

**Project Description** 

# LedIE0204x4

[Indoor Model IE020A]



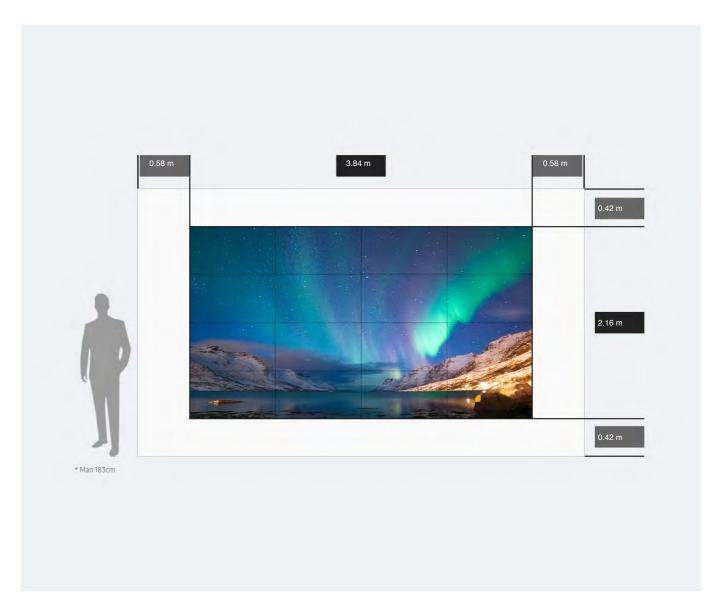


With more businesses turning to LED signage for an enhanced customer experience, Samsung's IER/IEA series displays offer an ideal combination of superior picture quality and intuitive usability. IER/IEA Series captivates customers through industry-leading video processing technologies and High Dynamic Range (HDR) picture refinement, delivering clearer, more realistic and memorable content. Fine-tune uniformity and accurate color even in low brightness also always ensures enhanced image presentation. Hassle-free installation and flexible configuration options means any business can have an eye-catching display regardless of environmental constraints.



LED Configuration Rendering

# **LED Configuration Rendering** [Indoor Model IE020A]





## Screen Specification

## Model Name | IE020A

IEA Display Requirements	Screen Configuration (WxH)	4 x 4
	No. of Cabinets	16
	No. of Spare Cabinets	1
	Total No. of Cabinets	17
Display Wall Dimensions	Dimensions	3.84 X 2.16 m
	Display Area	8.29 m²
	Diagonal	173.45 inch
	Weight	198.4 kg
Ontical Parameter	Resolution	1920 X 1080
Optical Parameter	Minimum No. of S-Boxes	1
Power Requirements	Max	3040 Watts
	Typical	1680 Watts

<sup>\*</sup> Specifications are subject to change without notice.



