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SAMSUNG SMART LED SIGNAGE FINE PIXEL PITCH IF SERIES

Revitalize Indoor Customer Engagement with Realistically Brilliant Picture Quality

With more businesses turning to LED signage for an enhanced customer experience, Samsung's fine pixel pitch IF Series displays offer an ideal combination of superior picture quality and intuitive usability. The IF Series combines Samsung's leading video processing technologies with High Dynamic Range (HDR) picture refinement to add clarity and sophistication to featured content – all within a compact, easy-to-maintain design. In turn, indoor users can deliver more realistic and memorable content without incurring additional costs or added burden.

HIGHLIGHTS

- Specialized LED High Dynamic Range (HDR) technology optimizes picture quality
- Elevated grayscale ensures clear and detailed expression even in low brightness settings
- Factory and on-site DSLR calibration fine-tunes visual properties for more consistent image delivery
- Flexible full-front and rear-service access simplifies maintenance while preserving a neat and tidy installation
- UHD Signage Box, advanced signal redundancy and content platform compatibility reduce operational complexity
- Temperature and ventilation control extend display lifespan while minimizing costs

INDUSTRY TRENDS

High resolution content has emerged as a popular upgrade for businesses seeking an extra engagement edge in crowded indoor spaces. In doing so, these businesses also require LED content delivery tools that reflect their brand and attract eyes without requiring significant time or effort. To make this state-of-the-art content delivery and inviting visual environment possible, more businesses recognize the need for versatile, cost-efficient and easy-to-use displays. By removing these common barriers to entry, businesses can realize and achieve the benefits of LED signage.

SAMSUNG'S FINE PIXEL PITCH IF SERIES: DELIVER LED CONTENT THAT INSPIRES IN AN EASY-TO-MANAGE FORMAT

By leveraging Samsung's powerful IF Series signage, businesses can invite target audiences to a cutting-edge, next-generation LED content arena that informs, engages and entertains.



PIONEERING VISUAL INNOVATION

The IF Series is the latest extension of Samsung's ongoing commitment to continuous LED innovation. These cutting-edge displays combine market-leading video processing tools with specialized LED High Dynamic Range (HDR) technology to maximize brightness and refine overall picture presentation. Each IF Series display additionally is customized for unique indoor content needs.



OPERATIONAL EFFICIENCY

Through an intuitive, easy-to-manage design, the IF Series displays help indoor users improve overall operational efficiency while reducing required expenses. Versatile full-front and rear service access grants additional installation and service flexibility. The displays' advanced UHD compatibility and signal redundancy also eliminate the need for multiple external devices and tools to reliably produce high-quality content.



UNWAVERING RELIABILITY

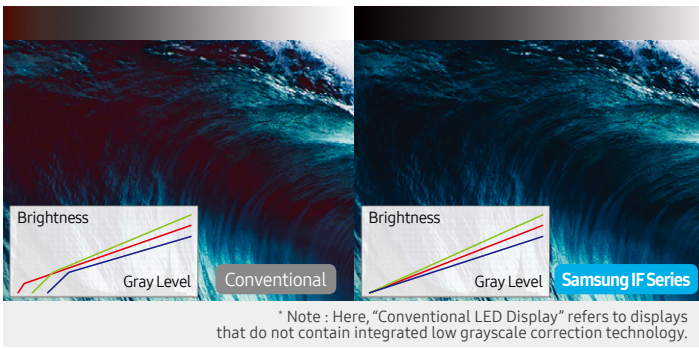
Indoor users can trust Samsung's IF Series displays to deliver engaging content at the speed and unique demands of their business. Each IF Series display undergoes rigorous durability testing to ensure continuous performance regardless of surrounding conditions. Likewise, an energy-efficient fanless cabinet design expands temperature and ventilation management capabilities to further reduce operational demands and simultaneously extend product shelf life.

KEY FEATURES



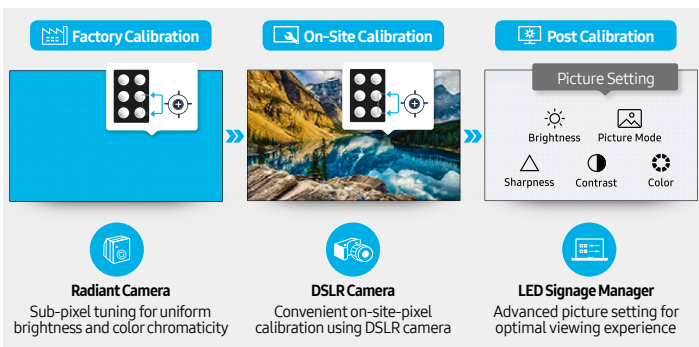
BRIGHT AND CLEAR LED EXPRESSION

Samsung's IF Series displays leverage LED HDR scene adaptation technology to showcase a detailed and realistic picture. Through this process, customized algorithms analyze and optimize gradation and brightness levels within individual content scenes while also preventing dazzling. IF Series users also benefit from dynamic peaking that empowers displays to reach peak brightness levels nearly two times higher than standard LED maximum brightness norms.



