



SAMSUNG SMART LED SIGNAGE

IPS SERIES

Revitalize Indoor Content Delivery through Clearer and More Vivid Picture Presentation

Often subjected to variable conditions and light exposure, indoor environments can be among the most challenging for business owners to deliver clear meaningful content. Samsung's new SMART LED signage IPS Series alleviates these discrepancies through a reinforced design that shares uninterrupted, color-uniform content in any setting. Durable and fine-tuned to meet customers' needs, the IPS Series is the ideal display to help indoor businesses achieve their goals and captivate consumers.

HIGHLIGHTS

- Ultra-high 49,920 Hz. refresh rate supports clear video content without interruption
- Cabinet design deters light interference to deliver bright, crisp images
- Two-step pixel-by-pixel calibration produces consistent and accurate colors
- Round-the-clock support ensures optimal performance at every state of the customer process

INDUSTRY TRENDS

As indoor environments in various industries become more crowded, businesses continue to seek new avenues to gain an extra edge on their competition. In turn, LED signage has emerged as a popular upgrade to attract and engage potential customers. Easy implementation and consistent, high-quality picture presentation have eliminated many common obstacles, and invited more indoor users to consider replacing outdated analog displays with modern signage that fosters unprecedented creative potential.

SAMSUNG'S IPS SERIES LED SIGNAGE: CAPTIVATE INDOOR AUDIENCES THROUGH VERSATILE LED CONTENT

Customizable and engineered for long-term performance, Samsung's IPS Series signage ensures continuous and brilliant message delivery that helps businesses achieve their goals, even in potentially demanding conditions.



INDUSTRY-LEADING IMAGE QUALITY

Samsung brings the world's leading digital display company with its leading LED technology to deliver the highest-quality LED content possible. Through in-depth calibration, enhanced image processing and an industry-best contrast ratio, Samsung offers the LED signage that solves content challenges while maintaining optimal performance and appearance.



PROACTIVE EXPERT SUPPORT

A successful LED investment requires time and resources to ensure continuous and smooth long-term operation. Samsung holds high level of expertise within the LED signage marketplace, and provides end-to-end customer support that makes for convenient and effortless display management.



ENERGY-EFFICIENT PERFORMANCE

Beyond a commitment to improving customers' businesses, Samsung's signage also reflects a commitment to bettering the environment. Our LED signage is sustainably composed, and help customers reduce their energy expenses while simultaneously achieving their own eco-centered goals.



KEY FEATURES



SUPERIOR IMAGE QUALITY

Samsung's IPS Series LED signage delivers excellent image quality guaranteed to capture audience eyes even in potentially busy settings. The displays pair a premium diode composition with advanced video processing technologies to produce an ultra-high 49,920 Hz.* refresh rate far surpassing that of standard LED signage. As a result, videos can stream on the displays smoothly and without distortion or interruption. The IPS Series also is equipped to deter light interference and reflection, and produce crisp and clear images at elevated brightness levels.

* Refer to specifications for details as refresh rate can differ by models.



SPECIALIZED COLOR TUNING

Samsung's two-step calibration process ensures that IPS Series content is delivered with accurate and consistent color quality. First, display maintenance teams close color distortion gaps by tuning pixels to the lowest possible brightness level. Next, each pixel undergoes LED voltage adjustment that creates perfect color uniformity as brightness settings increase. By achieving the correct color tones, this thorough calibration process produces high-quality imagery with optimal color integrity.



END-TO-END PROJECT MANAGEMENT

During each installation, Samsung provides a centralized customer support center that remedies and prevents common LED signage performance challenges. A dedicated expert engages with customers during all six stages of the implementation process (Planning, Consulting, Designing and Producing, Shipping, Installing and Maintenance) to answer questions and ensure that all displays are running to their fullest potential. This proactive, involved approach not only saves customers time and money, but identifies and alleviates problems faster and with less effort required.



