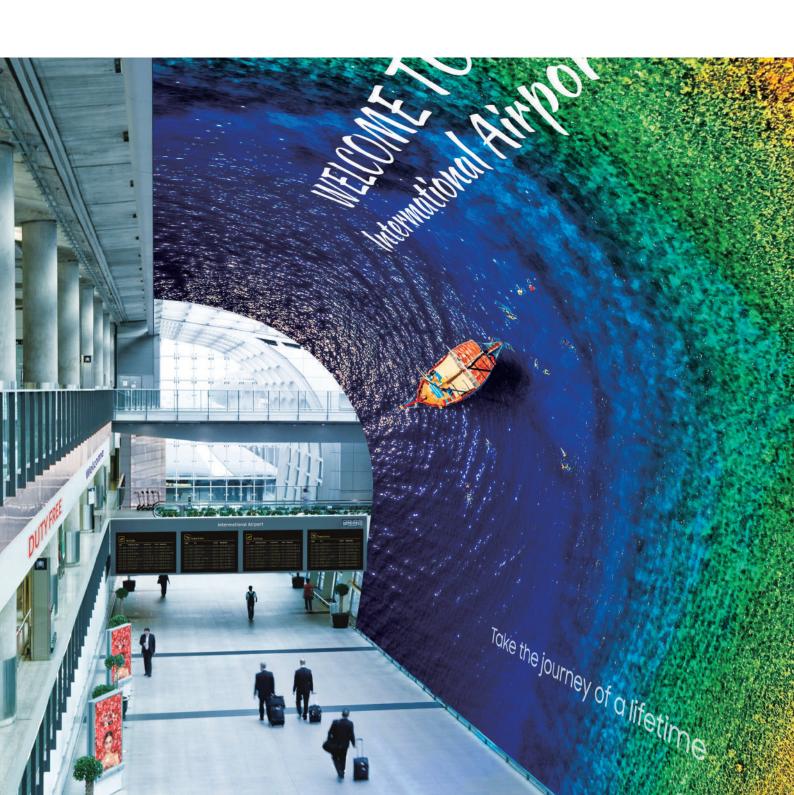
# Indoor LED Signage

**IFA Series** 

Completely captivating. Fully flexible.



## LED Signage an integral part of business

Digital signage technology has become a central part of any business environment, from corporate lobbies and hospitality venues to busy transportation hubs such as airports and railways. As the world re-opens and foot traffic increases, digital signage will play a vital role in providing critical information to customers while maximizing efficiency for businesses. LED signage is engineered to provide brilliant picture quality any time of the day or night — regardless of ambient light. Plus, with flexible design options and efficient operation, LED signage has the advanced visual capability to enhance any business environment. LED signage is now seen as an integral part of any modern business to create an optimized customer experience while delivering robust, reliable performance that drives growth.

## Sharp visuals, seamless and safe for any business environment



## Clear visuals that captivate customers

Keep customers engaged with clear and compelling messages thanks to the IFA series' best-in-class LED picture quality. With refined visuals and pin-sharp clarity regardless of any bright or dark ambient lighting, businesses can be confident knowing customers are receiving the critical information they need. Combined with Industry-leading calibration technology, the IFA series ensures a consistent, concise viewing experience for audiences aligned with brand guidelines.



# Customized installation and complete display control

Businesses need flexibility regardless of the environment and the IFA series offers a variety of flexible installation design options – including hanging, ceiling, inclined, curved and L-type installation – giving businesses complete control over their space. The cable-less design enables effortless installation and maintenance so businesses can put their displays to work immediately.



## Certified safety for customer peace of mind

With the Samsung IFA series, customers stay engaged and safe from potential harm. Each model is EMC class B compliant, ensuring a safe viewing environment that meets strict electromagnetic wave emission standards. In addition, the display is equipped with flame prevention functionality, preventing the spread of flames in the event of a fire for maximum protection and enhanced user peace of mind so they can focus on what is front of them.

## **Key features**



## Best-in-class LED picture quality

Drawing on Samsung's industry leadership experience and years of innovation in visual display technology, the displays produce images with vivid color expression, reduced noise and a full range of grays and blacks.



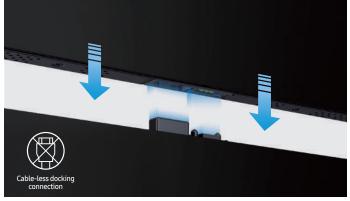
## Clearly refined visuals

LED HDR turns any content into HDR-level without requiring special metadata. Dynamic Peaking and Inverse Tone Mapping enhance content to optimum brightness levels while avoiding glare, and Color Mapping ensures an accurate color presentation.



