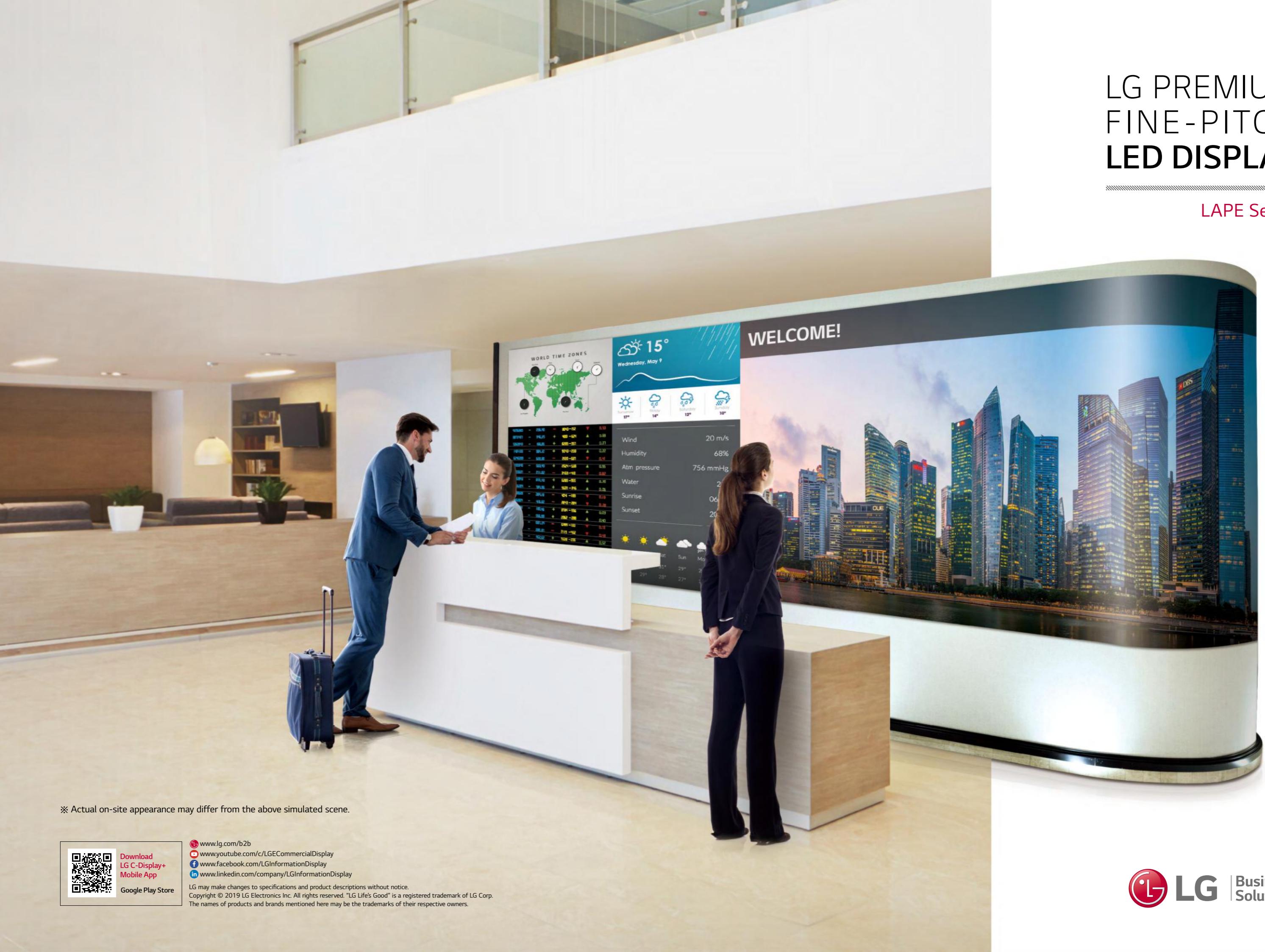


# LG PREMIUM FINE-PITCH LED DISPLAY

LAPE Series



※ Actual on-site appearance may differ from the above simulated scene.



- [www.lg.com/b2b](http://www.lg.com/b2b)
- [www.youtube.com/c/LGECommercialDisplay](http://www.youtube.com/c/LGECommercialDisplay)
- [www.facebook.com/LGInformationDisplay](http://www.facebook.com/LGInformationDisplay)
- [www.linkedin.com/company/LGInformationDisplay](http://www.linkedin.com/company/LGInformationDisplay)

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 **LG** | Business Solutions

An artistic landmark with dynamic content brings new horizons to the LED signage world

Boasting detailed color and super contrast, LG's LAPE series brings content to life through freedom of design, giving it outstanding presence as a work of media art. A world-class slim screen was developed thanks to modular type architectural design concepts and flexible LDM. The LAPE series brings technological innovation and artistic values together.



