Samsung UED Series video wall displays

Sleek premium-quality displays for simplified, creative configurations



Highlights

- **Convey a sophisticated image with a slim and sleek design:** Promote products and services with simple-to-create video walls in a variety of unique configurations to attract customer attention.
- **Reduce space modification and installation effort:** Configure and install video walls in confined spaces more easily with narrow, lightweight displays employing LED BLU technology.
- **Implement the most advanced embedded video wall management solution:** Deliver state-of-the-art large format display (LFD) innovation without an additional PC unit using the 2nd Generation Samsung Smart Signage Platform (SSSP) software, powered by powerful quad-core processor in an embedded media player.
- **Reduce needless clutter with PC-less digital signage operation:** Eliminate clutter and the need for a separate PC to playback content, connect to a network with built-in Wi-Fi and a mobile app for display and content control from a mobile device.
- **Create an array of display screens with vibrant pictures and text:** Increase color consistency with enhanced color calibration technology while maintaining image ratios when changing orientation.

Promote products and services with a superb display

Merchandisers want to give their customers an immersive shopping experience. Many are installing video walls as a way to provide an impressive ambiance and to increase revenues. Because most retailers have limited space, they are seeking a LFD that enhances their surroundings without overwhelming them. The preferred LFD enables retailers to create near-seamless video walls with high-quality pictures and simplified content management.

Samsung UED Series video wall displays are an ideal choice for many retailers because managers can configure the displays based on available space and can control the display content with ease.

Available in 46-inch and 55-inch sizes, the UED Series features slim, sleek profiles and ultra-narrow bezels measuring 11 mm (0.43 in.). These sophisticated displays can be combined to create captivating video walls in myriad creative configurations for impactful, near-seamless, immersive viewing. Full high-definition (FHD) picture quality further attracts potential customers.

Create impactful content using the powerful quad-core processor with embedded media player

Build video walls in small spaces with extensive installation options

Multiple installation options help retailers design video walls wherever needed, even behind display cases. UED Series displays use edge LED technology that makes a single display or a wall of displays more comfortable to work around because fewer lamps are in use. With a depth as shallow as 29.9 mm (1.18 in.) and weighing as light as 10kg (22 lb.), UED Series displays enable businesses to create video walls within limited spaces.

Samsung technology also offers a dimming solution that generates deeper black tones by controlling the LED BLU (backlight unit).

Broadcast rich content with the most advanced embedded video wall management solution

The UED Series comes equipped with the most advanced embedded video wall management solution, the powerful 2nd Generation SSSP and MagicInfo® S2 software. This state-of-the-art LFD innovation platform eliminates the need for a separate PC to run the displays and is powered by the powerful quad-core CPU with a graphics card built into the embedded media player. It boasts a 1GHz quad-core CPU and 1.5GB double data rate (DDR3) dual 48 bit memory. SSSP is also compatible with various third-party solutions.

Plus, SSSP is equipped with a variety of features that simplify the design and deployment of display content, such as an interactive whiteboard and picture-in-picture (PIP) viewing, which can be enlarged to encompass over 50 percent of the display screen.

Launch a variety of versatile features with the processor's upgraded SoC technology

The UED Series is designed with upgraded SoC technology - the brains of the SSSP - providing convenience, simplicity of use and versatility. Included are features such as multi-channel scheduling, internal auto-play, built-in Wi-Fi and a mobile interaction application.

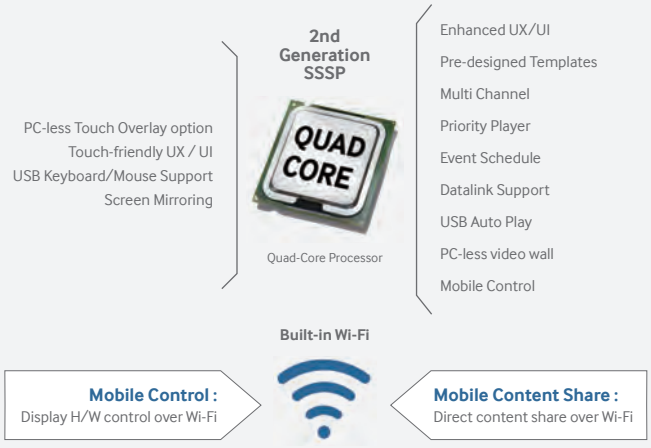


Figure 1. An integrated solution to provide a new digital signage experience

Manage displays directly from a mobile device while ensuring precision color uniformity

Perform direct playback and management without a PC or wire clutter

Samsung UED Series displays require no external PC to operate, either locally or over a network, which means there are no cumbersome wires or equipment to distract viewers from the message being delivered. Content playback, touch overlay support, as well as daisy chain and network connections, can all be performed without an external PC thanks to the embedded SSSP.