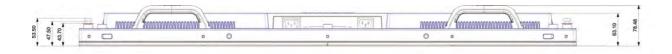
## **Product Specification**

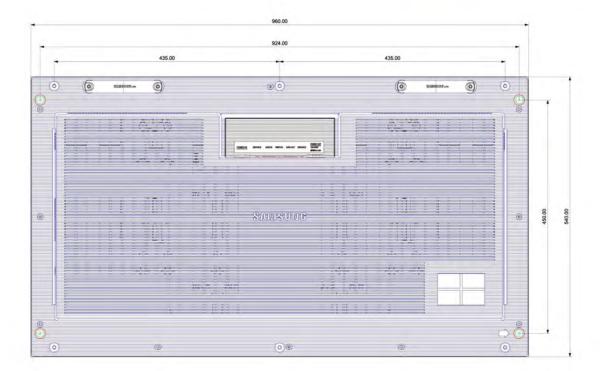
## Model Name | IE020A

	Pixel Pitch	2mm
	Diode Type	Surface Mount Device (SMD)
Physical Parameter	Dimensions (mm, LxHxD, per cabinet)	960x540x79.5 mm
	Dimensions (inch, inchxD, per cabinet)	43.3 x 3.13 inch
	Weight (per cabinet/per m²)	12.4 kg / 23.9 kg
	Brightness (Peak/Max)	1,000 nit / 500 nit
	Contrast Ratio (Peak/Max)	7,500:1
0.11.15	Viewing angle - Horizontal	150°
Optical Parameter	Viewing angle - Vertical	150°
	Bit Depth	16 bit (Internal processing 18bit)
	Color temperature - Adjustable	2,800 ~ 10,000K (use S/BOX)
	Video Rate	50/60 Hz
	Input Power Range	100~240 VAC, 50/60 Hz
EL 18	Power consumption - Max	367 (W/m²) / 190 (W/Cabinet)
Electrical Parameter	Power consumption - Typ	203 (W/m²) / 105 (W/Cabinet)
	Heat generation - Max(BTU/SF)	1,251 (BTU/m²) / 648 (BTU/Cabinet)
	Refresh rate	3,840 Hz
	Working Temperature / Humidity	0°C~40°C / 10~80%RH
	Storage Temperature / Humidity	-20°C~45°C / 5~95%RH
Operation Conditions	IP Rating	IP20
	LED Lifetime	100,000 hours
Certification	EMC Class A, Safety 60950-1	62368-1, 60950-1
Service	Service	Front
	Box Dimension (mm, LxHxD)	1,119 x 206 x 699 mm
Package	Box Volume (m²)	N/A
	Package Weight (kg, per cabinet)	16.5 kg



#### **Cabinet Drawing**



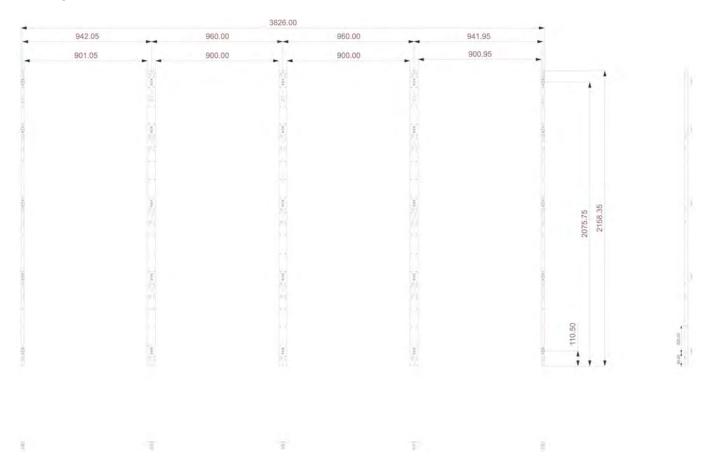






## Mechanical Drawing(Frame Kit)

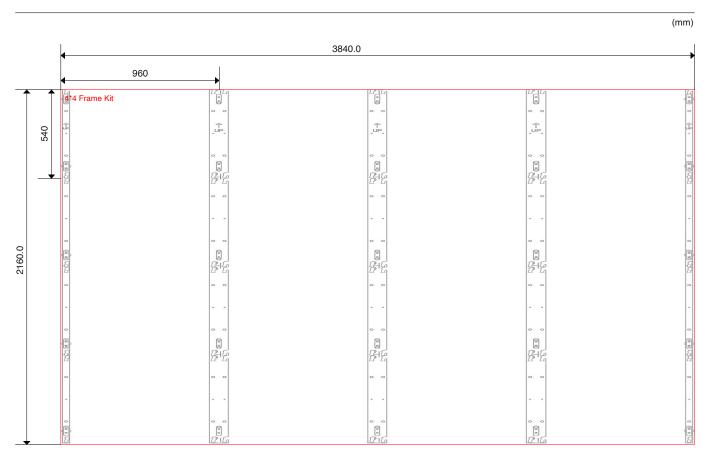
## LED DISPLAY IEA FRAME KIT 4X4



	Mount Framekit for IEA 8x4 (VG-LFR84FWL)	0
	Mount Framekit for IEA 4x4 (VG-LFR44FWL)	1
Fuerra Vita	Mount Framekit for IEA 5x3 (VG-LFR53FWL)	0
Frame Kits	Mount Framekit for IEA 3x3 (VG-LFR33FWL)	0
	Mount Framekit for IEA 5x2 (VG-LFR52FWL)	0
	Mount Framekit for IEA 1x1 (VG-LFR11SWL)	0