Time Flight	From	Hall Status	Time Flight	From	Hall Status	Time Flight	From	Hall Status	Time Flight	From	Hall Status
18:00 UA 869	Denver	A Est at 19:23	19:10 AE 845	Kaohsiung	Cancelled	20:25 CZ 357	Yinchuan	A	22:00 KE 607	Seoul / ICN	A Est at 22:07
	San Francisco					20:30 UO 4122	Gulin	A Est at 20:16	22:00 VN 792	Hanoi	B
18:10 KA 951	Qingdao	A Est at 19:26	19:10 SQ 868	Tokyo	B Est at 19:21	20:40 CA 117	Beijing	A Est at 20:30	22:05 CX 104	Adelaide	B Est at 22:13
18:15 AE 1821	Tai Ching	A At gate 18:01	19:15 CZ 310	Beijing	A At gate 19:06	CX 6117			22:05 CX 902	Manila	B
18:15 ET 608	Addis Ababa	B Delay	19:15 QF 085	Melbourne	A Est at 19:19	20:40 PR 310	Manila	A Est at 20:21	22:05 KA 921	Shenyang	A Est at 22:07
18:15 QF 127	Sydney	A At gate 18:06	19:20 CZ 5997	Xiamen	A At gate 19:01	20:45 CX 784	Denpasar	B Est at 20:22		Dalian	
18:20 BR 871	Taipei	Cancelled	19:25 TG 630	Bangkok	B At gate 19:14	BA 4568			22:05 KA 993	Beijing	A Est at 21:31
18:20 CI 803	Taipei	Cancelled	19:30 3K 695	Singapore	A Est at 19:37	20:50 AA 6115	Tokyo	B Est at 20:23	CA 6521		
18:25 CA 427	Chengdu	A At gate 18:15	19:30 UO 607	Osaka / Kansai	A At gate 19:10	20:50 CX 581	Sapporo	B Est at 20:44	22:10 CX 505	Tokyo	B Est at 22:24
	CX 6127		19:35 MU 8927	Shanghai	B Est at 19:23	20:50 CX 776	Jakarta	B Est at 20:32	22:10 CX 718	Singapore	B Est at 21:54
18:25 RA 409	Kathmandu	B At gate 17:58	19:40 CX 535	Nagoya	B Est at 19:41	BA 4574			22:15 NW 011	Detroit	A Est at 22:18
18:30 AC 007	Vancouver	B At gate 19:00	19:40 FM 711	Shanghai	A Est at 19:41	20:55 BA 4550	Auckland	B Est at 20:36	22:20 CA 107	Beijing	A Est at 21:51
18:30 MU 509	Shanghai	A At gate 18:58	19:45 CX 549	Tokyo	B Landed 19:09	21:00 CX 401	Taipei		Cancelled	KA 1107	
18:35 CZ 3031	Gulin	Cancelled	19:45 SK 8604	Bangkok	B Est at 19:36	21:00 JL 5115	Osaka / Kansai	B Est at 20:30	22:20 MU 725	Shanghai	A
18:40 5J 118	Manila	B At gate 18:34	19:50 BR 857	Taipei	Cancelled	21:05 CX 6863	Shanghai	A Est at 21:07	22:25 KA 301	Busan	B Est at 21:42
18:40 CX 879	San Francisco	B At gate 18:28	19:55 AY 5842	Singapore	B Est at 19:45	21:10 5J 142	Manila	A	22:25 NA 911	Tokyo	A Est at 22:50
18:45 CA 115	Beijing	A At gate 18:40	19:55 CX 839	Vancouver	B Est at 20:03	21:15 CX 6825	Xiamen	B	22:25 UO 603	Okinawa	A
	KA 1115						Fuzhou	A	22:30 KA 701	Gulin	B
18:45 CI 642	Bangkok	A At gate 18:33	20:00 CX 734	Singapore	B Est at 19:40	21:35 CX 6847	Shanghai		22:30 KA 897	Shanghai	B
18:45 FM 811	Shanghai	Cancelled	20:00 CY 912	Manila	B Est at 19:45	21:35 SQ 002	Singapore	A Est at 21:32	22:30 MA 074	Kuala Lumpur	B Est at 22:27
18:50 B7 173	Tai Chung	A At gate 18:33	20:00	Beijing	A Est at 20:04	21:40 OX 200	Bangkok		22:35 CX 702	Bangkok	B
18:50 CO 099	Newark	B At gate 18:58	20:05	Nagoya	B Est at 19:32	AA 6098	Kuala Lumpur	B Est at 21:36	22:35 CX 764	Ho Chi Minh	B
18:50 CO 831	New York / JFK	B Est at 19:29	20:05 CX 885	Los Angeles	A Est at 20:20	21:45 EK 380	Dubai		VN 1764		
18:55 CO 885	Los Angeles	B At gate 18:58	20:05 CX 885	Shanghai	B Est at 19:44	21:55 CX 638	Delhi	A Est at 21:33	22:40 CX 419	Seoul / ICN	B
18:55 CO 885	Los Angeles	B At gate 18:58	20:05 CX 885	Shanghai	B Est at 19:57	21:55 AA 5824	Tokyo	B Est at 22:00	22:40 KA 483	Taipei	
18:55 CO 885	Los Angeles	B At gate 18:58	20:05 CX 885	Shanghai	A Est at 20:02	21:55 KA 431	Kaohsiung	A Est at 21:51	22:40 KE 607	Seoul / ICN	Cancelled
18:55 CO 885	Los Angeles	B At gate 18:58	20:05 CX 885	Shanghai	A Est at 19:53	21:55 AF 8075	Sydney	A Est at 21:36	22:45 OA 4683		
18:55 CO 885	Los Angeles	B At gate 18:58	20:05 CX 885	Shanghai	B Est at 19:59	22:00 CX 100	Sydney	B Est at 21:17	22:45 HX 528	Ho Chi Minh	A
18:55 CO 885	Los Angeles	B At gate 18:58	20:05 CX 885	Shanghai	B Est at 21:44						

