



Samsung SMART LED Signage

XPR Series

Proven visuals. Built to perform.

With constant change and evolving business needs, outdoor digital signage must continue to create an inviting and innovative environment to attract customers and retain loyalty. Samsung's XPR series is ideal for a wide range of outdoor applications, from sports stadiums to dynamic outdoor advertising environments. This display provides exceptional picture quality with clear visibility in a variety of conditions. The XPR series is built for the elements through rigorous performance testing, ensuring high uptime even in the toughest environments. These features are supported by a fully customizable design that can allow your imagination come to life.

Highlights

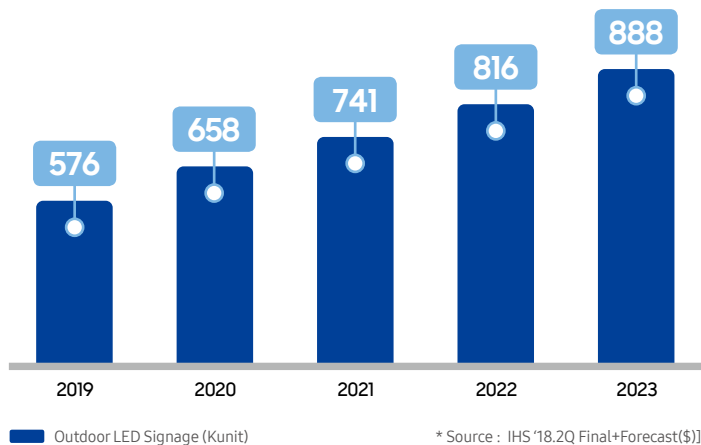
- Engineered to withstand the elements from high heat to heavy rain
- Rigorous performance testing for long-lasting operation
- Prevent errors through signal, control board and power redundancy
- Engage audiences with eye-catching brightness in any weather or lighting conditions
- High refresh rate for smooth video, photo ready and no eye strain
- Fully customizable design decreases space constraints of installation

SAMSUNG

Industry trend

Business in today's world is ferociously competitive. There are new challenges every day and a business that can maximize its presence is one that will ultimately succeed. Outdoor advertising has become an important space for businesses to make an impact. From exhibitions to festivals to sports events, there has been a significant trend toward outdoor LED displays over conventional print media, with the outdoor LED market anticipated to see continuous growth through 2023. This is powered by innovation and the technological advancement of LED technology, improving brightness levels, picture quality and long-term reliability – engaging viewers and impacting brands like never before. Samsung has allowed some of the most famous landmarks in the world to take their displays to the next level across the globe.

Outdoor LED Signage market is growing steadily



Samsung has increased its presence in this market

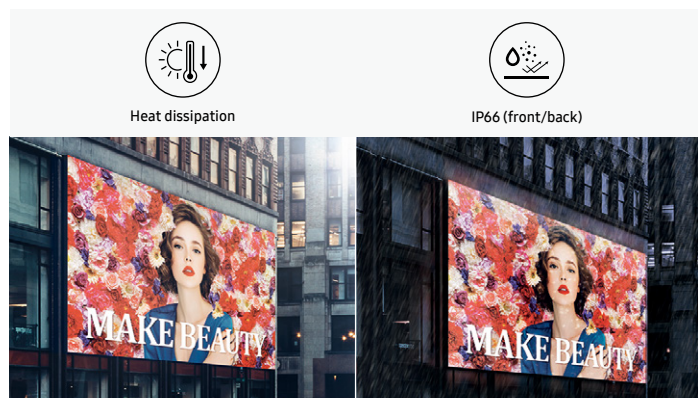


Why Samsung XPR series

Samsung has extensive knowledge of the complexities of outdoor environments. For any outdoor signage, reliability is critical to ensure optimum performance and high visibility even in harsh environments or weather conditions. The XPR series provides superior reliability through its redundant signal and power systems and weather-resistant features, which have been rigorously tested against the elements to ensure the display can withstand any environment, at any time. The XPR series is equipped with exceptional picture quality, offering brightness of at least 7,000 nits and high contrast, meaning content is crisp and visible even in intense sunlight. Its high refresh rate means the image does not stutter or cause distractions, ensuring viewers always have a smooth experience. Finally, flexible design capabilities enable the display to be installed in many unique ways to suit the needs, removing environmental constraints often associated with outdoor signage installations.

