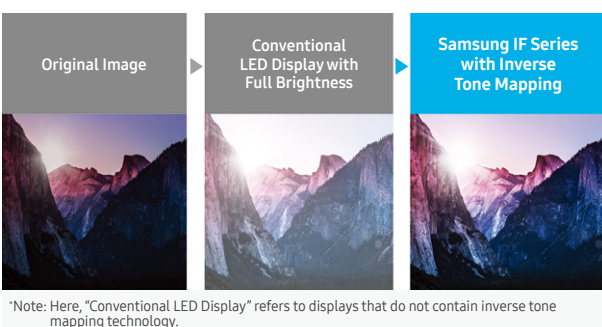
Optimize Content Brilliance

To ensure optimal LED performance, the IF Series employs dynamic peaking technology that combats potential interference from natural or ambient lighting. Dynamic peaking produces featured content at peak brightness levels nearly twice as high as the standard LED signage maximum. As a result, the IF Series displays produce brilliant, consistent content that shines even against white or dark backgrounds.

Conventional LED | Samsung IF Series

Reddish Skin Tone Presentation

Accurate Skin Tone Presentation

*Note: Here, "Conventional LED Display" refers to displays that do not contain color management technology.

Showcase True-to-Life Imagery

As certain LED displays struggle to reflect wider RGB color gamuts, the ensuing oversaturation can give skin tones an unnatural reddish hue. Samsung's IF Series displays mitigate these variations and maintain consistent gradation through in-depth color management. As a result, featured subjects ranging from models and newscasters to virtual conference participants appear with lifelike realism.

Original Image | Conventional LED Display with Full Brightness | Samsung IF Series with Inverse Tone Mapping

*Note: Here, "Conventional LED Display" refers to displays that do not contain inverse tone mapping technology.

Elevate Contrast and Brightness

Samsung's IF Series displays ensure ongoing uniformity and create a comfortable long-term viewing environment by leveraging strict Scene Adaptive HDR technology. This includes specialized inverse tone mapping algorithms that analyze and optimize gradation and brightness levels within individual content scenes while simultaneously eliminating shine.
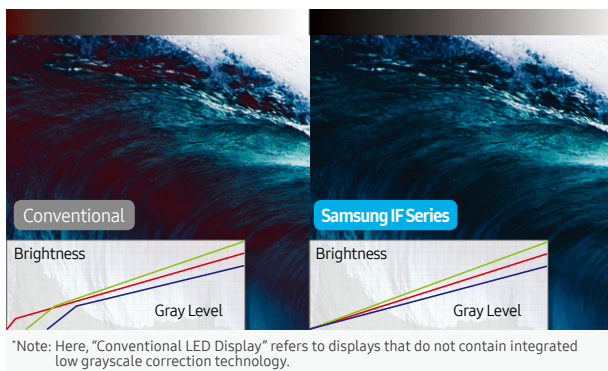
EXCEPTIONAL, INDOOR-READY PICTURE QUALITY

With Samsung's IF Series displays, businesses can customize color presentation to fit their unique branding needs while also avoiding common LED display visual inconsistencies. The displays leverage real-time tuning to ensure color consistency and elevated clarity, and deter audience distraction.
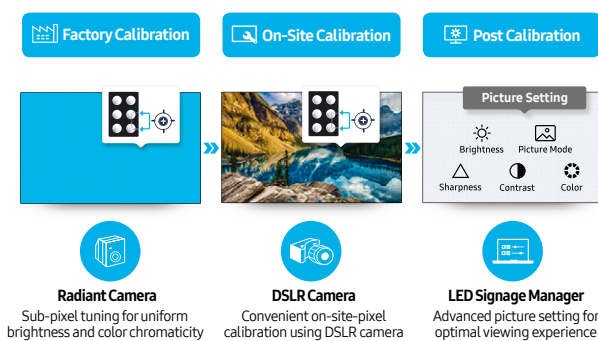

Customize Color Presentation

Detailed color management functionalities also allow IF Series users to select, store and deploy the RGB color gamut shades that best fit their unique branding and content needs. This convenience benefits museums, corporate facilities, news studios and other environments who must quickly deploy content at high clarity across multiple screens.