Time Now  
19:14

## SPACE FITTING DESIGN

Go beyond conventional LED screens when designing your space

### SELECTABLE TWO PRODUCT TYPES ACCORDING TO CUSTOMER NEEDS

The LAPE Series comes in 2 product types which differ in the way the power is installed. The one has a power separated from the LED screen while the other one has an embedded power in the screen. Each has their own distinctive benefits, so customers can choose between two types based on installation environment such as space size, outlet layout, service of points, or etc.



### FLEXIBLE LDM

With a specially designed flexible LDM<sup>(LED Display Module)</sup>, the LAPE series supports true concave and convex curvature up to 1,000R. This greatly amplifies design flexibility, providing users with the ability to create true curved screens for use in interior design or as an immersive screen experience.



\* The "Conventional" shown above refers to an LED screen composed of flat LED unit cases.

## SUPERIOR PICTURE QUALITY

Vivid high visual impact

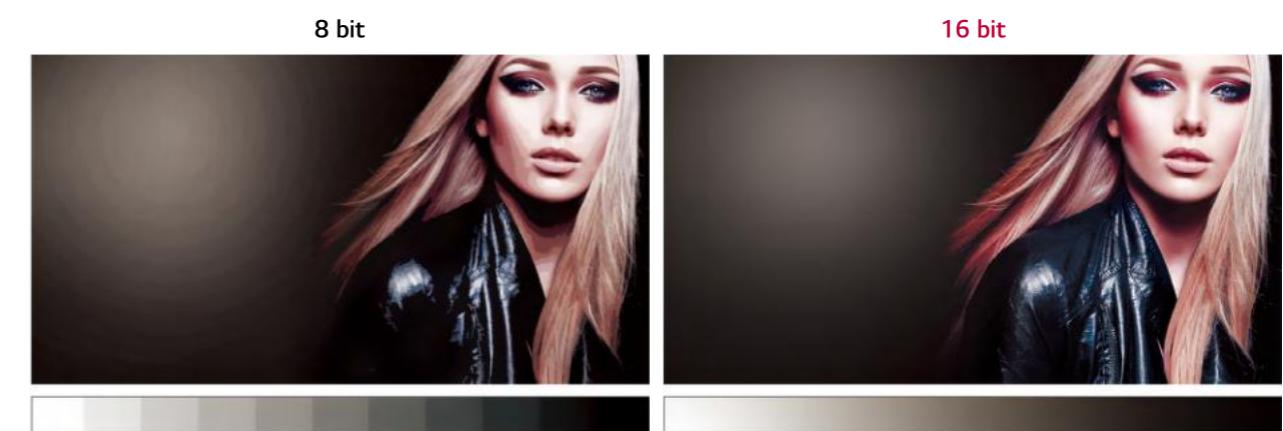
### REALISM THROUGH LIFELIKE COLORS

The LAPE series delivers vivid and distinctive picture quality through a wide range of color details with deep contrast thanks to LG's exclusive 'Dynamic Contrast Algorithm'.



### DETAILED EXPRESSION OF COLOR DEPTH

16-bit color processing provides a higher greyscale level, which seamlessly displays different depths and densities of colors without distortion, thereby giving a more realistic and sophisticated content.



### SMOOTH PLAYBACK IN DYNAMIC MOTION

Powered by LG's display technology, a high refresh rate of 3,840Hz assures the smooth playback of content. The flicker-free image prevents the black bars that occur from video shooting, as well as eye strain and blurred vision in viewers.

