

Samsung MD65C Large Format Displays

Versatile LFDs with capabilities to support productive business scenarios



Highlights

- Increase productivity with visual solutions such as sharper, brighter images without shadows and no dazzling or focusing issues Engage audiences with an interactive display that offers the added flexibility of an optional overlay installation touchscreen with Touch Pen
- Enhance the customer experience and save energy with innovative technology featuring direct LED LFD, super-narrow bezels, slim depth and energy-efficient design
- Simplify management with Samsung MagicInfo™ S software embedded solutions and a Plug-in Module (PIM)
- Operate displays remotely using RJ45 and RS-232 wired connections, as well as using WiFi and WiDi standards wirelessly
- Link multiple displays with Display Port (DP) 1.2 loop out

Improve image quality and functionality with an energy-efficient LFD

LFDs were originally used strictly for signage. Now their use has expanded into unified productivity devices in the business environment, substituting for traditional projectors, interactive e-boards in meeting rooms and classrooms. Corporate executives also find useful as business intelligence dashboards.

Traditional projectors typically provide poor image quality, annoying shadows and blinding dazzle. They also emit heat, dust and noise, which distract viewer attention. In addition, projectors are expensive to operate and maintain, consuming energy and causing downtime when costly bulbs need replacement.

Once strictly limited to signage, large format displays (LFDs) are now used in place of projectors in a variety of business applications. With innovative advances in touchscreen technology, picture quality and energy efficiency, LFDs are a better, clearer and more cost-effective alternative to projectors.

Samsung MD65C LFDs offer a smarter solution to lamp-lit projectors with enhanced picture quality, lower power consumption and added versatility. Backlight dimming for broader contrast, high refresh rate for sharper, smoother pictures and a touchscreen overlay option deliver an enhanced viewing experience. In addition, a built-in media player and energy-efficient LED technology help reduce the total cost of ownership (TCO).

Display sharper images without viewer distractions with Samsung backlit LED LFD technology.

MagicInfo™ S software and optional PIM provide management flexibility.

View ultra-clear pictures without distractions

Samsung MD65C LED LFDs deliver high-quality images without the distortion, blur or glare inherent in traditional projectors, providing productive, distraction-free presentations. An ultra-clear panel, backlight dimming and higher refresh rate help enhance image detail and readability, providing a better viewing experience.

Enhancements include:

- Reduced light scatter and reflection
- Broader color contrast ratios and deeper blacks
- Sharper, smoother pictures, even when images are moving at high speeds
- Brighter picture quality
- Virtually no visual distortion

Increase viewer interest with an interactive touchscreen option

For added versatility, The MD65C LED displays can be transformed into e-boards with the simplified installation of an optional overlay touchscreen. The touch overlay supports multi touch capability allowing simultaneous multiple interactions. The displays can also be linked together to create an interactive video wall. A special antiglare film covers the surface of the overlay for a smooth writing surface and a real handwriting feel. Included with the overlay touchscreen are two Touch Pens and Samsung MagicIWB (Interactive White Board) software. Also included is a pen tray that incorporates one upstream and two downstream Universal Serial Bus (USB) ports.

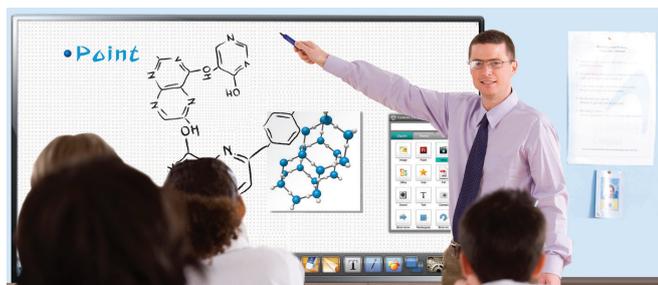


Figure 1. Displays can be transformed into e-boards with optional overlay touchscreens and Touch Pens.

Project large-scale images and consume less energy with LED technology

Samsung MD65C LED LFD provides large viewing area and is more energy efficient than cold cathode fluorescent light (CCFL) display of same size. The 65-inch models produce considerably less heat, provide near-silent operation and require less energy to operate compared with traditional projectors. In addition, there are no expensive bulbs to replace, which means there is no downtime spent waiting for a replacement bulb. The result is lower TCO.