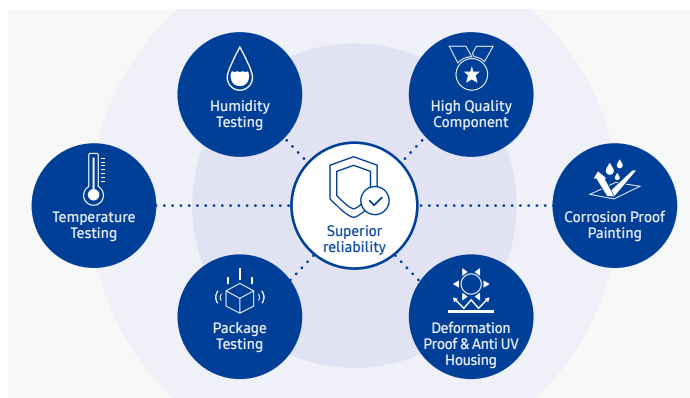


Key features



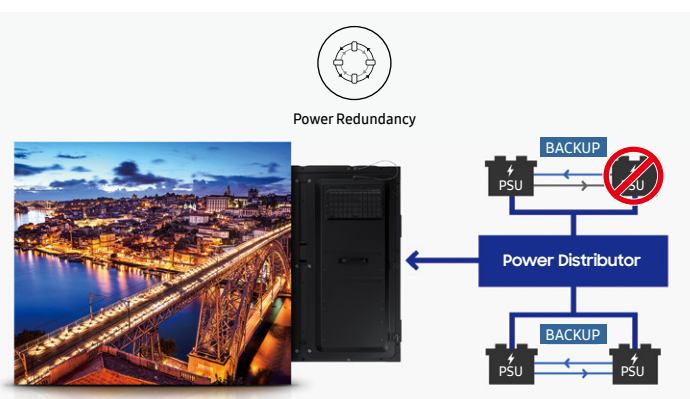
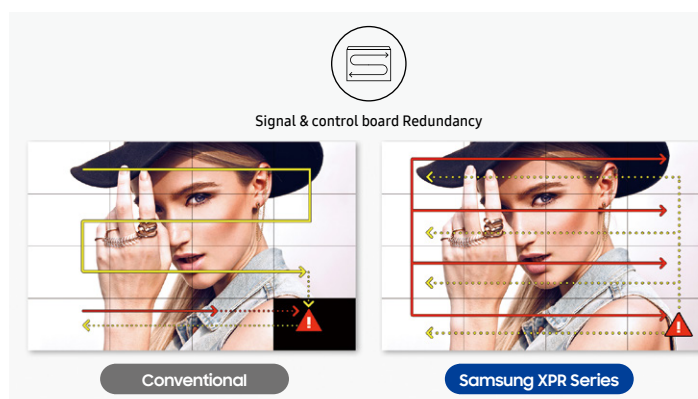
Built for the elements

The XPR series features an advanced heat dissipation mechanism to prevent overheating. The cabinets are also IP66 rated both front and back, while the cabinet and components inside are waterproof for added reliability in any weather conditions.