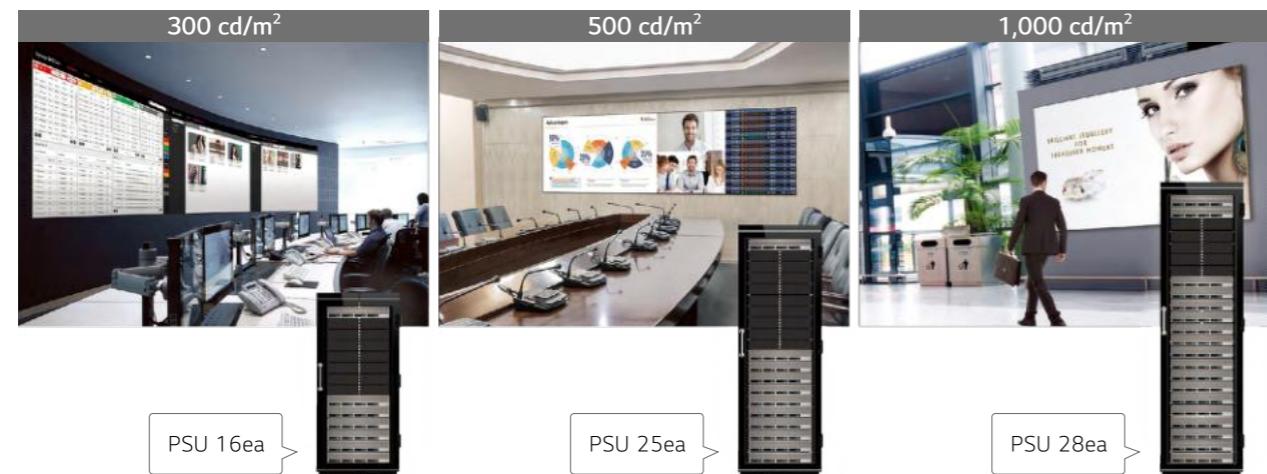


# OPERATIONAL EFFICIENCY

Unique architectural platform maximizes efficiency

## FLEXIBLE POWER MANAGEMENT

The power supply units (PSU) are separated from the screen, dramatically improving the latter's internal thermal condition. Thanks to the modular power concept design, users can choose the desired brightness of the screen by customizing\* the number of PSUs\*\* based on the electrical capacity of the user environment.



\* Exclusive to the Remote Power models.

\*\* The number of power units required may vary depending on the installation environment.

The above description is an example of a UHD screen configuration with a 2.0 mm pitch in 'redundancy off' mode.

## PRECISE FHD/UHD SCREEN CONFIGURATION

It has often been difficult to configure a perfect FHD/UHD resolution screen prohibiting native resolution image display. With the LAPE series, this is possible for all model options.

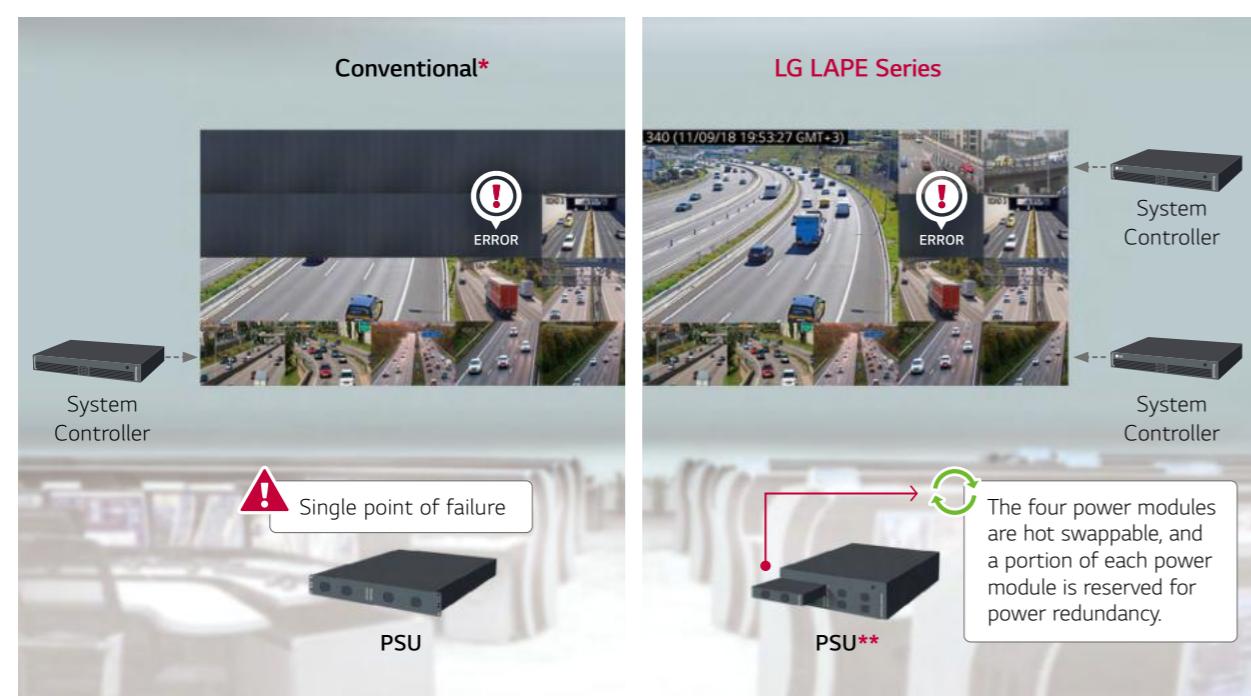


Pixel Pitch	1.5mm	2.0mm	2.5mm
Full HD (1,920 x 1,080)	6 x 3	8 x 4	12 x 6
Ultra HD (3,840 x 2,160)	12 x 6	16 x 8	24 x 12