*Note: Here, "Conventional LED Display" refers to displays that do not contain integrated low grayscale correction technology.
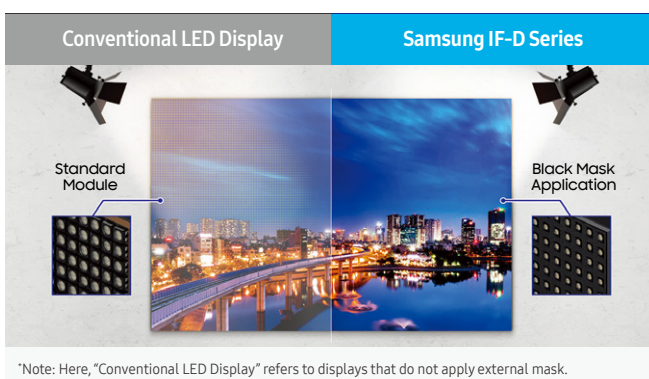
Reinforce Accurate Low Grayscale Color Expression

A unique grayscale management algorithm empowers the IF Series displays to deliver consistent red, green and blue hues without distortion, even in low grayscale settings. This color stability ensures optimal and uninterrupted picture quality in museums, galleries and other low-brightness indoor environments.

Radiant Camera
Sub-pixel tuning for uniform brightness and color chromaticity

DSLR Camera
Convenient on-site-pixel calibration using DSLR camera

LED Signage Manager
Advanced picture setting for optimal viewing experience

Fine-Tune Uniformity

Rigorous factory calibration fine-tunes all IF Series sub-pixels for uniform brightness and color chromaticity out of the box. For added consistency, the IF Series displays also leverage DSLR cameras - rather than radiant - for real-time sub-pixel calibration. When coupled with the integrated Samsung LED Signage Manager's advanced picture settings, this enhanced display treatment produces an excellent presentation.

*Note: Here, "Conventional LED Display" refers to displays that do not apply external mask.
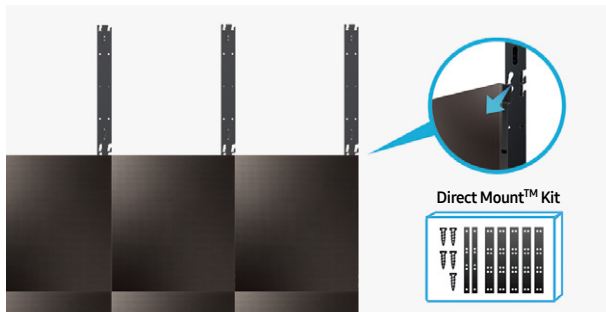
"Mask" Visual Inconsistencies

IF-D Series displays apply an external black mask sheet* to offset the lead framework exposure and glittering effect that often affects higher pixel-pitch LED offerings. For added consistency, each sheet adheres to the display via glue, in place of screws that pose an additional glittering risk. By closing visual gaps, these masks ensure that the IF-D Series can uphold contrast against dynamic lighting exposure.

*Note: The black mask module is only applicable for the IF040H-D and IF060H-D models.
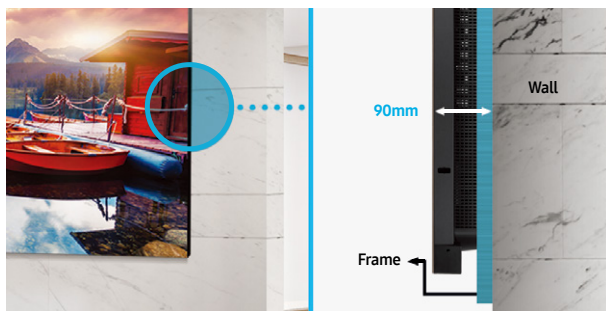
SEAMLESS PREMIUM DISPLAY INSTALLATION

The IF Series' advanced design accommodates and ensures a clean, gap-free installation in any business environment. A compact size and compatible, hook-based Direct Mount™ Kit reduce setup time and allow users to quickly align and activate their displays.
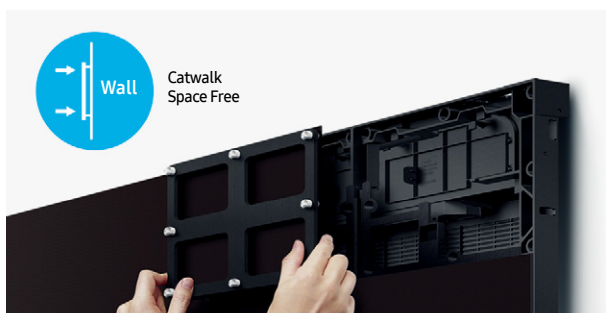