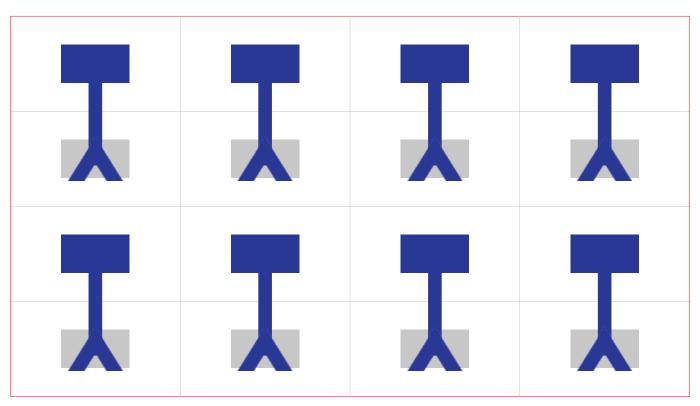
## Mechanical Drawing(Frame Kit)



<sup>\*</sup> This figures below is the cabinet length on mounted position



## Power Flow Diagram(110V)



<sup>\*</sup> The number of primary power cables doesn't pertain to the number of external circuits. The number of external circuits depends on power consumption. For more detail, please contact your sales partner from Samsung Electronics.

Power Interconnect Cable

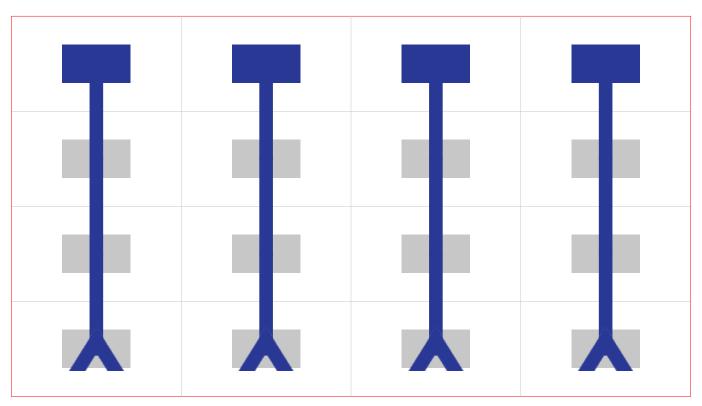
Power Cable Input/Output

Primary Cable Routing End Point

Primary Power Cable Input



## Power Flow Diagram(220V)



<sup>\*</sup> The number of primary power cables doesn't pertain to the number of external circuits. The number of external circuits depends on power consumption. For more detail, please contact your sales partner from Samsung Electronics.

Power Interconnect Cable

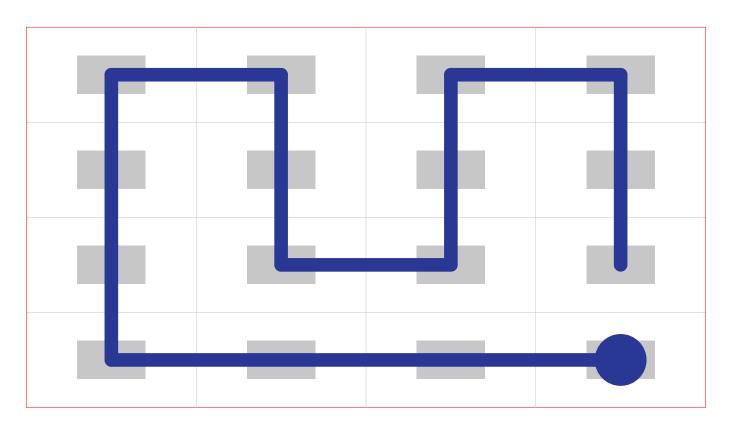
Power Cable Input/Output

Primary Cable Routing End Point

Primary Power Cable Input



## Data Flow Diagram



Primary Video Cable Input

Video & Communication Input

Video & Communication Cables



## Ventilation Guide (A case Dynamic Peaking function is activated)

(CFM)