(Unit Case)

## POWER/SIGNAL REDUNDANCY SUPPORT

The LAPE series is designed to support power / signal redundancy (optional), providing users with peace of mind. The power supply units (PSU) support power redundancy, assuring the continuous operation of the screen without power failure, while the dual controllers minimize screen failure with a bi-directional signal input.

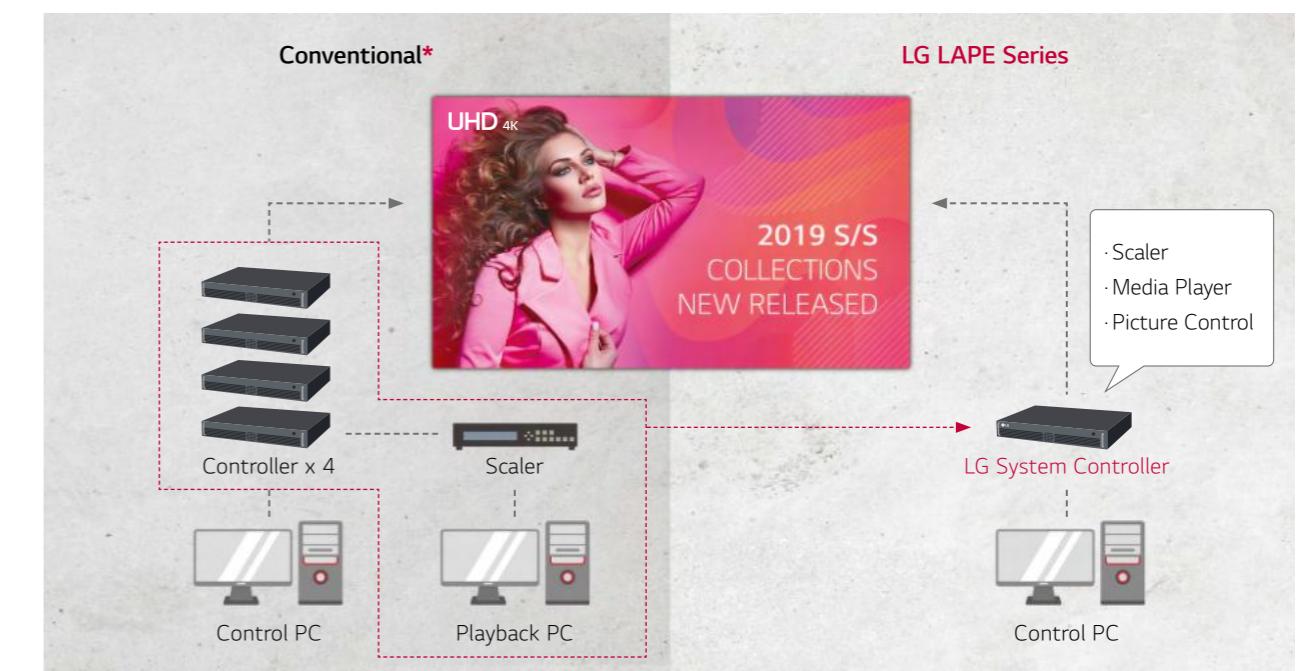


\* The "Conventional" shown above refers to LED displays which do not support the power/signal redundancy mode.

\*\* Power redundancy is exclusive to the Remote Power models.

## SMART HIGH PERFORMANCE SYSTEM CONTROLLER

The LAPE series comes with a versatile 4K system controller, providing simplified system configuration in a high-resolution canvas platform. The controller also has a built-in high performance media player as well as scaler. Additionally, it has LG's exclusive picture control features such as 'Dynamic Contrast' and Power Saving Mode options.



\* The "Conventional" shown above refers to LED displays that don't have an all-in-one system controller.