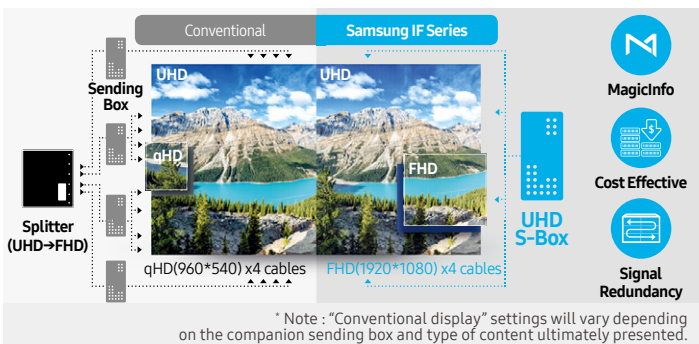
ACCURATE COLOR EXPRESSION FOR LOW BRIGHTNESS SETTINGS

Often, conventional LED displays struggle to present red, green and blue color hues accurately and without distortion in low grayscale settings. The IF Series displays alleviate these challenges through a unique grayscale management algorithm that maintains consistent R/G/B gradation for improved color accuracy. As a result, low-brightness indoor environments, such as galleries, museums and shops, can display content at optimal quality with uniform and precise color expression.



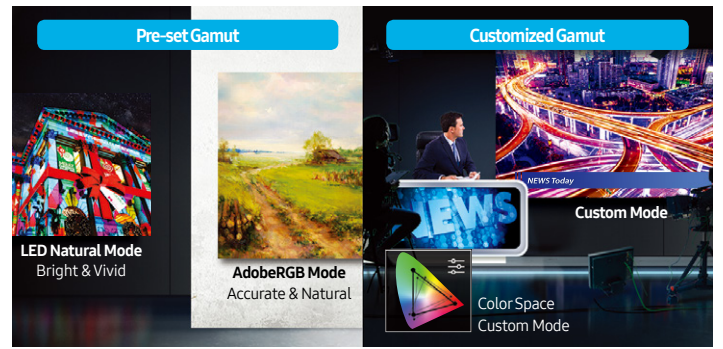
CONSISTENT, UNIFORM CONTENT DELIVERY

Thorough factory calibration fine-tunes all IF Series display sub-pixels for uniform brightness and color chromaticity out of the box. Samsung additionally provides convenient, DSLR camera-driven on-site sub-pixel calibration, eliminating the need for burdensome radiant cameras. Once installed, module-to-module calibration and advanced picture setting using Samsung LED Signage Manager (LSM) maintains an excellent and consistent presentation.



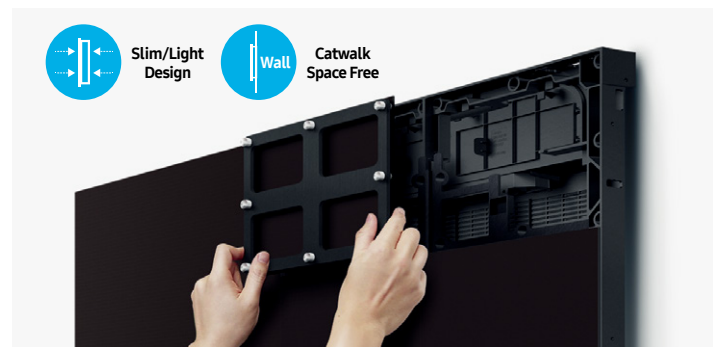
VERSATILE AND EFFICIENT OPERATIONS

The IF Series' user-friendly design allows for a faster, tidier and more cost-efficient activation. Samsung's new LED Signage Box (S-Box) transmits UHD content across multiple screens from a single source without requiring an expensive splitter or multiple external boxes. Users also can leverage existing cable structures to easily configure signal redundancy. Likewise, the integrated Samsung MagicInfo content platform makes content creation, scheduling and deployment across the IF Series displays easier.