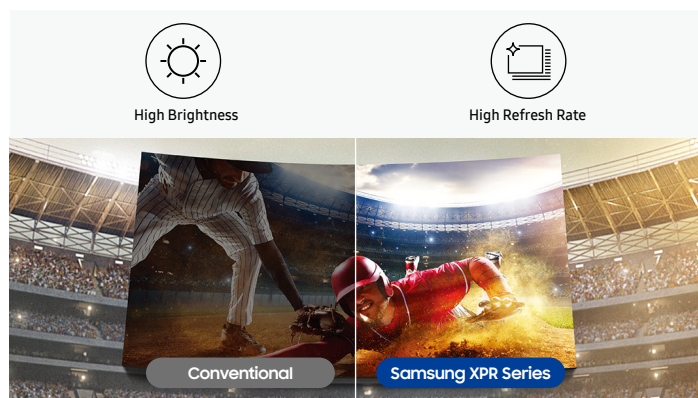
Rigorous performance testing

The XPR series has been rigorously tested against the elements including accelerated life cycle test, real-life operation tests in wet environments and simulations replicating the harshest sunlight to ensure the displays can withstand even the toughest environments.



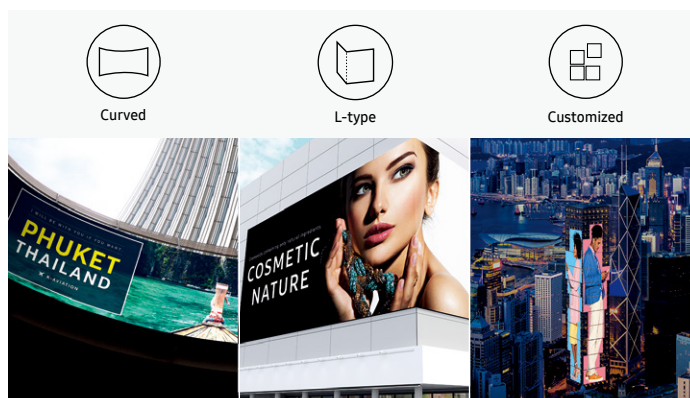
Integrated operational safeguards

The XPR series features multiple operational safeguards to prevent errors and interruptions. We have a newly designed connection protocol between the cabinets and the control boards. All modules are connected to each other, so an issue with a single control board won't have an impact on the displayed content. The screens also protect against interruptions resulting from power supply failure. While conventional displays black out when one power supply unit fails, our XPR series is not affected from the power disruption as each unit is coupled with a back-up. * Signal direction can vary dependent on installation configuration.



Exceptional picture quality

The XPR series delivers clear, brilliant images and prevents interruptions, no matter where they are installed. Eye-catching brightness combined with a high refresh rate, means content is clearly visible in any weather or lighting conditions.



Fully customizable design

With support for customized design, you can get the exact shape, size and curve for your display to meet any specifications. Curved walls, L-shaped or completely customized, with the XPR series, you have endless options. * Additional fittings are needed for customized design.