# OPERATIONAL EFFICIENCY

Unique architectural platform maximizes efficiency

## INTUITIVE MANAGEMENT SOFTWARE

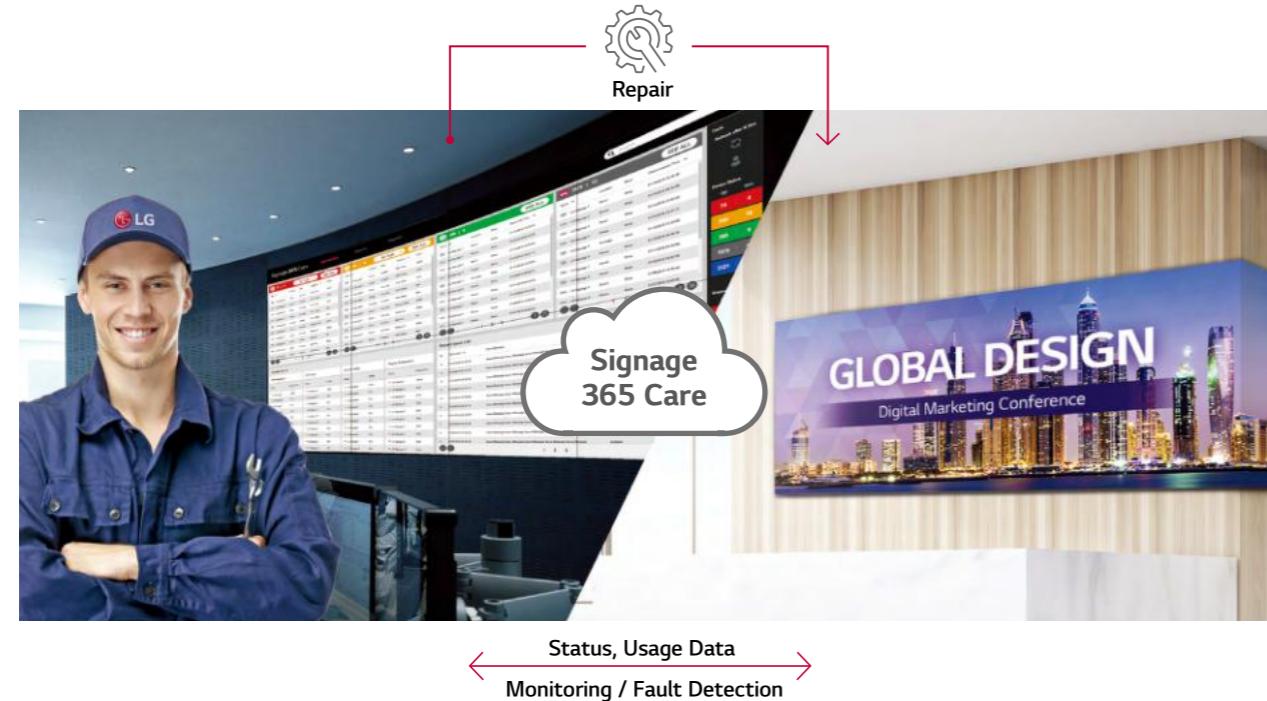
LG's new management control software platform 'LED Assistant' provides easy screen management. Screen setting is made simple with a visual guide and all-in-one dashboard that shows the overall status of screen components at a glance.

The screenshot displays the 'LG LED Assistant' software interface. It includes:

- Visualized Layout:** Shows a grid of LED panels with arrows indicating the direction of the Daisy chain.
- Daisy Chain Settings:** A step-by-step guide for setting up the Daisy chain, including selecting the port and choosing between Top or Bottom start.
- Each Component's Status:** Three tables showing the status of the System Controller, LED Controller, and LDM PSU.
- User Guide:** A detailed guide for connecting the Daisy chain and arranging set values.
- Log Report:** A table listing sensor events with columns for Sensor Name, Event Name, Status, Duration, Start Time, and End Time.

## REAL-TIME 365 CARE SERVICE

The maintenance gets easier and faster with an optional service Signage 365 Care\*, a cloud service solution provided by LG service. It remotely manages status of LED displays in client workplaces for fault diagnosis and remote-control services, ensuring the stable operation of a client's business.



\* The availability of "Signage 365 Care" service can differ by region, so please contact the LG sales representative in your region for further details.

# CONVENIENT SCREEN INSTALLATION

Reduce installation complexity

## EASY TO HANDLE & INSTALL

Conventional large-sized and heavy cabinet-based installation often results in LED dot defects during installation. The LAPE series breaks free from conventional norms by introducing much smaller and light weight LDM<sup>(LED Display Module)</sup>-based installation, providing incomparable ease of handling with far less risk of LED dot damage during installation.