Enjoy a Clean, Hassle-Free Installation

The IF Series' design produces a uniform installation across any setting or wall height by overcoming gaps between frames or cabinets. A specialized Direct Mount™ Kit offers users hooks to connect each individual screen. Users in turn can slide and mount each screen to the frame in a simple motion, rather than requiring more laborious nail- or screw-driven processes.
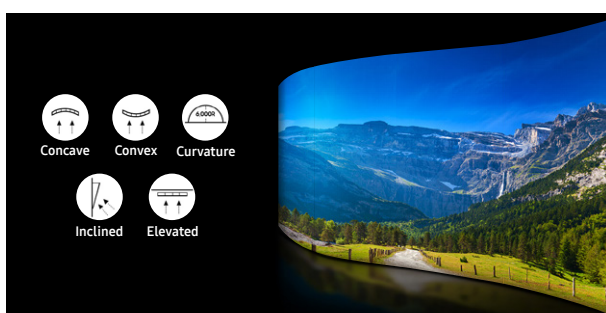

Ensure a Compact and Compliant Activation

Regardless of the environment, the IF Series' sleek design ensures seamless adherence without requiring an extra wall or backdrop installation. Together, the frame and screen account for 90 mm*. of space, ensuring compliance with Americans with Disabilities Act (ADA) protrusion regulations.

*Note: Depth of IF012J equals 95mm

Ease Maintenance through Full Front and Rear Access

For added flexibility, the IF Series displays offer full-front access to critical signage components. This expanded visibility further drives clean installations free of catwalk space and ensures closer adherence to neighboring surfaces. Similarly, the IF Series displays foster more convenient, quick-turn maintenance by making rear display components fully accessible without removal or disassembly.
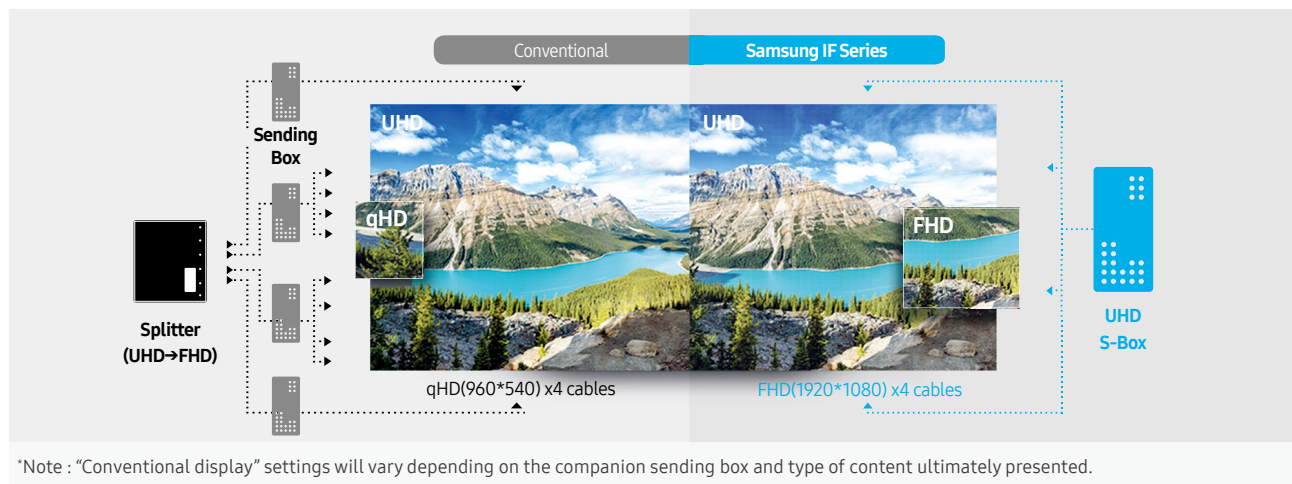

Expand Display Composition Possibilities

Businesses seeking an extra competitive edge can strategically position Samsung's IF Series displays in their most advantageous locations. The IF Series' advanced design includes both convex* and concave curved configurations (up to 6,000R in curvature) guaranteed to catch audience eyes. Additionally, businesses can align their IF Series displays on an incline or adhere them to a ceiling**, opening new engagement possibilities regardless of environmental constraints.

