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For more information

For more information about Samsung Premium Displays, visit www.samsunglfd.com



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Samsung premium signage displays (PEC, LEC Series)

High-quality, convenient, operation efficient displays designed for virtually continuous business use



Sturdy, flexible, low-cost displays for daily operation

Broadcast important company messages consistently, flexibly and economically

With the availability of almost limitless purchasing options online, brick-and-mortar stores must compete to capture the attention of modern shoppers. Electronic visual displays can help by presenting valuable information about products and promotions. These displays can contribute positively to other types of business environments also, including transportation terminals, medical establishments and financial institutions. Critical, timely information, such as flight schedules, health tips and interest rates, helps inform company employees and customers.

To provide the highest performance, electronic visual displays must be durable enough to consistently operate on a virtually continuous basis. They must offer straightforward content and display control for the employees responsible for creating visual content. In addition, displays must be cost-effective at the installation stage and during ongoing operation.

Samsung premium signage displays fulfill these needs. The displays are designed to operate nearly continuously, yet cost-effectively. Company employees can readily create and display images using a wide range of content. The displays are designed to be robust and durable, with straightforward installation.



Figure 1. High-performing Samsung premium signage displays

Commercial-grade durability for virtually continuous usage

Samsung premium signage displays are designed to operate reliably and around the clock to deliver important business messages. The displays are protected with Protection Glass, which is designed for use in commercial environments. High brightness promotes clear content display in various conditions.

Accessible content and display control

Employees can schedule, update and control Samsung premium signage displays locally or remotely with the MagicInfo™ solution. MagicInfo™ solution enables users to schedule, play and update content readily. Users can create, schedule and display a wide range of contents with the embedded media player and manage customized rich content with the optional Plug-in Module (PIM).

Cost-effective display operation

Samsung premium signage displays include several cost-saving features:

- Reduced power consumption and lower heat emissions result in lower energy costs.
- The ability to operate without attention over long periods of time avoids maintenance expense. The entire back of the display panel.
- LED BLU (backlight unit) technology and power-saving features further decrease energy use and reduce operating expenses.
- Straightforward installation helps reduce labor and operational costs.

High-performance LED technology for enhanced viewing

Improve the quality and efficiency of video displays with LED technology

Samsung premium signage displays use Samsung edge-type LED technology. With this technology, LED lamps are built into the panel around the edges of the display. The lamps emit light on the panel's sides, reducing the depth of the displays. A narrower depth contributes to a streamlined appearance and easier installation.

These cost-efficient displays are built with a thin screen that requires fewer LED lamps, resulting in reduced power consumption and lower heat emissions. The lamps and, therefore, the displays can operate efficiently over long periods of time without costly servicing and maintenance.

The LED technology also contributes to high quality. Samsung Premium display images are vibrant and realistic, with lifelike pictures. Display images are designed to be easy to see, with a glare-proof surface that further enhances viewing. Haze levels of 44 percent for the PEC models and 11 percent for the LEC models plus high brightness (700 nits) provide efficient message delivery in various display environments. With this level of quality, important company messages can be displayed around the clock with a consistent viewing experience.

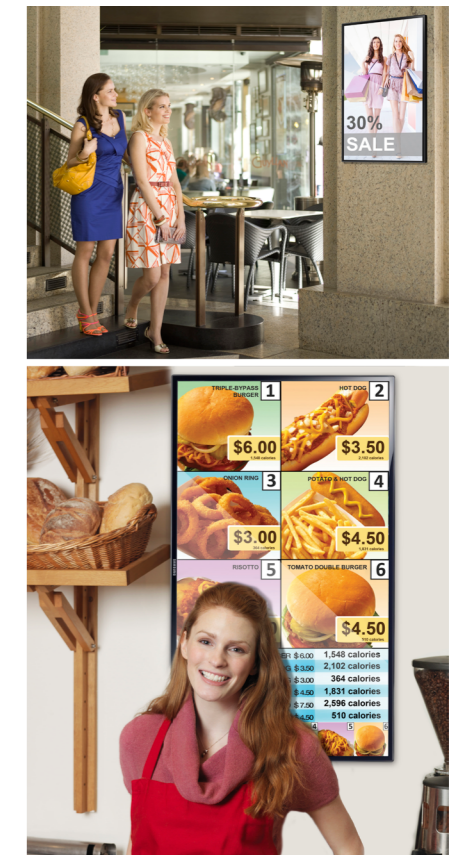


Figure 2. Samsung premium signage displays in retail and QSR environments

Display a variety of media types and control content with a convenient interface

Samsung premium signage displays provide numerous features to promote simpler content management, including scheduling, updating and controlling. Users can perform these functions locally or remotely with the included RJ45 remote control. This convenience helps conserve staff resources and lower operational expenses.