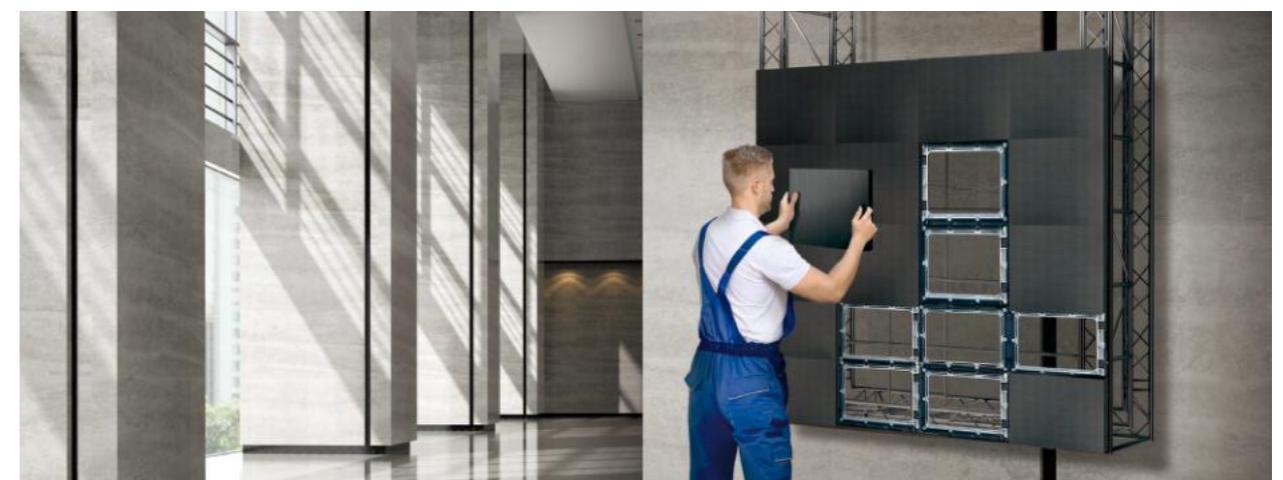
## EASY SCREEN ALIGNMENT

The unit case of the LAPE series has been carefully designed for easy screen flatness alignment. Each LDM has 20 Z-axis alignment points for ultra-fine flatness alignment.



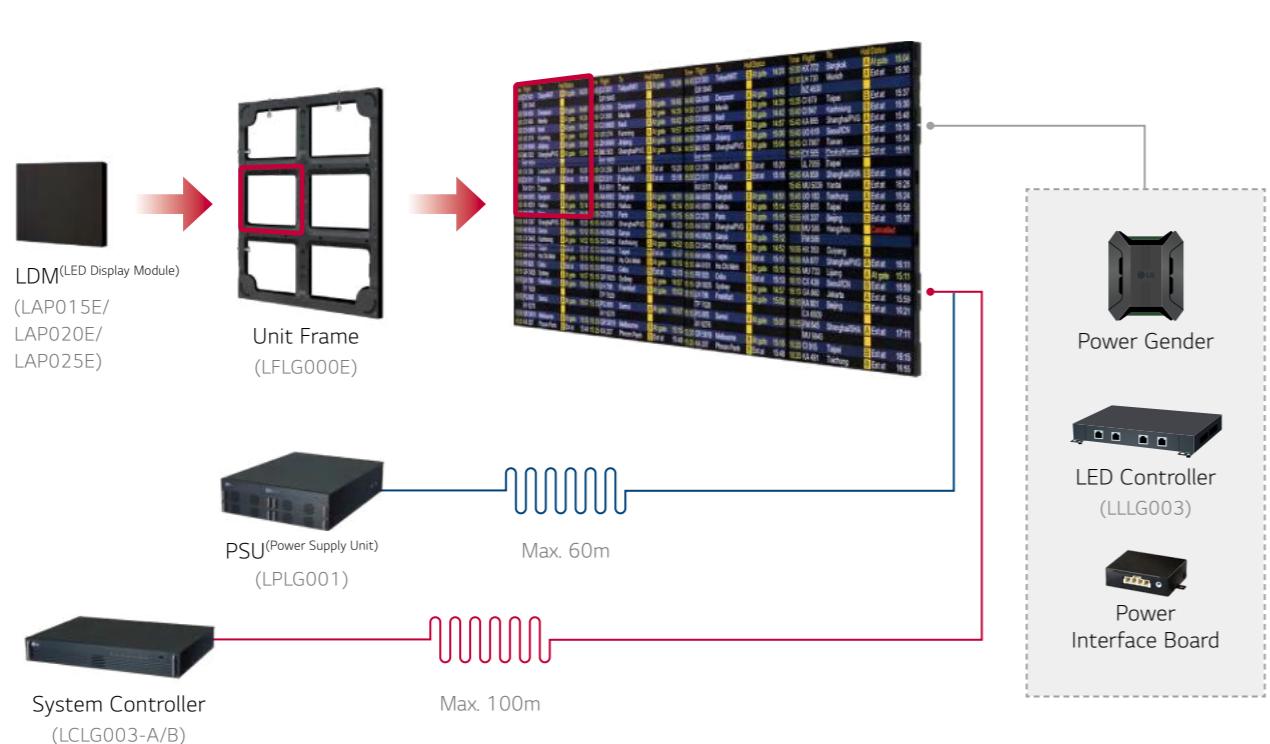
## FRONT INSTALLATION & SERVICE

The LAPE series comes with front installation and front service access, freeing users from needing rear access space, as well as a sleek screen design for maximum space optimization.



# PRODUCT INFORMATION

## REMOTE POWER MODELS



\* The number of components required may differ depending on the screen size and other options.

## EMBEDDED POWER MODELS



\* The number of components required may differ depending on the screen size and other options.