Specifications

Model Name		XPR-S P6	XPR-S P8	XPR-S P10	XPR-S P16
Physical Parameter	Pixel Pitch	6.25mm	8.333mm	10.416mm	16.666mm
	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
	Diode Density	25,600 m²	14,400 m²	9,216 m²	3,600 m²
	Configuration (LxH, per cabinet)	160x160 pixels	120x120 pixels	96x96 pixels	60x60 pixels
	Diode Type	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Discrete lamp
	Dimensions (mm, LxHxD, per cabinet)	1000x1000x267.7 mm	1000x1000x264.3 mm	1000x1000x264.0 mm	1000x1000x272.6 mm
	Dimensions (inch, inchxD, per cabinet)	55.7 x10.5 inch	55.7 x10.4 inch	55.7 x10.4 inch	55.7 x10.7 inch
	No. of Modules (WxH, per cabinet)	4 x 4	4 x 4	4 x 4	4 x 4
	Weight (per cabinet/per m²)	41 kg	41 kg	41 kg	43.5 kg
	Cabinet Construction	Aluminum	Aluminum	Aluminum	Aluminum
Optical Parameter	Brightness	8,000 nit	8,000 nit	8,000 nit	8,000 nit
	Contrast Ratio	8,000:1	8,000:1	8,000:1	8,000:1
	Viewing angle - Horizontal	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)
	Viewing angle - Vertical	90° (+25/- 65°)	90° (+25/- 65°)	90° (+25/- 65°)	90° (+25/- 65°)
	Video Processing	24 bit, 100% digital	24 bit, 100% digital	24 bit, 100% digital	24 bit, 100% digital
	Color Processing	16 bit per color (48 bit total)	16 bit per color (48 bit total)	16 bit per color (48 bit total)	16 bit per color (48 bit total)
	Number of colors	281 trillion colors	281 trillion colors	281 trillion colors	281 trillion colors
	Gray Scale Intensity	65,536 levels of red, green, and blue	65,536 levels of red, green, and blue	65,536 levels of red, green, and blue	65,536 levels of red, green, and blue
	Dimming Capability	256 levels of brightness	256 levels of brightness	256 levels of brightness	256 levels of brightness
	Color Wavelength	red: 630nm, green: 530nm, blue: 468nm	red: 630nm, green: 530nm, blue: 468nm	red: 630nm, green: 530nm, blue: 468nm	red: 630nm, green: 530nm, blue: 468nm
Electrical Parameter	Color temperature - Default	6,500K	6,500K	6,500K	6,500K
	Video Rate	60 frames per second	60 frames per second	60 frames per second	60 frames per second
	Animation Rate	60 frames per second	60 frames per second	60 frames per second	60 frames per second
	Input Power Range	100/240 volts, 50/60 Hz	100/240 volts, 50/60 Hz	100/240 volts, 50/60 Hz	100/240 volts, 50/60 Hz
	Power consumption - Max	1100 (W/m²)	1000 (W/m²)	1100 (W/m²)	600 (W/m²)
	Power consumption - Typ	270 (W/m²)	270 (W/m²)	270 (W/m²)	200 (W/m²)
	Refresh rate	7,680hz	7,680hz	7,680hz	7,680hz
	Power Redundancy	Power Redundancy through load sharing between 4 Power Supply Units	Power Redundancy through load sharing between 4 Power Supply Units	Power Redundancy through load sharing between 4 Power Supply Units	Power Redundancy through load sharing between 2 Power Supply Units
	Calibration White Point	D65 - 6500K	D65 - 6500K	D65 - 6500K	D65 - 6500K
	Calibration Standards	REC 709, REC 2020 or Max Gamut	REC 709, REC 2020 or Max Gamut	REC 709, REC 2020 or Max Gamut	REC 709, REC 2020 or Max Gamut
Operation Conditions	Working Temperature	-40°C to 55°C (-40°F to 131°F)	-40°C to 55°C (-40°F to 131°F)	-40°C to 55°C (-40°F to 131°F)	-40°C to 55°C (-40°F to 131°F)
	Cooling	Quiet running vent fans	Quiet running vent fans	Quiet running vent fans	Quiet running vent fans
	IP Rating	Module IP68, Cabinet Front/Back IP66/ IP66	Module IP68, Cabinet Front/Back IP66/ IP66	Module IP68, Cabinet Front/Back IP66/ IP66	Module IP68, Cabinet Front/Back IP66/ IP66
	LED Lifetime	100,000 hours	100,000 hours	100,000 hours	100,000 hours
	Monitoring function	Temperature, module working, F/W version, webcam, interface status, power status, LOD, cal data on module, blanking	Temperature, module working, F/W version, webcam, interface status, power status, LOD, cal data on module, blanking	Temperature, module working, F/W version, webcam, interface status, power status, LOD, cal data on module, blanking	Temperature, module working, F/W version, webcam, interface status, power status, LOD, cal data on module, blanking
Certification	Certification	CE, UL / ULC listed	CE, UL / ULC listed	CE, UL / ULC listed	CE, UL / ULC listed
Service	Service	Front Service and/or Rear Service	Front Service and/or Rear Service	Front Service and/or Rear Service	Front Service and/or Rear Service