PROACTIVE ERROR RESOLUTION

To further empower the ongoing project management process, each IPS Series signage includes a host of technologies designed to identify common LED display performance problems. A two-way monitoring system notifies engineers at Samsung's Network Operating Center (NOC) of potential "display off" errors. Concurrently, a series of webcams and monitoring systems located throughout each display detects color and temperature discrepancies and LED dot errors. Once received, the NOC team proactively notifies and works with customers to address such issues that can impede seamless content delivery.

SPECIFICATIONS

MODEL		IPS030	IPS040	IPS059	IPS060
Physical Parameter	Pixel Pitch	3.175 mm (.125") centers	4.1275 mm (.1625") centers	5.9944 mm (.236") centers	6.35 mm (.25") centers
	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	99,200 m ² / 9,216 ft ²	58,698 m ² / 5,453 ft ²	27,830 m ² / 2,586 ft ²	24,800 m ² / 2,304 ft ²
	Diode Density	297,600 m ² / 27,648 ft ²	176,094 m ² / 16,359 ft ²	83,490 m ² / 7,758 ft ²	74,400 m ² / 6,912 ft ²
	Module Configuration (LxH)	64x72 pixels	64x72 pixels	32x36 pixels	32x36 pixels
	Diode Type	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)
	Dimensions (LxH) (per module)	203x229 mm	264x297 mm	192x216 mm	203x229 mm
	Weight (per module)	0.34 kg	0.52 kg	0.31 kg	0.32 kg
	Cabinet Construction	All aluminum construction	All aluminum construction	All aluminum construction	All aluminum construction
Optical Parameter	Brightness	2,000 nit	2,000 nit	2,000 nit	2,000 nit
	Contrast Ratio	6,000:1	15,000:1	11,000:1	11,500:1
	Viewing Angle - Horizontal	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)
	Viewing Angle - Vertical	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)
	Number of Colors	281 trillion colors	281 trillion colors	281 trillion colors	281 trillion colors
	Gray Scale Intensity	65,536 Levels of Red, Green and Blue	65,536 Levels of Red, Green and Blue	65,536 Levels of Red, Green and Blue	65,536 Levels of Red, Green and Blue
	Dimming Capability	256 Levels of brightness	256 Levels of brightness	256 Levels of brightness	256 Levels of brightness
	Color Wavelength	Red: 630 nm, Green: 530 nm, Blue: 468 nm	Red: 630 nm, Green: 530 nm, Blue: 468 nm	Red: 630 nm, Green: 530 nm, Blue: 468 nm	Red: 630 nm, Green: 530 nm, Blue: 468 nm
	Color Temperature - Default	6,500 K	6,500 K	6,500 K	6,500 K
	Color Temperature - Adjustable	4,500 - 9,000 K	4,500 - 9,000 K	4,500 - 9,000 K	4,500 - 9,000 K
Electrical Parameter	Video Rate	60 Frames per second	60 Frames per second	60 Frames per second	60 Frames per second
	Animation Rate	60 Frames per second	60 Frames per second	60 Frames per second	60 Frames per second
	Video Processing	24 bit, 100% digital, no compression	24 bit, 100% digital, no compression	24 bit, 100% digital, no compression	24 bit, 100% digital, no compression
	Color Processing	16 bit per color (48 bit total)	16 bit per color (48 bit total)	16 bit per color (48 bit total)	16 bit per color (48 bit total)
	Input Power Range	120/240 volts, 50/60 Hz	120/240 volts, 50/60 Hz	120/240 volts, 50/60 Hz	120/240 volts, 50/60 Hz
	Power Consumption - Max	892.8 (W/m ²) / 82.9 (W/ft ²)	528.3 (W/m ²) / 49.1 (W/ft ²)	571 (W/m ²) / 53 (W/ft ²)	570 (W/m ²) / 53 (W/ft ²)
	Power Consumption - Typical	223.2 (W/m ²) / 20.7 (W/ft ²)	132 (W/m ²) / 12.3 (W/ft ²)	133 (W/m ²) / 13.2 (W/ft ²)	142 (W/m ²) / 13.2 (W/ft ²)
	Refresh Rate	10,500 Hz	10,500 Hz	49,920 Hz	10,500 Hz
	Scan Rate	Scan Rate 9:1	Scan Rate 9:1	Scan Rate 1:1 non-multiplexed	Scan Rate 9:1
	Calibration	Pixel to pixel - Module to module	Pixel to pixel - Module to module	Pixel to pixel - Module to module	Pixel to pixel - Module to module
	Calibration White Point	D65 - 6500 K	D65 - 6500 K	D65 - 6500 K	D65 - 6500 K
	Calibration Standards	REC 709, REC 2020 or Max Gamut	REC 709, REC 2020 or Max Gamut	REC 709, REC 2020 or Max Gamut	REC 709, REC 2020 or Max Gamut
Operation Conditions	Working Temperature	-32°C to 55°C (-30°F to 131°F)	-32°C to 55°C (-30°F to 131°F)	-32°C to 55°C (-30°F to 131°F)	-32°C to 55°C (-30°F to 131°F)
	Cooling	Quiet running vent fans	Quiet running vent fans	Quiet running vent fans	Quiet running vent fans
	IP Rating	IP50	IP50	IP50	IP50
	LED Lifetime	80,000 hours	80,000 hours	100,000 hours	80,000 hours
Certification	Certification	CE, UL / ULC listed	CE, UL / ULC listed	CE, UL / ULC listed	CE, UL / ULC listed
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

