



Outdoor Digital Signage: Navigating the Benefits and Challenges

Outdoor signage is one of the next growth areas for digital communication, but networks need to be able to withstand a host of issues.

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In the constantly changing world of advertising and communication, outdoor digital signage has emerged as a powerful tool for businesses and public spaces alike. With its ability to display dynamic content, attract attention and engage audiences, digital signage represents a significant leap from traditional static signs. And more and more, those digital displays are conveying their message outdoors.

Figures vary, but one study predicts the market for outdoor advertising will reach \$38.9 billion by 2032, growing at a compound annual rate of 5.1% from \$23.9 billion in 2023.

But as with any technological advancement, outdoor digital signage offers a variety of benefits as well as a host of challenges.

Enhanced visibility and engagement

One of the most significant advantages of outdoor digital signage is its ability to catch the eye of passersby. With bright, vivid displays and the capacity for full-motion graphics, digital signs can draw more attention than static signs. This increased visibility helps businesses stand out in crowded urban landscapes, potentially boosting foot traffic and sales.

Unlike traditional signage, digital displays can be updated quickly and remotely, allowing for real-time content changes. This flexibility is invaluable for advertising sales, displaying up-to-the-minute information or reacting to current events, enabling deployers to keep content relevant and engaging.

Although the initial investment for outdoor digital signage can be higher than for static signs, the long-term costs can be lower. The ability to update content digitally eliminates the need for physical replacements, reducing printing and labor costs associated with traditional signage.

And by reducing the need for the materials used in static signs, digital displays can help lower a business's environmental footprint.

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Overcoming the challenges

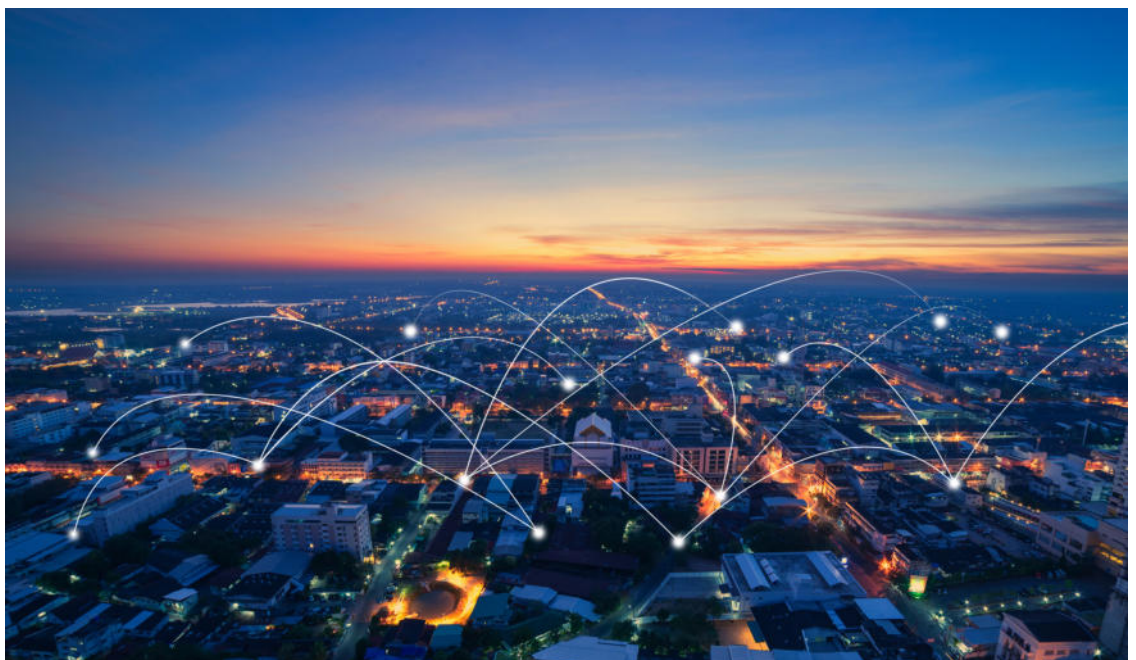
Still, outdoors displays are faced with several issues that indoor screens avoid. Outdoor digital signs must be designed to withstand various environmental conditions, including extreme temperatures, rain, and sunlight.