Model Name		XPR-E P6	XPR-E P8	XPR-E P10	XPR-E P15	XPR-E P20
Physical Parameter	Pixel Pitch	6.25mm	8.333mm	10.416mm	16.666mm	20.833mm
	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	1 red, 1 green, 1 blue
	Diode Density	25,600 m ²	14,400 m ²	9,216 m ²	3,600 m ²	2,304 m ²
	Configuration (LxH, per cabinet)	160x160 pixels	120x120 pixels	96x96 pixels	60x60 pixels	48x48 pixels
	Diode Type	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Surface Mount Device (SMD)	Discrete lamp	Discrete lamp
	Dimensions (mm, LxHxD, per cabinet)	1000x1000x267.7 mm	1000x1000x264.3 mm	1000x1000x264.0 mm	1000x1000x272.6 mm	1000x1000x274.5 mm
	Dimensions (inch, inchxD, per cabinet)	55.7 x 10.5 inch	55.7 x 10.4 inch	55.7 x 10.4 inch	55.7 x 10.7 inch	55.7 x 10.8 inch
	No. of Modules (WxH, per cabinet)	4 x 4	4 x 4	4 x 4	4 x 4	4 x 4
	Weight (per cabinet/per m ²)	41 kg	41 kg	41 kg	41 kg	41 kg
	Cabinet Construction	Aluminum	Aluminum	Aluminum	Aluminum	Aluminum
Optical Parameter	Brightness	7,000 nit	7,000 nit	7,000 nit	7,500 nit	7,500 nit
	Contrast Ratio	7,000:1	7,000:1	7,000:1	7,500:1	7,500:1
	Viewing angle - Horizontal	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)	160° (+/- 80°)
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	Video Processing	24 bit, 100% digital	24 bit, 100% digital	24 bit, 100% digital	24 bit, 100% digital	24 bit, 100% digital
	Color Processing	16 bit per color (48 bit total)	16 bit per color (48 bit total)	16 bit per color (48 bit total)	16 bit per color (48 bit total)	16 bit per color (48 bit total)
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Electrical Parameter	Video Rate	60 frames per second	60 frames per second	60 frames per second	60 frames per second	60 frames per second
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	Input Power Range	100/240 volts, 50/60 Hz	100/240 volts, 50/60 Hz	100/240 volts, 50/60 Hz	100/240 volts, 50/60 Hz	100/240 volts, 50/60 Hz
	Power consumption - Max	1100 (W/m ²)	1000 (W/m ²)	1000 (W/m ²)	600 (W/m ²)	480 (W/m ²)
	Power consumption - Typ	270 (W/m ²)	270 (W/m ²)	270 (W/m ²)	200 (W/m ²)	160 (W/m ²)
	Refresh rate	7,680hz	7,680hz	7,680hz	7,680hz	7,680hz
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	IP Rating	Module IP68, Cabinet Front/Back IP66/IP66	Module IP68, Cabinet Front/Back IP66/IP66	Module IP68, Cabinet Front/Back IP66/IP66	Module IP68, Cabinet Front/Back IP66/IP66	Module IP68, Cabinet Front/Back IP66/IP66
	LED Lifetime	100,000 hours	100,000 hours	100,000 hours	100,000 hours	100,000 hours
	Monitoring function	Temperature, module working, F/W version, webcam, interface status, power status, LOD, cal data on module, blanking	Temperature, module working, F/W version, webcam, interface status, power status, LOD, cal data on module, blanking	Temperature, module working, F/W version, webcam, interface status, power status, LOD, cal data on module, blanking	Temperature, module working, F/W version, webcam, interface status, power status, LOD, cal data on module, blanking	Temperature, module working, F/W version, webcam, interface status, power status, LOD, cal data on module, blanking
Certification	Certification	CE, UL / ULC listed	CE, UL / ULC listed	CE, UL / ULC listed	CE, UL / ULC listed	CE, UL / ULC listed
Service	Service	Front Service and/or Rear Service	Front Service and/or Rear Service	Front Service and/or Rear Service	Front Service and/or Rear Service	Front Service and/or Rear Service

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SMART LED Signage

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