Temperature	FAN flow per a column	Total FAN flow
15°C	0	No fan required
20°C	0	No fan required
25°C	0	No fan required
30°C	100	400



## Ventilation Guide (A case Dynamic Peaking function is deactivated)

(CFM)

Temperature	FAN flow per a column	Total FAN flow
15°C	0	No fan required
20°C	0	No fan required
25°C	0	No fan required
30°C	0	No fan required



## **Production Information**





IE020A

**SBB-SNOWJAU** 

# Indoor LED Signage

**IEA Series** 

Creating an unforgettable in-store experience with custom-fit design



## **Industry trend**

Even as online shopping and e-commerce have taken over, many brick-and-mortar stores continue to thrive by creating distinct, memorable in-store experiences. Physical retail stores that utilize LED signage to create innovative, eye-catching content have found they can both draw in new customers and encourage return visits from their most loyal customers. The market for indoor LED Signage is expected to continue to grow for the foreseeable future. It's no surprise then, that implementing modern in-store LED Signage has not only become common, but really is an essential element in creating an unforgettable in-store experience.

## Why Samsung IEA Series

Samsung's IEA Series is designed especially for retail stores, with Samsung's industry-leading picture quality and an intuitive, streamlined content management system allowing store managers to easily and efficiently update display content. The IEA Series displays also feature multiple cabinet sizes giving retailers additional options, providing cost savings and greater flexibility in the design and layout of their displays. This means displays can be custom-fit for their specific space requirements, giving customers a more immersive experience.





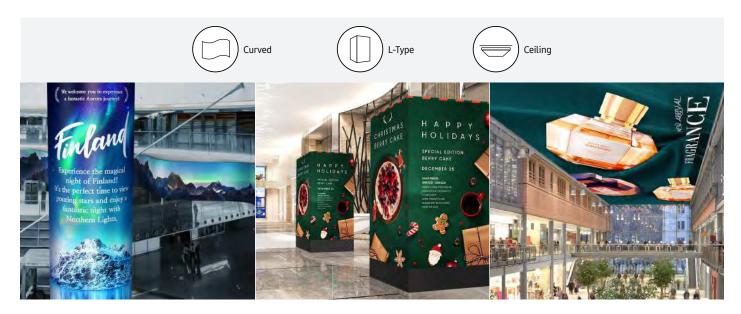


High picture quality



Operational efficiency

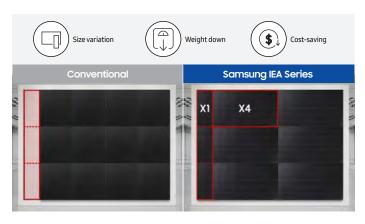
## **Key features**



## Flexible design for any location

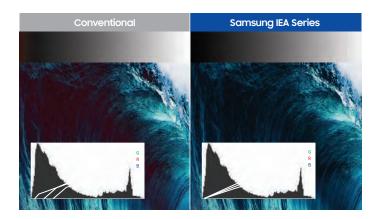
The IEA series' advanced design provides flexibility for any indoor retail or other business environment. With support of portrait, landscape, curved, L-shaped and ceiling installations, businesses can have ultimate control to create the ideal display for their space.

## **Key features**



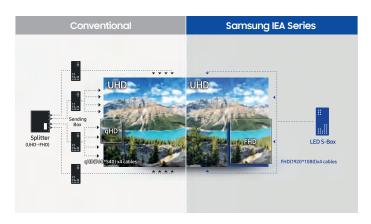
### Easier, cost-saving installation

The IEA Series supports two cabinet types. One version features a larger, lighter screen compared to conventional cabinets, simplifying installation. The other is a quarter of the size and provides more flexibility in design.



#### Accurate color in low brightness arena

Conventional LED displays struggle to present red, green and blue color hues accurately in low grayscale settings. The IEA Series overcomes these challenges through a unique algorithm that maintains R/G/B gradation and delivers precise, detail-rich hues in low-brightness indoor environments.