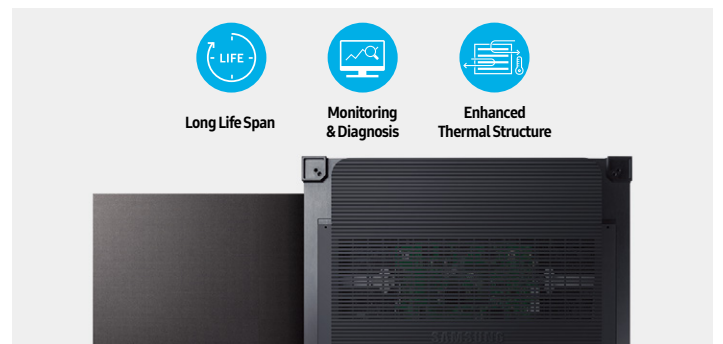
DETAILED AND CUSTOMIZED COLOR PRESENTATION

Compatibility with various color gamut settings, including the sRGB, AdobeRGB and LED Natural Mode spectra, enables the IF Series displays to emphasize brilliant color expression customized for specific environmental needs. Specialized indoor operations, such as broadcast studios and galleries, in turn can customize color gamut conditions to accommodate their advanced needs and achieve seamless content delivery.



CLEAN AND HASSLE-FREE INSTALLATION

For added installation flexibility, the Samsung IF Series displays leverage a compact design that is significantly slimmer and lighter than comparable alternatives. Full-front access to critical signage components ensures a neat installation free of catwalk space, while complementary rear access enables more convenient and quick-turn maintenance. Through their advanced cabinet structure, the IF Series displays can be positioned without the seams that typically accompany more challenging frontal implementations.



DURABLE, LONG-LASTING PERFORMANCE

An energy-efficient cabinet design, featuring advanced temperature and ventilation management capabilities, ensures uninterrupted performance regardless of surrounding environmental conditions. A fanless design deters dust and particle exposure to further prolong the displays' lifespan. The integrated LED Signage Manager (LSM) also helps users quickly identify common performance errors and avoid visual disruptions.

SPECIFICATIONS

MODEL		IF015H	IF020H	IF025H
Physical Parameter	Pixel Pitch	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
	Pixel Density	444,444 m ² / 41,290 ft ²	250,000 m ² / 23,225 ft ²	160,000 m ² / 14,864 ft ²
	Configuration (LxH)	320x360 pixels (per cabinet)	240x270 pixels (per cabinet)	192x216 pixels (per cabinet)
	Diode Type	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)
	Dimensions (LxHxD)	480x540x65mm (LxHxD, per cabinet)	480x540x65mm (LxHxD, per cabinet)	480x540x65mm (LxHxD, per cabinet)
	Weight	6kg (per cabinet)	6kg (per cabinet)	6kg (per cabinet)
Optical Parameter	Max Brightness (After Calibration)	800 nit	1,200nit	1,200 nit
	Peak Brightness	1,600 nit	2,400nit	2,400nit
	Contrast Ratio	5,000:1	5,000:1	5,000:1
	Dynamic Contrast Ratio	10,000:1	10,000:1	10,000:1
	Viewing Angle - Horizontal	160°	160°	160°
	Viewing Angle - Vertical	160°	160°	160°
	Bit Depth	14.5bit per Color	14.5bit per Color	14.5bit per Color
	Color Temperature - Default	6,500K	6,500K	6,500K
	Color Temperature - Adjustable	2,800 - 10,000K	2,800 ~ 10,000K	2,800 - 10,000K
	Color Gamut	100% NTSC	100% NTSC	100% NTSC
	Color Mode Setting	Adobe RGB/ s RGB / LED Natural mode	Adobe RGB/ s RGB / LED Natural mode	Adobe RGB/ s RGB / LED Natural mode
Electrical Parameter	Video Rate	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
	Power Consumption - Max	772 (W/m ²) / 200 (W/Cabinet)	694 (W/m ²) / 180 (W/Cabinet)	617 (W/m ²) / 160 (W/Cabinet)
	Power Consumption - Typical	257 (W/m ²) / 67 (W/Cabinet)	231 (W/m ²) / 60 (W/Cabinet)	205 (W/m ²) / 53 (W/Cabinet)
	Heat Generation - Max	245 BTU/SF per hour	220 BTU/SF per hour	196 BTU/SF per hour
	Heat Generation - Average	82 BTU/SF per hour	73 BTU/SF per hour	65 BTU/SF per hour
	Refresh Rate	1,920Hz ~ 3,840 Hz	1,920Hz ~ 3,840 Hz	1,920Hz ~ 3,840 Hz
Operation Conditions	Working Temperature	0°C~40°C (32°F to 104°F)	0°C~40°C (32°F to 104°F)	0°C~40°C (32°F to 104°F)
	IP Rating	IP20	IP20	IP20
	LED Lifetime	100,000 hours	100,000 hours	100,000 hours
Certification	EMC Class A, Safety 60950		EMC Class A, Safety 60950	EMC Class A, Safety 60950
Service	Front Service and/or Rear Service		Front Service and/or Rear Service	Front Service and/or Rear Service
Package	Box Dimension (LxHxD)	609 x 670 x 184	609 x 670 x 184	609 x 670 x 184
	Box Volume (m ³)	0.075	0.075	0.075
	Package Weight	8.8	8.8	8.8

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SMART LED Signage

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