MODEL		IPS080	IPS100	IPS110	IPS120	IPS160
Physical Parameter	Pixel Pitch	8.255mm (.325") centers	10.32mm (.400") centers	10.16mm (.400") centers	12.7mm (.5") centers	16.51mm (.65") centers
	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	14,675 m ² / 1,363 ft ²	9,688 m ² / 900 ft ²	9,688 m ² / 900 ft ²	6,200 m ² / 576 ft ²	3,669 m ² / 341 ft ²
	Diode Density	44,025 m ² / 4,089 ft ²	29,064 m ² / 2,700 ft ²	29,064 m ² / 2,700 ft ²	18,600 m ² / 1,728 ft ²	11,007 m ² / 1,023 ft ²
	Module Configuration (LxH)	32x36 pixels	32x16 pixels	16x16 pixels	16x16 pixels	16x16 pixels
	Diode Type	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)
	Dimensions (LxH) (per module)	264x297 mm	330x165 mm	165x165 mm	203x203 mm	264x264 mm
	Weight (per module)	0.50 kg	0.27 kg	0.27 kg	0.27 kg	0.44 kg
	Cabinet Construction	All aluminum construction	All aluminum construction	All aluminum construction	All aluminum construction	All aluminum construction
Optical Parameter	Brightness	2,000 nit	2,000 nit	2,000 nit	2,000 nit	2,000 nit
	Contrast Ratio	13,000:1	8,000:1	8,000:1	19,000:1	13,000:1
	Viewing Angle - Horizontal	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)
	Viewing Angle - Vertical	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)
	Number of Colors	281 trillion colors	281 trillion colors	281 trillion colors	281 trillion colors	281 trillion colors
	Gray Scale Intensity	65,536 Levels of Red, Green and Blue	65,536 Levels of Red, Green and Blue	65,536 Levels of Red, Green and Blue	65,536 Levels of Red, Green and Blue	65,536 Levels of Red, Green and Blue
	Dimming Capability	256 Levels of brightness	256 Levels of brightness	256 Levels of brightness	256 Levels of brightness	256 Levels of brightness
	Color Wavelength	Red: 630 nm, Green: 530 nm, Blue: 468 nm	Red: 630 nm, Green: 530 nm, Blue: 468 nm	Red: 630 nm, Green: 530 nm, Blue: 468 nm	Red: 630 nm, Green: 530 nm, Blue: 468 nm	Red: 630 nm, Green: 530 nm, Blue: 468 nm
	Color Temperature - Default	6,500 K	6,500 K	6,500 K	6,500 K	6,500 K
	Color Temperature - Adjustable	4,500 - 9,000 K	4,500 - 9,000 K	4,500 - 9,000 K	4,500 - 9,000 K	4,500 - 9,000 K
Electrical Parameter	Video Rate	60 Frames per second	60 Frames per second	60 Frames per second	60 Frames per second	60 Frames per second
	Animation Rate	60 Frames per second	60 Frames per second	60 Frames per second	60 Frames per second	60 Frames per second