Simplify digital display content management with the MagicInfo™ Premium solution

The Samsung MagicInfo™ Premium solution, designed for use with single video displays or small video walls, includes a straightforward graphical user interface (GUI). This interface can be deployed by almost anyone to create quality video display content. The solution is designed to help simplify content scheduling and publishing with drag-and-drop functionality.

The software supports various multimedia elements without the need to convert them to a particular format. The Script Wizard guides creative and interactive content development, and DataLink and Mobile Management help users present content in near-real time with the following functions:

- Reload data from a shared folder automatically
- Add price lists, waiting lists and so on
- Direct text conversion to icon
- Establish a database connection
- Manage and monitor content with the extended software package



Figure 3. Embedded MagicInfo™ Premium S Player software features USB AutoPlay and content or templates saved in LFD internal memory.

Expand the range of media display options with the economical, built-in Samsung Smart Signage Platform

Samsung Smart Signage Platform eliminates the need for customers to purchase, install or use an external PC or media player. MagicInfo™ Premium S Player and MagicInfo™ Lite applications perform the media player functions.

These embedded solutions are designed to enable the large format display (LFD) to operate as a standalone unit. Users can readily display multimedia files and templates saved in USB memory by plugging a USB drive into the USB port. Users can save multimedia or other content in internal memory and create customized content with preinstalled templates using the remote control. In addition to content creation and playback, local scheduling can be performed with the remote control.

Built within a microchip, the internal media player has a CPU with an impressive processing speed and cache size. The powerful CPU offers convenient storage and plays a wide range of media types. database integration and mobile management.



Figure 5. MagicInfo™ software helps users incorporate content from myriad media types.

Support near-continuous content play with Auto Source Switching

Using the Auto Source Switching feature, users can maintain virtually constant, seamless content display. This feature automatically changes the display from one content source to another when the original source fails. Source recovery enables a content source to be used as a backup for ongoing play when another source is unavailable. This feature helps ensure that business content remains available.

Safeguard displays with Protection Glass

Designed for commercial environments, the LEC model has a mechanical structure that allows third-party service providers to install protection glass according to customer needs. The glass helps prevent the display from being damaged by hazardous objects and dust.



Figure 6. Protection Glass

Reduce total cost of ownership (TCO) through lower operational costs and greater durability

Samsung premium signage displays are highly durable and designed for operation 24 hours per day, seven days per week. Low power consumption and heat emissions help protect the environment and the company's bottom line.

BLU technology and power-saving features lower electricity use, reducing operating expenses. The innovative cooling technologies of Samsung displays improve heat dissipation while lowering internal temperatures. This process enables the displays to operate efficiently and consistently over longer periods of time without costly servicing and maintenance.

Extended use does not compromise the quality of company messages. Built with industry-leading imaging technology, Samsung premium signage displays produce images that remain more vibrant and realistic than images produced by other displays in their class.

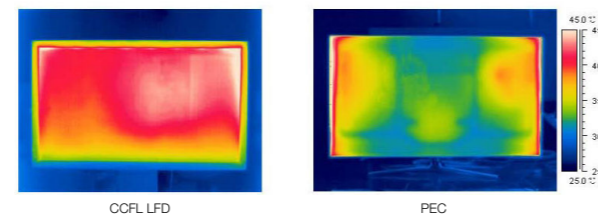


Figure 7. Lower heat emissions

Simplify installation with slim, lightweight models

Unlike traditional projectors and screens, LED LFDs can be installed readily with no special equipment.

Both PE and LE Series LFDs are easier to handle than CCFL LFDs. LED LFDs weigh significantly less than CCFL LFDs—as little as 25.1 kg (55.3 lb).

The technology behind both the edge-type PE Series and slim direct-type LE Series also reduces the depth of the displays. This design produces screens as thin as 32.2 mm (1.27 in.).

The LFDs include a pivot display that enables both portrait and landscape orientations and movable stands for flexible installation options.

Enhance content display with built-in connectivity

Samsung LED LFD displays offer powerful connectivity, with built-in RJ45 and RS-232 connections. Unlike many conventional LFDs, PE Series displays permit both network connections to be used simultaneously.