#### Streamlined UHD content delivery

Samsung's compatible S-Box condenses the delivery of compelling content to a single, centralized device. The S-Box transmits UHD content across multiple IEA Series displays without requiring external boxes or splitters, helping businesses enjoy faster and more cost-efficient operations.



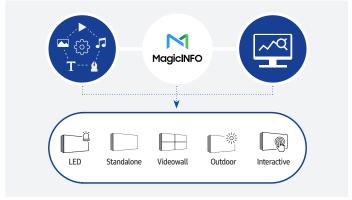
## Clearly refined visuals

LED HDR leverages advanced refinement technologies for true-to-life picture presentation. Dynamic Peaking and Inverse Tone Mapping enhance content to optimum peak brightness levels with improved contrast and without shine, while in-depth Color Mapping ensures an accurate expression of colors.



## Fine-tuned uniformity

Rigorous factory calibration and real-time DSLR camera sub-pixel calibration fine-tune all sub-pixels for uniform brightness and color chromaticity. When coupled with the Samsung LED Signage Manager's advanced picture settings, this enhanced treatment produces excellent presentation.



#### Manage content and devices anywhere

Compatibility with the MagicINFO platform enables IEA Series' users to create, schedule and deploy content across an entire signage network. Users can also monitor and adjust the settings of different display types at the same time and troubleshoot potential performance issues from any location via remote access.

# **Specifications**

			IE	IEA	
Model		IE015A	IE020A	IE025A	IE040A
		LH015IEACLS	LH020IEACLS	LH025IEACLS	LH040IEACLS
	Pixel Pitch	1.5mm	2.0 mm	2.5 mm	4.0 mm
	Pixel Configuration	1 red,1 green,1 blue	1 red,1 green,1 blue	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue
	Configuration (LxH, per cabinet)	640 x 360 pixels	480 x 270 pixels	384 x 216 pixels	240 x135 pixels
Physical	Diode Type	Surface Mount Device (SMD)			
Parameter	Dimensions (mm, LxHxD, per cabinet)	960 x 540 x 79.5 mm			
	Dimensions (inch, per cabinet)	43.3 x 3.13 inch			
	No. of Modules (WxH, per cabinet)	4 x 3	4 x 3	4 x 3	4 x 3
	Weight (per cabinet/per m²)	11.8 kg / 22.8 kg	12.4 kg / 23.9 kg	10.8 kg / 20.8 kg	10.8 kg / 20.8 kg
	Brightness (Peak/Max) (1)	1,000 nit / 500 nit	1,000 nit / 500 nit	1,000 nit / 500 nit	800 nit / 500 nit
	Contrast Ratio (2)	6,000:1	7,500:1	5,000:1	5,000:1
	HDR Compatibility	LED HDR / HDR10+ support / Multi-link HDR			
Optical	Viewing Angle - Horizontal	150°	150°	150°	150°