In Williston, N.D., for example, it's not unusual for temperatures in the winter to fall to -5° F (-20° C). In Las Vegas, temperatures often top out at 110° F (43° C).

Hilo, Hawaii, is the rainiest city in the US, with an average of 276 days of rain per year. On the other end of the spectrum, Phoenix sees sunshine 85% of the time.

Digital signage networks need to deliver peak performance in environments ranging from extreme heat to extreme cold, and everything in between. They also need to deliver results no matter how dry or how damp conditions may be.

Like any technology, the hardware driving digital signage systems needs to be reliable and offer the ability to remotely detect technical glitches, including software crashes and hardware failures. Any downtime can result in lost advertising opportunities and the need for technical support to visit the site to resolve issues.



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“The SE-603-N outdoor digital signage player from IBASE Technology, for example, delivers high performance, reliability and security in a variety of conditions, and enables smooth 4K media playback on three independent displays.”

Striking a balance

To maximize the benefits of outdoor digital signage while mitigating the challenges, deployers should develop a content strategy that keeps the signage fresh, relevant, and engaging can maximize its impact.

Additionally, choosing durable, weather-resistant screens and robust software systems can reduce long-term maintenance issues. Although that may mean higher costs for the initial deployment, those costs will be offset by lower ongoing maintenance costs.

And at the heart of any digital signage deployment is the media player. Choosing a robust, reliable media player can help ensure the smooth operation of any outdoor signage deployment.

The SE-603-N outdoor digital signage player from IBASE Technology, for example, delivers high performance, reliability and security in a variety of conditions, and enables smooth 4K media playback on three independent displays. The player is powered by 11th Gen Intel® Core™ processors, supporting up to 64GB DDR4-3200 memory.

The SE-603-N features various connectivity options such as M.2 E-Key (2230) for Wi-Fi, Bluetooth, or capture card options and M.2 B-Key (3052) for 5G



“With built-in iSMART energy saving smart control and Observer remote monitoring technologies, the SE-603-N offers power on/off scheduler, power resume and remote management functions.”

options. With Intel® processor integrated graphics, the player offers high-quality graphics content with HDMI 2.0, DVI-D, and DP (DP++) outputs for flexible display configurations.

Additionally, the compact player features TPM 2.0, vPro, and a watchdog timer to ensure maximum security and reliability. The fanless design enables silent operation, making it ideal for use in noise-sensitive environments. It can also operate in temperatures ranging from -20°C to 70°C, making it suitable for use in various rugged environments such as bus stop displays, drive-through menus, digital billboards, and wayfinding applications.

With built-in iSMART energy saving smart control and Observer remote monitoring technologies, the SE-603-N offers power on/off scheduler, power resume and remote management functions. It also supports OOB (Out-of-Band), allowing users to flexibly manage devices remotely and maintain computers that cannot access the operating system over the network to reduce maintenance costs. PDPC functionality enables control of peripheral device power to restore the operation of external devices.

Getting the message out

Outdoor digital signage offers a dynamic and effective way to communicate with audiences in public spaces. While the challenges are significant, they are not insurmountable. With careful planning and an investment in quality technology, organizations of all types can leverage digital signage to capture attention, convey messages, and engage with their community in powerful new ways.

Features of the SE-603-N Digital Signage Player from IBASE

11th Gen Intel® Core™ / Celeron® U-Series Processor Fanless Signage Player with 1x HDMI, DP and DVI

- iSMART intelligent energy-saving & Observer remote monitoring technologies
- 11th Gen Intel® Core™ / Celeron® U-Series Processors
- 2x DDR4-3200 SO-DIMM, dual channel, Max. 64GB
- Intel® Processor integrated graphics device
- Supports OOB (Out-of-Band) and PDPC (Peripheral Device Power Control) functions
- 1x HDMI 2.0, 1x DVI-D, 1x DP (supports DP++)
- 1x M.2 E-Key (2230) for Wi-Fi, Bluetooth or capture card options
- 1x M.2 B-Key (3052) for 5G options
- TPM 2.0, vPro and watchdog timer
- Wide-range operating temperature: -20°C ~ 70°C
- Ruggedized, fanless and all solid-state design
- 24/7 operational reliability

Source: IBASE Technology



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