Using a Digital Visual Interface (DVI) loop out, a single display image can be shared with nearby displays. This innate connectivity eliminates the need to purchase separate video signal distributors for each display, reducing equipment costs.

These LED LFDs also have powerful built-in stereo speakers that enhance the impact of messages.

Users can optimize display space through the following elements:

- Longer content delivery, up to 15 m (49.2 ft), using the DisplayPort®
- Smaller connectors
- RJ45 port (even when using a combination of RJ45 and RS-232 ports) for remote control

These features reduce spatial limitations and enable users to configure the display setup to match the business environment.

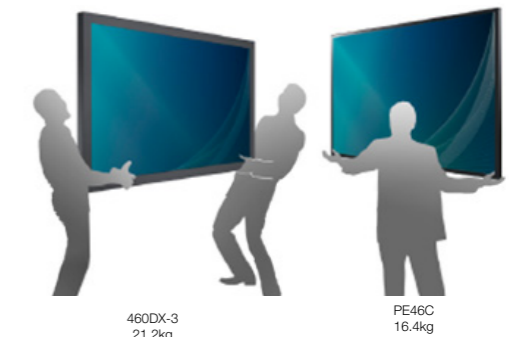


Figure 8. Lightweight design for easier installation

Features and benefits

Features	Benefits
Samsung edge-type LED technology	Slender display depth for streamlined appearance and easier installation Higher brightness
Glare-proof surface	Clear image viewing
Haze levels of 44 percent for PEC models and 11 percent for LEC models	High image quality in various display environments
RJ45 remote control	Convenient display operation from remote locations
Simultaneous display of multiple content types	Greater message flexibility
8 GB storage	Expanded content warehouse
30 Mbps display bit rate	Higher quality messages
Built-in content manager	Accessible content storage and management
Smart Scheduling	Granular control over how and when content is displayed
Built-in professional signage player	Content play without the need for a PC
1 GHz dual core processor with 512 KB cache size	High performance level, equal to two PCs
Auto Source Switching	Virtually continuous, seamless content display
Embedded media player	Availability of content from a broad range of media
MagicInfo™ Lite and MagicInfo™ Premium S	Convenient content display for one or multiple displays
Optional Samsung PIM	Power and video source delivery through a single cable
Protection Glass	Display glass safety
BLU technology and power-saving features	Lower power consumption and cost savings
Lightweight design	Decreased space and time needed for installation

Provide critical company information with premium, stable, cost-efficient displays

Samsung premium displays address a diverse combination of business requirements:

- High-quality displays help broadcast important company information with vibrant, attractive images.
- Usability features help employees conveniently create compelling, customized messages.
- Displays are sturdily designed to withstand commercial conditions and many hours of nearly continuous use provides high reliability.
- Energy-saving features and durability reduce operating costs.