*Note: Convex designs are only available for the IF025H-D, IF040H-D and IF060H-D models.
**Note: Inclined or ceiling installations are only possible with the IF040H-D and IF060H-D models.
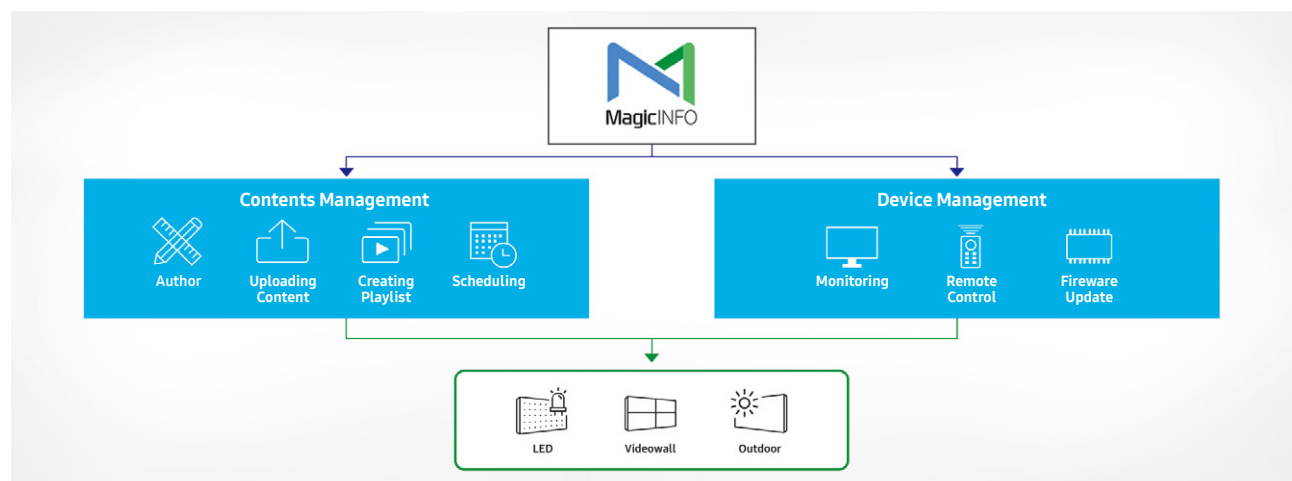
NEXT-LEVEL OPERATIONAL EFFICIENCY

Backed by Samsung's powerful LED Signage Box (S-Box), the IF Series displays allow users to streamline the presentation and management of brilliant, true-to-life content. The S-Box's extensive visibility empowers faster review and troubleshooting of potential challenges without disrupting performance.

*Note : "Conventional display" settings will vary depending on the companion sending box and type of content ultimately presented.

Streamline UHD Content Delivery

Samsung's compatible S-Box condenses the delivery of compelling content to a single, centralized device. The S-Box transmits UHD content across multiple IF Series displays without requiring external boxes or splitters, helping businesses enjoy faster and more cost-efficient operations.

Centralize Content and Device Management

By aligning Samsung's MagicInfo content management platform with the LED S-Box, IF Series users can remotely program and modify their entire display network's settings within a single source. MagicInfo users can create, schedule and deploy content across multiple displays directly from their personal devices. The platform's extensive visibility also empowers users to monitor and adjust display settings and troubleshoot potential performance issues from any location via remote access. This includes the ability to implement firmware updates to maximize performance and LED HDR picture settings for the best possible visibility.