Plus, built-in Wi-Fi and a mobile app enable LFD control and direct playback of content directly from a mobile device or laptop. Clutter-free and wireless content sharing and display management results in a video wall that is sleek-looking and pleasing to the eye, which can enhance any business environment.

Create an array of screens with vibrant pictures and text

UED Series displays can be arranged to construct exceptional video walls. Refined color calibration, improved picture quality, a bezel-to-bezel width of just 11 mm (0.43 in.) and vivid high-resolution images create a pleasurable viewing experience.

Increase color consistency with enhanced color calibration

The integrated factory color tuning process has been refined for white balancing and color difference compensation, resulting in improved color temperature matching. The Samsung Color Expert software with built-in ACM chipset is also enhanced for ease of use and performance and offers three options: gamma calibration, local uniformity and white balance. The calibration speed is higher and the user interface (UI) is augmented for more precise color management. Light reflection, absorption and scatter are significantly reduced with the help of the Ultra Clear Panel. As a result of Ultra Clear Panel technology, images are brighter and sharper, which ultimately improves content visibility.



Figure 2. Improved video wall color calibration for color uniformity

Create dynamic video wall configurations without resolution loss or additional equipment

Maintain image ratios when changing orientation

UED Series displays offer pivoting capability and image rotation software that can change image orientation from portrait to landscape for greater display flexibility. For convenience when rotating images, two ratio options are available: original ratio or auto full-sizing ratio. Users do not need to rotate a picture in the software to make it appear correctly in a different orientation.



Figure 3. Portrait to landscape image rotation enhances usability with no loss of resolution

Daisy chain multiple displays without the need for additional equipment

Businesses can join multiple displays without losing picture quality using DisplayPort (DP) 1.2 multi-stream support. The UED Series displays offer High-bandwidth Digital Content Protection (HDCP) daisy chain capabilities. By supporting HDCP daisy chaining, UED models can display HDCP content such as LiveTV™ or Blu-ray Disc™ content without a HDCP distributor or an external PC. The HDCP daisy chain function helps reduce the cost of deploying multiple displays throughout an organization.

By using the DP 1.2 port, businesses can display content resolutions of 3,840 x 2,160 in 2 x 2 video walls. The port enables such high resolution content to maintain its quality without the need for additional equipment. With no complex distributors' equipment to connect, a digital daisy chain allows simpler configuration with less clutter.

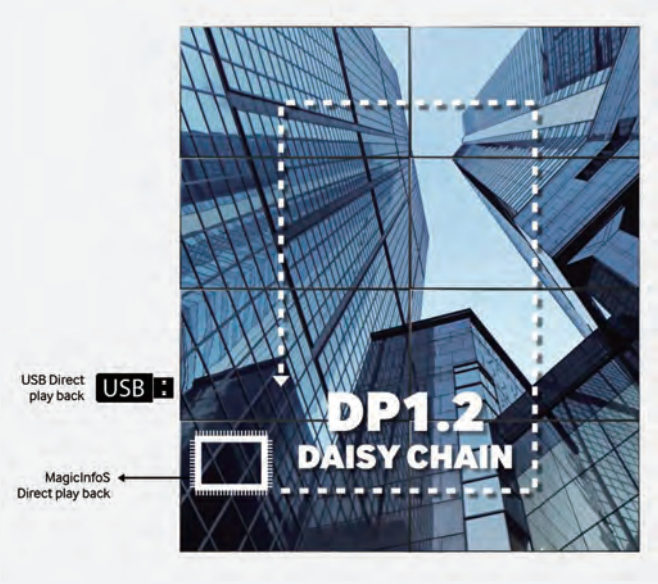
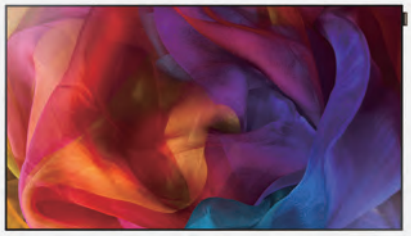


Figure 4. The HDCP daisy chain function reduces the cost of deploying multiple displays to manage each display in a video wall

Samsung UED Series video wall displays

UED

46" /55"