Specifications

		PE40C	PE46C	PE55C	
Panel	Diagonal Size	40"	46"	55"	
	Type	60Hz LED BLU	60Hz LED BLU	60Hz LED BLU	
	Resolution	1920x1080 (16:9)	1920x1080 (16:9)	1920x1080 (16:9)	
	Pixel Pitch(mm)	0.15375(H) X 0.46125(V)	0.17675(H) X 0.53025(V)	0.21(H) X 0.63(V)	
	Active Display Area(mm)	885.6(H) X 498.15(V)	1018.08(H) X 572.67(V)	1209.6(H) X 680.4(V)	
	Brightness(Typ.)	700nit	700nit	700nit	
	Contrast Ratio	4000:1	4000:1	4000:1	
	Viewing Angle(H/V)	178:178	178:178	178:178	
	Response Time(G-to-G)	8ms	8ms	8ms	
	Display Colors	16.7M	16.7M	16.7M	
Color Gamut	70%	70%	70%		
Display	Dynamic C/R	-	-	-	
	H-Scanning Frequency	30 ~ 81kHz	30 ~ 81kHz	30 ~ 81kHz	
	V-Scanning Frequency	56 ~ 75Hz	56 ~ 75Hz	56 ~ 75Hz	
	Maximum Pixel Frequency	148.5MHz	148.5MHz	148.5MHz	
Connectivity	INPUT	RGB	D-Sub, DVI-D, Display Port(1.2)	D-Sub, DVI-D, Display Port(1.2)	D-Sub, DVI-D, Display Port(1.2)
		VIDEO	Component(CVBS common), HDMI	Component(CVBS common), HDMI	Component(CVBS common), HDMI
		AUDIO	Stereo mini Jack	Stereo mini Jack	Stereo mini Jack
	OUTPUT	RGB	DP1.2(Loop-out)	DP1.2(Loop-out)	DP1.2(Loop-out)
		AUDIO	Stereo mini Jack	Stereo mini Jack	Stereo mini Jack
		EXTERNAL CONTROL	RS-232C(In/Out) thru Stereo Jack, RJ-45	RS-232C(In/Out) thru Stereo Jack, RJ-45	RS-232C(In/Out) thru Stereo Jack, RJ-45
EXTERNAL SENSOR	IR, Ambient Light	IR, Ambient Light	IR, Ambient Light		
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]	165	187	209
		Typical[W/h]	114	131	149
		BTU(Max)	562.65	637.67	712.69
		Sleep mode	less than 1W(with Ethernet)	less than 1W(with Ethernet)	less than 1W(with Ethernet)
Off mode	less than 1W(with Ethernet)	less than 1W(with Ethernet)	less than 1W(with Ethernet)		
Mechanical Spec	Dimension (mm)	Set	919.6 X 532.0 X 35.1	1054.5 X 608.5 X 35.1	1249.5 X 721.0 X 35.1
		Package	985.0 X 634.0 X 135.0	1141.0 X 719.0 X 140.0	1374.0 X 838.0 X 165.0
	Weight (kg)	Set	13.5	16.4	20.5
		Package	16.1	20.1	25.8
	VESA Mount	200*200mm	400*400mm	400*400mm	
	Stand Type	Foot Stand(optional)	Foot Stand(optional)	Foot Stand(optional)	
	Media Player Option Type	Embedded	Embedded	Embedded	
Bezel Width (mm)	13.5mm (Bottom 14.4mm)	14.6mm (Bottom 15.4mm)	16.5mm (Bottom 17.1mm)		
Operation	Operating Temperature	0°C ~ 40°C	0°C ~ 40°C	0°C ~ 40°C	
	Humidity	10~80%	10~80%	10~80%	

		PE40C	PE46C	PE55C	
Accessories	Included	Quick Setup Guide, Warranty Card, Application CD, Power Cord, D-Sub cable, Remote Controller, Batteries	Quick Setup Guide, Warranty Card, Application CD, Power Cord, D-Sub cable, Remote Controller, Batteries	Quick Setup Guide, Warranty Card, Application CD, Power Cord, D-Sub cable, Remote Controller, Batteries	
	Optional	Stand	STN-L4055AD	STN-L4055AD	
		Mount	WMN4070SD WMN250MD	WMN4270SD WMN250MD	WMN4270SD WMN250MD
	Specialty	CML400D (Ceiling Mount)	CML450D (Ceiling Mount)	CML450D (Ceiling Mount)	
Media Player		SBB-A or PIM (Optional)	SBB-A or PIM (Optional)	SBB-A or PIM (Optional)	
Feature	Key	Professional Heavy Usage LED LFD	Professional Heavy Usage LED LFD	Professional Heavy Usage LED LFD	
	Internal Player	Processor	Cortex-A9 1GHz Dual Core CPU	Cortex-A9 1GHz Dual Core CPU	Cortex-A9 1GHz Dual Core CPU
		On-Chip Cache Memory	L1 (I/D) : 32KB / 32KB L2 (Unified) : 512KB	L1 (I/D) : 32KB / 32KB L2 (Unified) : 512KB	L1 (I/D) : 32KB / 32KB L2 (Unified) : 512KB
		Clock Speed	1GHz Dual	1GHz Dual	1GHz Dual
	Main Memory Interface	1Gbyte DDR3 Dual 32bit DDR3-667 (1333MHz)	1Gbyte DDR3 Dual 32bit DDR3-667 (1333MHz)	1Gbyte DDR3 Dual 32bit DDR3-667 (1333MHz)	
	Graphics	2D & 3D Graphics Engine - Up to 1920x1080. 32bpp - Supports OpenGL ES	2D & 3D Graphics Engine - Up to 1920x1080. 32bpp - Supports OpenGL ES	2D & 3D Graphics Engine - Up to 1920x1080. 32bpp - Supports OpenGL ES	
	Storage (FDM)	8GB (2.0GB Occupied by O/S, 6GB Available)	8GB (2.0GB Occupied by O/S, 6GB Available)	8GB (2.0GB Occupied by O/S, 6GB Available)	
	Multimedia	Video Decoder - MPEG-1/2, H.264/AVC (Dual) - VC-1, JPEG, PNG Audio DSP (Decoder) - AC3 (DD), MPEG, DTS and etc.	Video Decoder - MPEG-1/2, H.264/AVC (Dual) - VC-1, JPEG, PNG Audio DSP (Decoder) - AC3 (DD), MPEG, DTS and etc.	Video Decoder - MPEG-1/2, H.264/AVC (Dual) - VC-1, JPEG, PNG Audio DSP (Decoder) - AC3 (DD), MPEG, DTS and etc.	
	IO Ports	USB 2.0 * 2EA	USB 2.0 * 2EA	USB 2.0 * 2EA	
	Operating System	Linux	Linux	Linux	