## Pin-sharp clarity, bright or dark

Discover the true beauty no matter how bright or dark a scene is. The IFA series supports HDR10+ which optimizes brightness and contrast ratio scene-by-scene to ensure each frame looks exactly as intended.



#### **Effortless installation**

Samsung's IFA series has a cable-less design, enabling simple and easy installation as well as fast setup of the display so it can get to work immediately. The display also requires a minimal number of signal or power cable connections between cabinets, even in the event of a module repair service.



## Flexible installation for any location

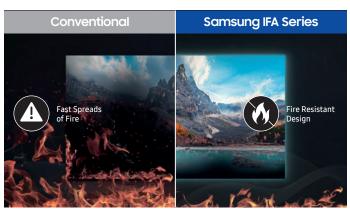
IFA series enables a variety of installation options to meet any environmental specifications. With support of hanging, ceiling, curved, inclined and inner and outer L-shaped installations, businesses can have complete control to create the ideal display for their space.

## **Key features**



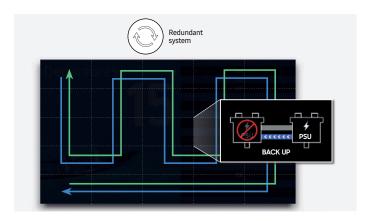
#### Reduced electromagnetic waves

The IFA series ensures user safety with EMC Class B certification, minimizing electromagnetic waves for safe use in addition to the protection of the surrounding working environment. The display protects user health so they can focus on the task at hand with peace of mind.



#### Flame prevention functionality

The IFA series has been recognized with a fire protection design, preventing the spread of flames in the event of a fire. This ensures users have enough time to deal with the emergency during any fire, providing the critical time needed for minimized impact.



#### Operational safeguards to minimize downtime

IFA series features multiple operational safeguards intended to minimize screen failures including embedded dual power units and forward and reverse signal redundancy. These redundant systems help to ensure content interruptions are reduced as much as possible, keeping your message front and center.



#### Screen uniformity all the time

On-site PC and mobile calibration combined with multi-step factory calibration tunes the whole screen of LED displays to uniform brightness and color. Color Expert LED Mobile provides a quick and easy calibration, requiring nothing more than a mobile phone and a Wi-Fi connection.



## Seamless, smooth content playback

Frame rate synchronization guarantees smooth content without screen tearing when multiple S-boxes are connected. This means users can enjoy almost perfectly smooth playback even when combining or splitting content across cabinets.