When multiple MD65C displays are combined to create one video wall, the large screen size and ultra-thin bezels provide near-seamless message delivery. Businesses can plan and deploy large-scale video walls with less display units and less bezels, significantly reducing distractions. The display's slim, lightweight profile is well-suited for environments where space is limited and helps facilitate installation. The MD65C display has a bezel width of 18 mm (0.71 in.) and weighs 27.4 kg (60.41 lb).

Streamline management with Samsung embedded solutions

Samsung MD65C LED LFDs are designed to help simplify management as well as offer customizing options with embedded solutions for today's sophisticated video demands.

Eliminate the need for a PC media player with Samsung MagicInfo™ S software

Samsung MagicInfo™ S digital signage software is standard with MD65C LED displays. This all-in-one display solution includes an internal media player, eliminating the need for an external PC. Designed with an intuitive user interface (UI) for ease of use, administrators can manage, organize and schedule content on multiple displays through a web-based interface. The MagicInfo™ S software connects to the MagicInfo™ S Server to control display functions without a Multi-Display Control (MDC) program. Content can be automatically played through the LFD's internal memory or with a USB thumb drive Plug-and-Play (PNP) feature.

Three PIM options are available to suit specific needs.



Figure 2. Samsung MagicInfo™ S all-in-one display solution includes an internal media player and signage software.

Customize content more easily with an optional Samsung PIM

Display content can be customized with Samsung's optional PIM. This cableless PC solution supports any Open Pluggable Specification (OPS) device that is compatible with Intel® OPS. Designed for ease of installation and use, the compact PIM plugs into the back of the display.

The Samsung PIM adds only 34.4 mm (1.35 in.) additional depth to the 65-inch MD model. Fully self-contained, the PIM transfers power and signals internally. This feature eliminates the need for unwieldy cables, offering a less cluttered environment. Users can choose from the following three PIM options:

1. Dual core (2 GB of RAM) with Microsoft® Windows® Embedded Standard 7 (WES7), designed for signage with MagicInfo™ i Premium preinstalled
2. Quad core (4 GB of RAM) with WES7, designed for signage with MagicInfo™ i Premium preinstalled
3. Quad core (4 GB of RAM, 128 GB solid state drive (SSD) with Windows 7 Professional preinstalled, designed for e-board usage with MagicIWB (Interactive White Board) 2.0 Basic preinstalled

Display presentations with versatile options such as a touchscreen overlay and a PIM.

Control displays remotely with mixed connectivity

Samsung MD65C LED displays offer powerful connectivity, even when working with RJ45 and RS-232 connections. Competitor displays can operate only an RJ45 or RS-232 connection. With the Samsung line of LED displays, both network connections can be used simultaneously. Using a DP 1.2 loop out, a single display image can be shared with nearby displays. This feature eliminates the need to purchase separate video signal distributors for each display, further reducing equipment costs.



Figure 4. Samsung MD65C LED displays enable RJ45 and RS-232 connectivity simultaneously.

Control displays wirelessly

Samsung MD65C LED displays come with built-in WiFi and WiDi support. Combination with devices that support WiFi and WiDi, MD65C display can have its content streamed and controlled from the source device without the clutter of LAN, RGB, and HDMI cables.

Samsung MD65C displays offer robust features for superior presentations.

Features and benefits

Features	Benefits
Ultra-clear panel	Reduce light scatter and reflection for enhanced readability.
Direct backlit LED	Increase energy efficiency and decrease heat emissions, compared with conventional CCFL displays.
Backlight dimming	Deliver broader color contrast and deeper blacks with LED backlight unit control.
higher refresh rate	Project sharper, smoother pictures, even when images are moving at high speeds, reducing blur and visual distortion.
Super-thin bezel	Project near-seamless images without distracting thick bezels.
Ultra-slim profile	Fit displays in limited space.
Lightweight design	Install displays more easily without lifting cumbersome, heavy units.
MagicInfo™ S software	Manage, organize, schedule and control displays remotely.
Overlay option	Enhance the user interface with touchscreen flexibility for writing and drawing on the screen.
PIM option	Customize content with an external PC solution and reduce clutter without the need for a PC or unwieldy cables.
Powerful connectivity	Use RJ45 and RS-232 connections simultaneously.
DP 1.2 loop out	Share content with nearby displays without the need for separate video signal distributors.
Wireless connection	Less cable clutter