## SPECIFICATIONS

LAPE Series		Remote Power Model		Embedded Power Model			
Model Name		LAP015E	LAP020E	LAP025E	LAP015EP	LAP020EP	LAP025EP
Pixel Configuration		3 in 1 SMD	3 in 1 SMD	3 in 1 SMD	3 in 1 SMD	3 in 1 SMD	3 in 1 SMD
Pixel Pitch (mm)		1.50	2.00	2.50	1.50	2.00	2.50
Module Resolution (W x H)		160 x 120	120 x 90	96 x 72	160 x 120	120 x 90	96 x 72
Module Dimensions (W x H, mm)		240 x 180	240 x 180	240 x 180	240 x 180	240 x 180	240 x 180
Weight per Module (kg)		0.36	0.36	0.36	0.36	0.36	0.36
No. of Modules per Unit Case (W x H)		2 x 3	2 x 3	2 x 3	2 x 3	2 x 3	2 x 3
Unit Case Resolution (W x H)		320 x 360	240 x 270	192 x 216	320 x 360	240 x 270	192 x 216
Unit Case Dimensions (W x H x D, mm)		480 x 540 x 53			480 x 540 x 105		
Unit Case Surface Area (m <sup>2</sup> )		0.260	0.260	0.260	0.259	0.259	0.259
Weight per Unit Case (kg/unit)		6.0	6.0	6.0	10.1	10.1	10.1
Weight per Square Meter (kg/m <sup>2</sup> )		22.2	21.8	21.3	38.4	38.0	37.4
Physical Pixel Density (pixels/m <sup>2</sup> )		444,444	250,000	160,000	444,444	250,000	160,000
Flatness of Unit Case (mm)		±0.2	±0.2	±0.2	±0.2	±0.2	±0.2
Unit Case Material		Die Casting Aluminum					
Service Access		Front and Rear					
Min. Brightness (After Calibration)		1,000 <sup>1)</sup> cd/m <sup>2</sup>			700 cd/m <sup>2</sup>		
Color Temperature		3,200 ~ 9,300	3,200 ~ 9,300	3,200 ~ 9,300	3,200 ~ 9,300	3,200 ~ 9,300	3,200 ~ 9,300
Visual Viewing Angle (Horizontal)		160°	160°	160°	160°	160°	160°
Visual Viewing Angle (Vertical)		140°	140°	140°	140°	140°	140°
Brightness Uniformity		95%	95%	95%	95%	95%	95%
Color Uniformity		±0.015Cx, Cy	±0.015Cx, Cy	±0.015Cx, Cy	±0.015Cx, Cy	±0.015Cx, Cy	±0.015Cx, Cy
Contrast Ratio		6,000	6,000	6,000	6,000	6,000	6,000
Processing Depth (bit)		16 (HDR10)	16 (HDR10)	16 (HDR10)	16 (HDR10)	16 (HDR10)	16 (HDR10)
Power Consumption (W/Unit, Max.)		318	285	143	200	187	99
Power Consumption (W/Unit, Avg.)		130	104	52	67	52	26
Power Consumption (W/m <sup>2</sup> , Max.)		1,225	1,100	550	770	720	380
Power Supply (V)		100 to 240	100 to 240	100 to 240	100 to 240	100 to 240	100 to 240
Frame Rate (Hz)		50 / 60	50 / 60	50 / 60	50 / 60	50 / 60	50 / 60
Refresh Rate (Hz)		3,840	3,840	3,840	3,840	3,840	3,840
Lifetime (Half Brightness, hrs <sup>2)</sup>		100,000	100,000	100,000	100,000	100,000	100,000
Operating Temperature (°C)		0°C to + 40°C	0°C to + 40°C	0°C to + 40°C	0°C to + 40°C	0°C to + 40°C	0°C to + 40°C
Operating Humidity		10-80% RH	10-80% RH	10-80% RH	10-80% RH	10-80% RH	10-80% RH
EMC		FCC Class A / CE / KC					
Environment		RoHS	RoHS	RoHS	RoHS	RoHS	RoHS
Controller		LCLG003-A	LCLG003-A	LCLG003-B	LCLG005-A	LCLG005-A	LCLG005-B
Video Inputs		HDMI In, DP In, OPS In, USB			HDMI In, DP In, OPS In, USB		
Control		RJ45 In, RS232C In/out			RJ45 In, RS232C In/out		
Special Features		HDR10, Temperature Sensor, Power Detection ADA Compliant, PSU Hot Swappable			HDR10, Temperature Sensor, Power Detection		
Optional Accessory		ACC-LAPP06(DC PSU Cable 6m), ACC-LAPP060(DC PSU Cable 60m)			N/A		

\* Specifications are subject to change without notice.

\*\* LED package with goldwire.

1) Brightness can be reduced (up to 300nit) by the number of PSU modules, thereby decreasing power consumption.

2) The Lifetime(Half brightness) spec is subject to LED package spec.