1. RS-232C IN
2. RS-232C OUT
3. IR / AMBIENT SENSOR IN
4. RGB / DVI / HDMI / AV / COMPONENT / AUDIO IN
5. AUDIO OUT
6. SD CARD
7. USB
8. DVI / MAGICINFO IN
9. DP IN
10. HDMI IN
11. RGB IN
12. DP OUT
13. COMPONENT IN / OUT
14. RJ45

Samsung UED Series video wall displays

Specifications

			UE46D	UE55D
Panel	Diagonal size		46"	55"
	Type		120 Hz E-LED BLU	
	Resolution		1,920 x 1,080 (16:9)	
	Pixel pitch (mm/in.)		0.15375 x 0.46125 0.00605 x 0.01815	0.210 x 0.630 0.008 x 0.024
	Active display area (mm/in.)		1,018.08 x 572.67 40.08 x 22.54	1,209.6 x 680.4 47.62 x 26.78
	Brightness (Typ.)		450 nit	
	Contrast ratio		4,000:1	
	Viewing angle (H/V)		178:178	
	Response time (G-to-G)		8 ms	
	Display colors		10 bit Dithering - 1.07 Billion	
	Color gamut		72%	
Display	Dynamic C/R		100,000 : 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	HDMI, Component (CVBS Common)	
		Audio	Stereo mini jack	
	Output	RGB	DP 1.2 (Loop-out)	
		Video	-	
		Audio	Stereo mini jack	
		Power Out	N/A	
	External control		RS-232C (in/out) thru stereo mini jack, RJ45	
	External control		N/A	
Power	Type		Internal	
	Power supply		AC 100 - 240 V~ (+/- 10 %), 50/60 Hz	
	Power consumption	Max (W/h)	132	154
		Typical (W/h)	115	130
		BTU (Max)	450.12	524.14
		Sleep mode	Less than 0.5 W	
		Off mode	Less than 0.5 W	

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Specifications

			UE46D	UE55D
Mechanical specs	Dimension (mm/in.)	Set	1,030.9 x 585.4 x 29.9 (Max: 31.3) 40.5 x 23.0 x 1.1 (Max: 1.2)	1,222.4 x 693.2 x 29.9 (Max: 31.3) 48.1 x 27.2 x 1.1 (Max: 1.2)
		Package	1,110.0 x 688.0 x 130.0 43.7 x 26.2 x 5.1	1,340.0 x 800.0 x 145.0 52.7 x 31.4 x 5.7
	Weight (kg/lb)	Set	10 / 22	13.3 / 29.3
		Package	13 / 28.6	17.8 / 39.2
	VESA mount		400 x 400 15.7 x 15.7	
	Protection glass		No	
	Stand type		Foot Stand (Optional)	
	Media player option type		Embbeded, SBB-C (Attachable)	
	Bezel width (mm/in.)		5.5 / 0.21	
Operation	Operating Temperature		0°C – 40°C (32°F – 104°F)	
	Humidity		10 - 80%	
Feature	Key		LED slim video wall	
	Special	H/W	WiFi Module Embedded, SD Card Slot, Super Clear Coating, Temperature Sensor, Pivot Display, Clock Battery (80hrs Clock Keeping), Built in Speaker (10 W x 2 ch)	
		S/W	ACM Support(Advanced Color Management), Magic Clone(to USB), Auto Source Switching & Recovery, Lamp Error Detection, RS232C/RJ45 MDC,Plug and Play (DDC2B), PIP/PBP, Image Rotation, Button Lock, DP 1.2 Digital Daisy Chain(HDCP Support), Smart Scheduling, Smart F/W update, Built In MagicInfo Player S2, Video Wall (10X10), Firmware Update by Network, LFD New Home Screen, PC-less VideoWall, Predefined Template for Vertical Usage, Multi Channel, Mobile Control, Event Schedule, Backup Player	
	Internal player (Embedded H/W)	Processor	Cortex-A9 1 GHz Quad Core CPU	
		On-chip cache memory	L1 (I/D) : 32KB / 32KB L2 (Unified) : 1MB	
		Clock speed	1 GHz CPU Quad	
		Main memory interface	1.5GB Dual 48bit DDR3-933 (1866MHz)	
		Graphics	2D & 3D graphics engine - Up to 1,920 x 1,080. 32 bpp - Supports OpenGL ES	
		Storage (FDM)	8 GB (2 GB occupied by O/S, 6 GB available)	
		Multimedia	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	
		Operating system	Linux	