	Video Processing	24 bit, 100% digital, no compression	24 bit, 100% digital, no compression	24 bit, 100% digital, no compression	24 bit, 100% digital, no compression	24 bit, 100% digital, no compression
	Color Processing	16 bit per color (48 bit total)	16 bit per color (48 bit total)	16 bit per color (48 bit total)	16 bit per color (48 bit total)	16 bit per color (48 bit total)
	Input Power Range	120/240 volts, 50/60 Hz	120/240 volts, 50/60 Hz	120/240 volts, 50/60 Hz	120/240 volts, 50/60 Hz	120/240 volts, 50/60 Hz
	Power Consumption - Max	543 (W/m ²) / 50.4 (W/ft ²)	494 (W/m ²) / 45.9 (W/ft ²)	494 (W/m ²) / 45.9 (W/ft ²)	490 (W/m ²) / 45.5 (W/ft ²)	474 (W/m ²) / 44.1 (W/ft ²)
	Power Consumption - Typical	190 (W/m ²) / 21.3 (W/ft ²)	123.5 (W/m ²) / 11.5 (W/ft ²)	123.5 (W/m ²) / 11.5 (W/ft ²)	143 (W/m ²) / 13.2 (W/ft ²)	142 (W/m ²) / 13.2 (W/ft ²)
	Refresh Rate	49,920 Hz	49,920 Hz	49,920 Hz	49,920 Hz	49,920 Hz
	Scan Rate	Scan Rate 1:1 non-multiplexed	Scan Rate 1:1 non-multiplexed	Scan Rate 1:1 non-multiplexed	Scan Rate 1:1 non-multiplexed	Scan Rate 1:1 non-multiplexed
	Calibration	Pixel to pixel - Module to module	Pixel to pixel - Module to module	Pixel to pixel - Module to module	Pixel to pixel - Module to module	Pixel to pixel - Module to module
	Calibration White Point	D65 - 6500 K	D65 - 6500 K	D65 - 6500 K	D65 - 6500 K	D65 - 6500 K
	Calibration Standards	REC 709, REC 2020 or Max Gamut	REC 709, REC 2020 or Max Gamut	REC 709, REC 2020 or Max Gamut	REC 709, REC 2020 or Max Gamut	REC 709, REC 2020 or Max Gamut
	Operation Conditions	Working Temperature	-32°C to 55°C (-30°F to 131°F)	-32°C to 55°C (-30°F to 131°F)	-32°C to 55°C (-30°F to 131°F)	-32°C to 55°C (-30°F to 131°F)
Cooling		Quiet running vent fans	Quiet running vent fans	Quiet running vent fans	Quiet running vent fans	Quiet running vent fans
IP Rating		IP50	IP50	IP50	IP50	IP50
LED Lifetime		100,000 hours	100,000 hours	100,000 hours	100,000 hours	100,000 hours
Certification	Certification	CE, UL / ULC listed	CE, UL / ULC listed	CE, UL / ULC listed	CE, UL / ULC listed	CE, UL / ULC listed
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

MEMO.

MEMO.

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 Samsung Newsroom at <http://news.samsung.com>

SMART LED SIGNAGE

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

Screen images simulated.

Copyright © 2017 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

2017-01



Scan this code with your smartphone
to download the Samsung Display Solutions Mobile App.