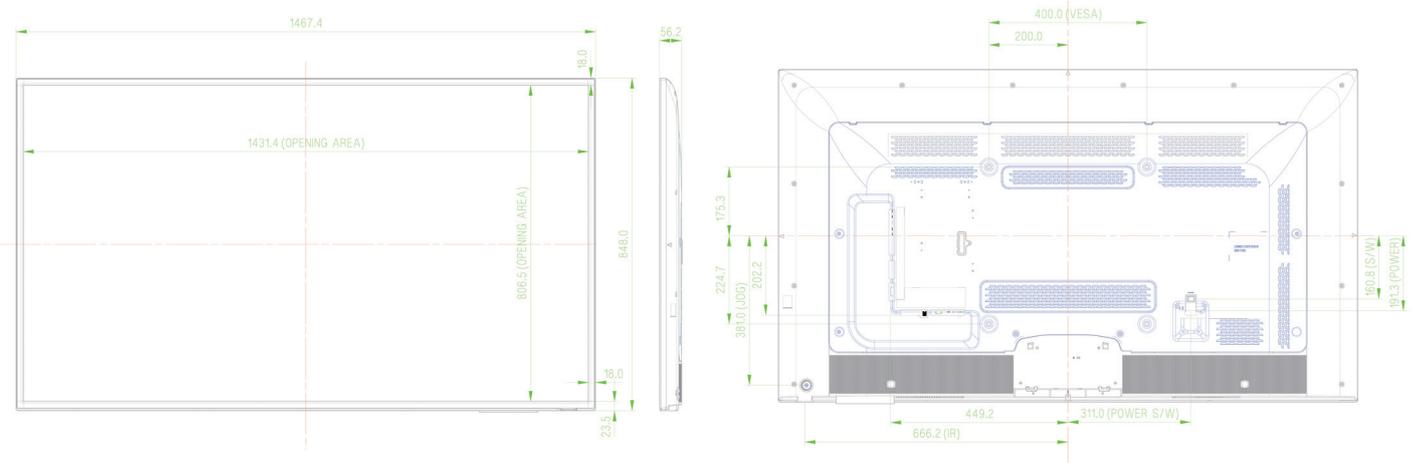


Figure 3. Schematic of model MD65C

Samsung MD65C

Specifications

		MD65C		
Panel	Diagonal size	65 in.		
	Type	60Hz LED BLU		
	Resolution	1,920 x 1,080 (16:9)		
	Pixel pitch (H x V)	0.248(H) x 0.744(V)		
	Active display area (H x V)	1428.48(H) x 803.52(V)		
	Brightness (Typ.)	450 cd/m ²		
	Contrast ratio	4,000:1		
	Viewing angle (H/V)	178/178		
	Response time (G-to-G)	6.5 ms		
	Display colors	10 bit dithering - 1.07 billion		
	Color gamut	70%		
Display	Dynamic C/R	10,000:1 (AV mode)		
	H-scanning frequency	30 - 81 kHz		
	V-scanning frequency	48 - 75 Hz		
	Maximum pixel frequency	148.5 MHz		
Connectivity	Input	RGB	Analog D-sub, DVI-D, DisplayPort 1.2	
		Video	Component (CVBS common), HDMI1, HDMI2	
		Audio	Stereo mini jack	
	Output	RGB	DP1.2(Loop-out)	
		Video	N/A	
		Audio	Stereo mini jack	
		Power out	N/A	
	External control	RS-232C (in/out) thru stereo jack, RJ45		
External sensor	IR, ambient light			
Power	Type	Internal		
	Power supply	AC 100 - 240 V (+/- 10%), 50/60 Hz		
	Power consumption (w/o PIM)	Max (W/h)	253 W (all regions)	
		Typical (W/h)	230 W	
		BTU (Max)	862.73BTU (all regions)	
		Sleep mode	Less than 1 W	
Off mode		Less than 1 W		