Parameter	Viewing Angle - Vertical	150°	150°	150°	150°
	Bit Depth	16 bit (Internal processing 18bit)			
	Color Temperature - Default	6,500K	6,500K	6,500K	6,500K
	Color Temperature - Adjustable	2,800 ~ 10,000K (use S/BOX)			
	Video Rate	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
	Input Power Range	100~240 VAC, 50/60 Hz			
	Power Consumption - Max	367 (W/m²) / 190 (W/Cabinet)	367 (W/m²) / 190 (W/Cabinet)	347 (W/m²) / 180 (W/Cabinet)	347 (W/m²) / 180 (W/Cabinet)
Electrical Parameter	Power Consumption - Typ	203 (W/m²) /105 (W/Cabinet)	203 (W/m²) /105 (W/Cabinet)	116 (W/m²) / 60 (W/Cabinet)	116 (W/m²) / 60 (W/Cabinet)
i didilictei	Heat Generation - Max	1,251 (BTU/m²) / 648 (BTU/Cabinet)	1,251 (BTU/m²) / 648 (BTU/Cabinet)	1,185 (BTU/m²) / 614 (BTU/Cabinet)	1,185 (BTU/m²) / 614 (BTU/Cabinet)
	Heat Generation - Typ	691 (BTU/m²) / 358 (BTU/Cabinet)	691 (BTU/m²) / 358 (BTU/Cabinet)	395 (BTU/m²) / 205 (BTU/Cabinet)	395 (BTU/m²) / 205 (BTU/Cabinet)
	Refresh Rate	3,840 Hz	3,840 Hz	3,840 Hz	3,840 Hz
	Power Redundancy	N/A	N/A	N/A	N/A
	Working Tempera- ture / Humidity	0°C~40°C /10~80%RH	0°C~40°C /10~80%RH	0°C~40°C /10~80%RH	0°C~40°C /10~80%RH
Operational Parameter	Storage Temperature	-20°C~45°C / 5~95%RH	-20°C~45°C / 5~95%RH	-20°C~45°C / 5~95%RH	-20°C~45°C / 5~95%RH
raiailletei	/ Flaminity  IP Rating	IP20	IP20	IP20	IP20
	LED Lifetime	100,000 hours	100,000 hours	100,000 hours	100,000 hours
	Controller	SNOW-JMU, SNOW-RAF	SNOW-JMU, SNOW-RAF	SNOW-JMU, SNOW-RAF	SNOW-JMU, SNOW-RAF
onnectivity	Connectivity	HDBT	HDBT	HDBT	HDBT
	Safety	62368-1, 60950-1	62368-1, 60950-1	62368-1, 60950-1	62368-1, 60950-1
ertification	EMC	Class A	Class A	Class A	Class A
Service	Service	Front	Front	Front	Front
	Operating System	Tizen	Tizen	Tizen	Tizen
	MagicINFO	Yes	Yes	Yes	Yes
Features	Sensor	Temperature	Temperature	Temperature	Temperature
	Other	Eco Image Enhancer	Eco Image Enhancer	Eco Image Enhancer	Eco Image Enhancer
Accessories	Accessories	Frame kit	Frame kit	Frame kit	Frame kit
Box Dime (mm, Wx Package V	Box Dimension (mm, WxHxD)	1,119 x 206 x 699 mm			
	Package Weight (kg, per cabinet)	16.5 kg	16.5 kg	16.5 kg	16.5 kg
	(kg, per cabinet) Curve (Concave/Convex)	12000R / N/A	12000R / N/A	12000R / N/A	12000R / N/A
Special	L-shape	N/A	N/A	N/A	N/A
Special Installation		Up to Forward 90º (Ceiling)			
	Rotation	Yes (90º clockwise)	Yes (90º clockwise)	Yes (90º clockwise)	Yes (90º clockwise)