IF-E & IF Series

Customize your Immersive Environment with
Fine Pixel Pitch LED Displays

Meeting Room   **IFH**

Control Room   **IFH**

Retail   **IFH-E**

Residential   **IFJ**

IF-D & IF-DL Series

Inform, Engage and Entertain Widespread Indoor Audiences

Retail   IF-D

Corporate   IF-D

Stadium   IF-DL

Table 1

	MODEL NAME	IF012J	IF015H-E	IF015H	IF020H	IF025H
Physical Parameter	Pixel Pitch	1.26 mm	1.5 mm	1.5 mm	2.0 mm	2.5 mm
	Pixel Configuration	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue
	Pixel Density	629,882 m² / 58,518 ft²	444,444 m² / 41,290 ft²	444,444 m² / 41,290 ft²	250,000 m² / 23,225 ft²	160,000 m² / 14,864 ft²
	Configuration (LxH per cabinet)	640x360 pixels	320x360 pixels	320x360 pixels	240x270 pixels	192x216 pixels
	Diode Type	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)
	Dimensions (mm, LxHxD per cabinet)	806.4x453.6x75mm	480x540x65mm	480x540x65mm	480x540x65mm	480x540x65mm
	Dimensions (inch, LxHxD per cabinet)	36.4 inch x 2.95 inch	28.5 inch x 2.56 inch	28.5 inch x 2.56 inch	28.5 inch x 2.56 inch	28.5 inch x 2.56 inch
	Weight (kg. per cabinet)	10.8kg	5.8kg	5.8kg	5.8kg	5.8kg
Optical Parameter	Brightness (Peak)*	1,200 nit	1,200 nit	1,600 nit	2,400 nit	2,400 nit
	Brightness (Full-white)	600 nit	600 nit	800 nit	1,200 nit	1,200 nit
	Contrast Ratio	8,000:1	6,000:1	10,000:1	10,000:1	10,000:1
	Viewing angle - Horizontal	160°	160°	160°	160°	160°
	Viewing angle - Vertical	150°	160°	160°	160°	160°
	Bit Depth	16bit per Color	16bit per Color	16bit per Color	16bit per Color	16bit per Color
	Color temperature - Default	6,500K	6,500K	6,500K	6,500K	6,500K
	Color temperature - Adjustable	2,800 - 10,000K (use S/BOX)	2,800 - 10,000K (use S/BOX)	2,800 - 10,000K (use S/BOX)	2,800 - 10,000K (use S/BOX)	2,800 - 10,000K (use S/BOX)
Electrical Parameter	Video Rate	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
	Input Power Range	100~240 VAC, 50/60 Hz	100~240 VAC, 50/60 Hz	100~240 VAC, 50/60 Hz	100~240 VAC, 50/60 Hz	100~240 VAC, 50/60 Hz
	Power consumption - Max	710 (W/㎡) / 260 (W/Cabinet)	770 (W/㎡) / 200 (W/Cabinet)	770 (W/㎡) / 200 (W/Cabinet)	695 (W/㎡) / 180 (W/Cabinet)	620 (W/㎡) / 160 (W/Cabinet)
	Heat generation - Max (BTU/SF per hour)	225 BTU/SF per hour	245 BTU/SF per hour	245 BTU/SF per hour	220 BTU/SF per hour	196 BTU/SF per hour
	Refresh rate	3,840 Hz	1,920Hz, 3,840 Hz Selectable	1,920Hz, 3,840 Hz Selectable	1,920Hz, 3,840 Hz Selectable	1,920Hz, 3,840 Hz Selectable
Operation Conditions	Working Temperature/Huminity	0°C~40°C / 10~80%RH	0°C~40°C / 10~80%RH	0°C~40°C / 10~80%RH	0°C~40°C / 10~80%RH	0°C~40°C / 10~80%RH
	IP Rating	IP20	IP20	IP20	IP20	IP20
	LED Lifetime	100,000 hours	100,000 hours	100,000 hours	100,000 hours	100,000 hours
Certification	Certification	EMC Class B, Safety 60950-1	EMC Class A, Safety 60950-1	EMC Class A, Safety 60950-1	EMC Class A, Safety 60950-1	EMC Class A, Safety 60950-1
Service	Service	Front Service and/or Rear Service	Front Service and/or Rear Service	Front Service and/or Rear Service	Front Service and/or Rear Service	Front Service and/or Rear Service
Package	Box Dimension (LxHxD)	942x590x153	606x667x179	606x667x179	606x667x179	606x667x179
	Box Volume (m³)	0.085	0.073	0.073	0.073	0.073
	Package Weight (per cabinet)	14kg (per cabinet)	9.1kg (per cabinet)	9.1kg (per cabinet)	9.1kg (per cabinet)	9.1kg (per cabinet)