Specifications, continued

			MD65C
Mechanical Specs	Dimension	Set	1467.4 x 848.0 x 56.2
		Package	1625 x 995 x 237
	Weight	Set	27.4 kg
		Package	40.3 kg
	VESA mount		400 mm x 400 mm (15.75 in. x 15.75 in.)
	Stand type		Foot stand (optional)
	Media player option type		Embedded, SBB-C/PIM-B (Attachable)
Bezel width		18.0mm(Bottom 23.5mm)	
Operation	Operating temperature		0°C - 40°C (32°F - 104°F)
	Humidity		10 - 80%
Feature	Key		Slim and light LFD with built-in MagicInfo™ S
	Special		Magic Clone(to USB), Auto Source Switching & Recovery, Lamp Error Detection, Super Clear Coating, Temperature Sensor, RS232C/RJ45 MDC, Plug and Play (DDC2B), PIP/PBP, Video Wall(10x10), Pivot Display, Image Rotation, Button Lock, DP 1.2 Digital Daisy Chain(Supporting 2x2 UHD Resolution, HDCP Support), Smart Scheduling, Smart F/W update, Clock Battery(80hrs Clock Keeping) Built In MagicInfo(Lite, Premium-S, Videowall-S), WiFi Embedded, WiDi 2.0
	Internal player (embedded H/W)	Processor	Cortex-A9 1GHz Dual Core CPU
		On-chip cache memory	L1 (I/D): 32 KB/32 KB L2 (Unified): 512 KB
		Clock speed	1GHz CPU Dual
		Main memory interface	1GB Dual 32bit DDR3-667 (1333MHz)
		Graphics	2D and 3D graphics engine - Up to 1,920 x 1,080, 32 bpp - Supports OpenGL ES
		Storage (FDM)	4 GB (1.2 GB occupied by O/S, 2.8 GB available)
		Multimedia	Video decoder - MPEG-1/2, H.264/AVC (Dual) - VC-1, JPEG, PNG Audio DSP (decoder) - AC3 (DD), MPEG, DTS and so on
		IO ports	USB 2.0
Operating system		Linux®	

Samsung MD65C

Specifications, continued

			MD65C
Certification	Safety		cUL (USA+Canada) : UL60950 TUV (Germany) : EN60950 CB (Europe) : IEC60950/EN60950 EK (Korea) : K60950 CCC (China) : GB4943.1 PSB (Singapore) : IEC60950 GOST (Russia) : IEC60950, EN55022 SIQ (Slovenia) : IEC60950, EN55022 PCBC (Poland) : IEC60950, EN55022 NOM (Mexico) : NOM-001-SCFI-1993 IRAM (Argentina) : IRAM SASO (Saudi Arabia) : IEC60950 BIS(India) : IS13252
	EMC		FCC (USA) FCC Part 15, Subpart B class A CE (Europe) EN55022, EN55024 VCCI (Japan) V-3 (CISPR22) KCC (Korea) :KN22, KN24 BSMI (Taiwan) : CNS13438 (CISPR22) C-Tick (Australia) : AS/NZS3548 (CISPR22) CCC(China) :GB 9254-2008, GB 17625.1-2003
	Environment		N/A
Accessories	Included		Quick Setup Guide, Warranty Card, Application CD, D-Sub cable, Power Cord, Remote Controller, Batteries
	Optional	Stand	STN-L4055AD
		Mount	WMN4675MD (for Video Wall W/M)
		Specialty	N/A
Media player			SBB-C, PIM (Optional)

Legal and additional information

About Samsung Electronics Co., Ltd.

Samsung Electronics Co., Ltd. is a global leader in semi-conductor, telecommunication, digital media and digital convergence technologies with 2011 consolidated sales of US\$143.1 billion. Employing approximately 222,000 people in 205 offices across 71 countries, the company operates two separate organizations to coordinate its nine independent business units: Digital Media & Communications, comprising Visual Display, Mobile Communications, Telecommunication Systems, Digital Appliances, IT Solutions, and Digital Imaging; and Device Solutions, consisting of Memory, System LSI and LCD. Recognized for its industry-leading performance across a range of economic, environmental and social criteria, Samsung Electronics was named the world's most sustainable technology company in the 2011 Dow Jones Sustainability Index. For more information, please visit www.samsung.com.

For more information

For more information about Samsung ME65C LED LFDs, visit www.samsunglfd.com/index.do.



Copyright © 2012 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.

ENERGY STAR is a registered trademark of the U.S. government.

Intel is a registered trademark of Intel Corporation or its subsidiaries in the United States, other countries, or both.

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

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

www.samsung.com

2013-08