<sup>(1)</sup> Peak value according to IDMS (Information Display Measurement Standard)
(2) Measured under 10 lux light. Contrast in darkroom exceeds 1000000:1
(3) For ceiling installation, screen should be installed at least 1.8m height with no vibration

# **Specifications**

			IEA-F			
Model		IE015A-F	IE020A-F	IE025A-F	IE040A-F	
		LH015IEACFS	LH020IEACFS	LH025IEACFS	LH040IEACFS	
	Pixel Pitch	1.5 mm	2.0 mm	2.5 mm	4.0 mm	
	Pixel Configuration	1 red,1 green,1 blue	1 red,1 green,1 blue	1 red, 1 green, 1 blue	1 red, 1 green, 1 blue	
	Configuration (LxH, per cabinet)	160 x 360 pixels	120 x 270 pixels	96 x 216 pixels	60 x 135 pixels	
Physical	Diode Type	Surface Mount Device (SMD)				
Parameter	Dimensions (mm, LxHxD, per cabinet)	240 x 540 x 81 mm				
	Dimensions (inch, per cabinet)	23.3 x 3.18 inch				
	No. of Modules (WxH, per cabinet)	1 x 3	1 x 3	1 x 3	1 x 3	
	Weight (per cabinet/per m²)	3.2 kg / 24.7 kg				
	Brightness (Peak/Max) (1)	1,000 nit / 500 nit	1,000 nit / 500 nit	1,000 nit / 500 nit	800 nit / 500 nit	
	Contrast Ratio (2)	6,000:1	7,500:1	5,000:1	5,000:1	
	HDR Compatibility	LED HDR / HDR10+ support / Multi-link HDR				
Optical	Viewing Angle - Horizontal	150°	150°	150°	150°	
Parameter	Viewing Angle - Vertical	150°	150°	150°	150°	
	Bit Depth	16 bit (Internal processing 18bit)				
	Color Temperature - Default	6,500K	6,500K	6,500K	6,500K	
	Color Temperature - Adjustable	2,800 ~ 10,000K (use S/BOX)				
	Video Rate	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	
	Input Power Range	100~240 VAC, 50/60 Hz				
	Power Consumption - Max	463 (W/m²) / 60 (W/Cabinet)				
Electrical Parameter	Power Consumption - Typ	309 (W/m²) / 40 (W/Cabinet)	309 (W/m²) / 40 (W/Cabinet)	154 (W/m²) / 20 (W/Cabinet)	154 (W/m²) / 20 (W/Cabinet)	
rarameter	Heat Generation - Max	1580 (BTU/m²) / 205 (BTU/Cabinet)				
	Heat Generation - Typ	1053 (BTU/m²) / 137 (BTU/Cabinet)	1053 (BTU/m²) / 137 (BTU/Cabinet)	527 (BTU/m²) / 68 (BTU/Cabinet)	527 (BTU/m²) / 68 (BTU/Cabinet)	
	Refresh Rate	3,840 Hz	3,840 Hz	3,840 Hz	3,840 Hz	
	Power Redundancy	N/A	N/A	N/A	N/A	
	Working Tempera- ture / Humidity	0°C~40°C /10~80%RH	0°C~40°C/10~80%RH	0°C~40°C /10~80%RH	0°C~40°C /10~80%RH	
Operational Parameter	Storage Temperature	-20°C~45°C / 5~95%RH	-20°C~45°C / 5~95%RH	-20°C~45°C / 5~95%RH	-20°C~45°C / 5~95%RH	
T di di ilico	IP Rating	IP20	IP20	IP20	IP20	
	LED Lifetime	100,000 hours	100,000 hours	100,000 hours	100,000 hours	
	Controller	SNOW-JMU, SNOW-RAF	SNOW-JMU, SNOW-RAF	SNOW-JMU, SNOW-RAF	SNOW-JMU, SNOW-RAF	
Connectivity	Connectivity	HDBT	HDBT	HDBT	HDBT	
	Safety	62368-1, 60950-1	62368-1, 60950-1	62368-1, 60950-1	62368-1, 60950-1	
Certification	EMC	Class A	Class A	Class A	Class A	
Service	Service	Front	Front	Front	Front	
	Operating System	Tizen	Tizen	Tizen	Tizen	
-	MagicINFO	Yes	Yes	Yes	Yes	
Features	Sensor	Temperature	Temperature	Temperature	Temperature	
	Other	Eco Image Enhancer	Eco Image Enhancer	Eco Image Enhancer	Eco Image Enhancer	
Accessories	Accessories	Frame kit	Frame kit	Frame kit	Frame kit	
Bi	Box Dimension (mm, WxHxD)	653 x 148 x 354 mm				
Package	Package Weight (kg, per cabinet)	4.9 kg	4.9 kg	4.9 kg	4.9 kg	
	Curve (Concave/Convex)	3000R / 3000R	3000R/3000R	3000R/3000R	3000R / 3000R	
Special	L-shape	Yes	Yes	Yes	Yes	
Installation	Ceiling / Incline (3)	Up to Forward 90º (Ceiling)				
	Rotation	Yes (90º clockwise)	Yes (90º clockwise)	Yes (90º clockwise)	Yes (90º clockwise)	

<sup>(1)</sup> Peak value according to IDMS (Information Display Measurement Standard)
(2) Measured under 10lux light. Contrast in darkroom exceeds 1000000:1
(3) For ceiling installation, screen should be installed at least 1.8m height with no vibration



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## **LED Signage**

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