Table 2

	MODEL NAME	IF025H-D	IF040H-D	IF060H-D	IF060H-DL
Physical Parameter	Pixel Pitch	2.5 mm	4.0 mm	6.0 mm	6.0 mm
	Pixel Configuration	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue
	Pixel Density	160,000 m2 / 14,864 ft2	62,500 m2 / 5,807 ft2	27,778 m2 / 2,581 ft2	27,778 m2 / 2,581 ft2
	Configuration (LxH per cabinet)	192x288 pixels	120x180 pixels	80x120 pixels	80x120 pixels
	Diode Type	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)
	Dimensions (mm, LxHxD per cabinet)	480x720x65mm	480x720x65mm	480x720x65mm	480x720x65mm
	Dimensions (inch, LxHxD per cabinet)	34 inch x 2.56 inch	34 inch x 2.56 inch	34 inch x 2.56 inch	34 inch x 2.56 inch
	Weight	7.4kg (per cabinet)	7.4kg (per cabinet)	7.4kg (per cabinet)	7.4kg (per cabinet)
Optical Parameter	Brightness (Peak)*	2,400 nit	1,700 nit	1,800 nit	3,400 nit
	Brightness (Full-white)	1,200 nit	1,200 nit	1,200 nit	2,000 nit
	Contrast Ratio	10,000:1	7,000:1	7,500:1	7,500:1
	Viewing angle - Horizontal	160°	160°	160°	160°
	Viewing angle - Vertical	160°	160°	160°	160°
	Bit Depth	16bit per Color	16bit per Color	16bit per Color	16bit per Color
	Color temperature - Default	6,500K	6,500K	6,500K	6,500K
	Color temperature - Adjustable	2,800 - 10,000K (use S/BOX)	2,800 - 10,000K (use S/BOX)	2,800 - 10,000K (use S/BOX)	2,800 - 10,000K (use S/BOX)
Electrical Parameter	Video Rate	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
	Input Power Range	100~240 VAC, 50/60 Hz	100~240 VAC, 50/60 Hz	100~240 VAC, 50/60 Hz	100~240 VAC, 50/60 Hz
	Power consumption - Max	580 (W/㎡) / 200 (W/Cabinet)	580 (W/㎡) / 200 (W/Cabinet)	580 (W/㎡) / 200 (W/Cabinet)	580 (W/㎡) / 200 (W/Cabinet)
	Heat generation - Max (BTU/SF per hour)	184 BTU/SF per hour	184 BTU/SF per hour	184 BTU/SF per hour	184 BTU/SF per hour
	Refresh rate	1,920Hz, 3,840 Hz Selectable	1,920Hz, 3,840 Hz Selectable	1,920Hz, 3,840 Hz Selectable	1,920Hz, 3,840 Hz Selectable
Operation Conditions	Working Temperature/Huminity	0°C~40°C / 10~80%RH	0°C~40°C / 10~80%RH	0°C~40°C / 10~80%RH	0°C~40°C / 10~80%RH
	IP Rating	IP20	IP20	IP20	IP20
	LED Lifetime	100,000 hours	100,000 hours	100,000 hours	100,000 hours
Certification	Certification	EMC Class A, Safety 60950-1	EMC Class A, Safety 60950-1	EMC Class A, Safety 60950-1	EMC Class A, Safety 60950-1
Service	Service	Front Service and/or Rear Service	Front Service and/or Rear Service	Front Service and/or Rear Service	Front Service and/or Rear Service
Package	Box Dimension (LxHxD)	606x847x179	606x847x179	606x847x179	606x847x179
	Box Volume (m³)	0.092	0.092	0.092	0.092
	Package Weight (per cabinet)	10.4kg (per cabinet)	10.4kg (per cabinet)	10.4kg (per cabinet)	10.4kg (per cabinet)