Specifications

		LE32C	LE46C	LE55C
Panel	Diagonal Size	32"	46"	55"
	Type	60Hz LED BLU	60Hz LED BLU	120Hz LED BLU
	Resolution	A1920x1080 (16:9)	1920x1080 (16:9)	1920x1080 (16:9)
	Pixel Pitch(mm)	0.12123(H) x 0.3637(V)	0.17675(H) x 0.53025(V)	0.21(H) x 0.63(V)
	Active Display Area(mm)	698.4(H) x 392.85(V)	1018.08(H) x 572.67(V)	1209.6(H) x 680.4(V)
	E	350nit (To be fixed)	700nit (To be fixed)	700nit (To be fixed)
	Contrast Ratio	3000:1 (To be fixed)	4000:1 (To be fixed)	4000:1 (To be fixed)
	Viewing Angle(H/V)	178:178	178:178	178:178
	Response Time(G-to-G)	8ms	8ms	8ms
	Display Colors	16.7M	16.7M	16.7M
Color Gamut	72%	72%	72%	
Connectivity	INPUT	RGB	Analog D-SUB	Analog D-SUB
		VIDEO	DVI, HDMI 1, HDMI 2, CVBS Component(D-sub 15pin)	DVI, HDMI 1, HDMI 2, CVBS Component(D-sub 15pin)
		AUDIO	Stereo mini Jack	Stereo mini Jack
	AUDIO	Stereo mini Jack	Stereo mini Jack	
EXTERNAL CONTROL	RS232C(in/out) thru stereo jack	RS232C(in/out) thru stereo jack	RS232C(in/out) thru stereo jack	
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]	To be fixed	To be fixed
		Typical[W/h]	To be fixed	To be fixed
Sleep mode		less than 0.5W	less than 0.5W	
Off mode	less than 0.5W	less than 0.5W		
Mechanical Spec	Dimension (mm)	Set	744.0 X 452.7 X 65.9 (To be fixed)	1061.0 x 619.8 x 51.7 (To be fixed)
	Weight (kg)	Set	To be fixed	To be fixed
	VESA Mount		200*200mm	400*400mm
	Stand Type		Foot Stand (Optional)	Foot Stand (Optional)
	Media Player Option Type		PIM	PIM
	Bezel Width (mm)		20.2(L/R), 27.9(T/B)	19.9mm(Bottom 24.1mm)
Operation	Operating Temperature		0°C ~ 40°C	0°C ~ 40°C
	Humidity		10~80%	10~80%
Feature	Key		Professional LED LFD for 24/7 business	Professional LED LFD for 24/7 business
	Special		Built in Speaker(10W + 10W), PIP/PBP, Narrow Bezel, Light Weight, RS232 In/Out	Built in Speaker(10W + 10W), PIP/PBP, Narrow Bezel, Light Weight, RS232 In/Out
Accessories	Included	Quick Setup Guide, Warranty Card, Application CD, D-Sub cable, Power Cord, Remote Controller, Batteries	Quick Setup Guide, Warranty Card, Application CD, D-Sub cable, Power Cord, Remote Controller, Batteries	Quick Setup Guide, Warranty Card, Application CD, D-Sub cable, Power Cord, Remote Controller, Batteries
	Optional	Stand	STN-L32D (To be fixed)	STN-L4055AD (To be fixed)
		Mount	WMN4070SD (To be fixed)	WMN4270SD (To be fixed)
Specialty		CML400D (Ceiling Mount)	CML450D (Ceiling Mount)	
Media Player		PIM	PIM	