## **Specifications**

		IF021A	IF025A	IF042A
		LH021IFABVS	LH025IFATVS	LH042IFATVS
	Pixel Pitch	2.1 mm	2.52 mm	4.2 mm
Physical Parameter	Pixel Configuration	1 red,1 green,1 blue	1 red,1 green,1 blue	1 red, 1 green, 1 blue
	Configuration (LxH,	384 x 216 pixels	320 x 180 pixels	192 x 108 pixels
	per cabinet)  Diode Type	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)
	Dimensions (mm,	806.4 x 453.6 x 37.7 mm	806.4 x 453.6 x 37.7 mm	806.4 x 453.6 x 37.8 mm
	LxHxD, per cabinet) Dimensions			
	(inch, per cabinet) No. of Modules	36.4 x 1.5 inch	36.4 x 1.5 inch	36.4 x 1.5 inch
	(WxH, per cabinet)	4 x 3	4 x 3	4 x 3
	Weight (per cabinet/per m²)	12.0 kg / 32.8 kg	12.0 kg / 32.8 kg	11.7 kg / 32.0 kg
Optical Parameter	Brightness (Peak/Max) <sup>(1)</sup>	1,600 nit /1,000 nit	2,400 nit / 1,200 nit	1,700 nit /1,200 nit
	Contrast Ratio (2)	7,500 : 1	10,000 : 1	10,000 : 1
	HDR Compatibility	LED HDR / HDR10+ support / Al Picture	LED HDR / HDR10+ support / Al Picture	LED HDR / HDR10+ support / Al Picture
	Viewing Angle - Horizontal	160°	160°	160°
	Viewing Angle -	160°	160°	160°
	Vertical Bit Depth	16 bit (Internal processing 18bit)	16 bit (Internal processing 18bit)	16 bit (Internal processing 18bit)
	Color Temperature -	6,500K ± 500K (Floating bin)	6,500K ± 500K (Floating bin)	6,500K ± 500K (Floating bin)
	Default Color Temperature -	•		
	Adjustable	2,800K ~ 10,000K (using S-Box)	2,800K ~ 10,000K (using S-Box)	2,800K ~ 10,000K (using S-Box)
Electrical Parameter	Video Rate	50/60 Hz	50/60 Hz	50/60 Hz
	Input Power Range Power Consumption	100~240 VAC, 50/60 Hz	100~240 VAC, 50/60 Hz	100~240 VAC, 50/60 Hz
	- Max	630 (W/m²) / 240 (W/Cabinet)	580 (W/m²) / 210 (W/Cabinet)	580 (W/m²) / 210 (W/Cabinet)
	Power Consumption - Typ	210 (W/m²) / 80 (W/Cabinet)	193 (W/m²) / 70 (W/Cabinet)	193 (W/m²) / 70 (W/Cabinet)
	Heat Generation - Max	2,150 (BTU/m²) / 819 (BTU/Cabinet)	1,980 (BTU/m²) / 717 (BTU/Cabinet)	1,980 (BTU/m²) / 717 (BTU/Cabinet)
	Heat Generation - Typ	717 (BTU/m²) / 273 (BTU/Cabinet)	660 (BTU/m²) / 239 (BTU/Cabinet)	660 (BTU/m²) / 239 (BTU/Cabinet)
	Refresh Rate (3)	11,520 Hz	11,520 Hz	11,520 Hz
Operational Parameter	Power Redundancy	Yes	Yes	Yes
	Working Tempera- ture / Humidity	0°C~+40°C /10%~80%RH	0°C~+40°C /10%~80%RH	0°C~+40°C /10%~80%RH
	Storage Temperature	-20°C~+45°C / 5%~95%RH	-20°C~+45°C / 5%~95%RH	-20°C~+45°C / 5%~95%RH
	/ Humidity  IP Rating	IP20	IP20	IP20
	LED Lifetime	100,000 hours	100,000 hours	100,000 hours
Connectivity	Controller	SNOW-AAE, SNOW-1810U	SNOW-AAE, SNOW-1810U	SNOW-AAE, SNOW-1810U
		Optical	Optical	Optical
	Connectivity	* HDBT is used for connecting only BT/Wifi module	* HDBT is used for connecting only BT/Wifi module	* HDBT is used for connecting only BT/Wifi module
Certification	Safety	62368-1, 60950-1	62368-1, 60950-1	62368-1, 60950-1
	EMC	Class B	Class B	Class B
	Eye-comfort	TUV	TUV	TUV
	Fire-protection	EN13501-1 Class B (TBD)	EN13501-1 Class B (TBD)	EN13501-1 Class B (TBD)
Service	Service	Front	Front	Front
Features	Operating System	Tizen 6.0 / 4.0	Tizen 6.0 / 4.0	Tizen 6.0 / 4.0
	MagicINFO	Yes	Yes	Yes
	Sensor	Temperature	Temperature	Temperature
	Other	Eco Image Enhancer	Eco Image Enhancer	Eco Image Enhancer
	Smart TV type	-	-	-
	Smart Function	Multiview, Screen-mirroring (w/ SNOW-AAE)	Multiview, Screen-mirroring (w/ SNOW-AAE)	Multiview, Screen-mirroring (w/ SNOW-AAE)
	Bixby Language	-	-	-
ccessories	Accessories	Décor Frame (Standard), Frame Kit	Décor Frame (Standard), Frame Kit	Décor Frame (Standard), Frame Kit
	Remote Control	-	-	-
Package	Box Dimension (mm, WxHxD)	927 x 161 x 592 mm	927 x 161 x 592 mm	927 x 161 x 592 mm
	Package Weight (per cabinet)	15.8 kg	15.8 kg	15.5 kg
Special Installation	Curve	Concave(6000R), Convex(6000R), L-type	Concave(6000R), Convex(6000R), L-type	Concave(6000R), Convex(6000R), L-type
	Inclination	Forward, Ceiling (TBD)	Forward, Ceiling (TBD)	Forward, Ceiling (TBD)
	Rotation	N/A	N/A	N/A

<sup>(1)</sup> Peak value according to IDMS (Information Display Measurement Standard)
(2) Measured under10lux light. Contrast in darkroom exceeds 1000000:1
(3) Referring to visual refresh rate

## SAMSUNG

## 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.

## **LED Signage**

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

Copyright © 2021 Samsung Electronics Co. Ltd. All rights reserved. Samsung is a registered trademark of Samsung Electronics Co. Ltd. Specifications and designs are subject to change without notice. Non-metric weights and measurements are approximate. All data were deemed correct at time of creation. Samsung is not liable for errors or omissions. All brand, product, service names and logos are trademarks and/or registered trademarks of their respective owners and are hereby recognized and acknowledged.

Samsung Electronics Co., Ltd. 416, Maetan 3-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-772, Korea