S-BOX

Model	SBB-SNOWJ3U	
SoC	Cortex-A12 1GHz Quad Core	
Memory	2.5GB 96bit DDR3-933 (1866MHz)	
Storage	8GB (3.75GB Occupied by O/S, 4.25GB Available)	
Graphics	2D & 3D Graphics Engine - Supports OpenGL ES	
OS	Tizen 2.4 OS	
Input / Output	DP In, HDMI1, HDMI2	
	HDBT Out x 4, SPDIF(Audio) Out x 1	
	RJ-45(10/100Mbps), RS232(Stereo) In	
	USB 2.0 Port x 2	
Power	Power Supply	AC 100 - 240 V~ (+/- 10 %), 50/60 Hz
	Power Consumption	Working: 60 Watt/h (BTU: 204.73 BTU/h)
		Standby: 0.5 Watt/h (BTU: 1.71 BTU/h)
Operation	Operating Temperature	0°C to 40°C
	Humidity	10 to 80%
Mechanical	Dimension (mm)	S-Box : 422.4x38.3x221.1 / IG : 75.6x23.3x268.8
	Weight (kg)	S-Box : 2.65 / IG : 0.5
Certification	Safety	UL/c-UL, CB
	EMC	FCC Class B, CE, VCCI, KCC, BSMI, C-Tick, CCC, NATA, GOST
Etc	Dimming (Brightness Sensor)	

DIRECT MOUNT™ KIT

	MODEL NAME	VG-LFJ32	VG-LFJ33	VG-LFH15	VG-LFH20
Mechanical Spec.	SET Size after installation (WxHxD, mm)	2405.2 x 906.2 x 49.8	2405.2 x 1359.8 x 49.8	2865.0 × 1611.8 x 49.8	3824.6 × 2151.5 x 49.8
	Set weight [kg] (except Accessories)	3.8	5.6	10.8	18.4
	Safe working load (kgf)	85	130	10.8	18.4
Standard Cabinet	SAMSUNG LED Signage models	LH012IFJ	LH012IFJ	LH015IFH, LH020IFH, LH025IFH	LH015IFH, LH020IFH, LH025IFH
	Counts of cabinets	6 (3X2)	9 (3X3)	18	32
Package	Packaging Size(LxHxD, mm)	1019 x 419 x 233	1922 x 419 x 164	1777 × 787 x 114	2313 × 881 x 114
	Gross weight [kg±5%]	10.5	13.9	21.9	34.6
	20ft DC loading size(Standard)	16 units/Individual unit, 192 units/Stuffing	24 units/Individual unit, 144 units/Stuffing	15 units/Individual unit, 105 units/Stuffing	17 units/Individual unit, 68 units/Stuffing
	40ft DC loading size(Standard)	16 units/Individual unit, 448 units/Stuffing	24 units/Individual unit, 312 units/Stuffing	15 units/Individual unit, 210 units/Stuffing	17 units/Individual unit, 136 units/Stuffing

	MODEL NAME	VG-LFH25	VG-LFH81FWA	VG-LFH82FWA	VG-LFH83FWA
Mechanical Spec.	SET Size after installation (WxHxD, mm)	4784.2 × 2691.2 x 49.8	3839.9 ×719.9 x 89.5	3839.9 ×1439.9 x 89.5	3839.9 × 2159.9 x 89.5
	Set weight [kg] (except Accessories)	28.2	6.6	12.7	19
	Safe working load (kgf)	28.2	32	32	32
Standard Cabinet	SAMSUNG LED Signage models	LH015IFH, LH020IFH, LH025IFH	LH025IFHSDS*, LH040IF-HSDS*, LH060IFHSDS*	LH025IFHSDS*, LH040IF-HSDS*, LH060IFHSDS*	LH025IFHSDS*, LH040IF-HSDS*, LH060IFHSDS*
	Counts of cabinets	50	8	16	24
Package	Packaging Size(LxHxD, mm)	2853 × 1157 x 114	935 × 114 x 874	1597 × 114 x 935 (mm)	2317 × 114 x 935 (mm)
	Gross weight [kg±5%]	50.2	12.7	23.2	31.7
	20ft DC loading size(Standard)	17 units/Individual unit, 34 units/Stuffing	17 units/Individual unit, 204 units/Stuffing	15 units/Individual unit, 119 units/Stuffing	15 units/Individual unit, 68 units/Stuffing
	40ft DC loading size(Standard)	17 units/Individual unit, 68 units/Stuffing	17 units/Individual unit, 408 units/Stuffing	15 units/Individual unit, 238 units/Stuffing	15 units/Individual unit, 136 units/Stuffing

About Samsung Electronics Co., Ltd

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SMART LED Signage

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All images are simulated.

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