

CASE STUDY



Reliable Digital Signage in Unreliable Conditions

A digital signage supplier partners with IBASE to deploy signage in harsh outdoor weather conditions.

By Richard Slawsky | Contributing writer, Digital Signage Today

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In the middle of winter, the temperature in Chicago can fall as low as -27°F (-33°C). For the Canadian city of Calgary, Alberta, that temperature in winter can fall as low as -22°F (-30°C).

At the other end of the spectrum, temperatures in Las Vegas in the summer can climb to as high as 110°F (43°C). Summertime temperatures in New Orleans can reach similar heights, with the added challenge of humidity levels topping 79.5 percent.

Considering such extremes in temperature and other environmental factors, deploying outdoor digital signage that performs flawlessly can be a challenge. Fortunately, technology companies are developing media players that can operate in those extremes.

The challenge

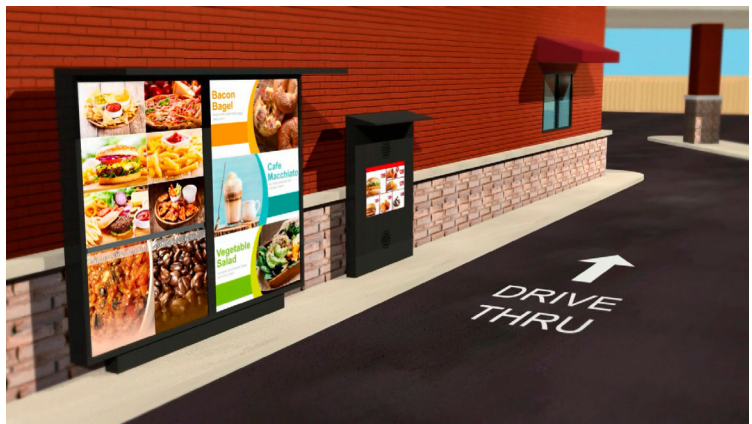
Although the overall digital signage market continues to develop and expand, there's one area where growth promises to be particularly strong: outdoor signage.

According to recent projections by ReportBuyer, the overall digital signage market is expected to grow by 8.2 percent through 2022. And an increasing component of that is outdoor signage, including for uses such as drive-thru menu boards, signage in transportation centers such as train stations and airports and vehicle signage such as those placed on the side of buses or taxis.

Twenty-two percent of respondents to a survey included in the 2017 Digital Signage Today Future Trends report said they already used outdoor digital signage, with another 28 percent saying they planned to deploy outdoor signage within the next two years.

But several factors must be considered when placing displays and media players outdoors. In an indoor environment, conditions such as temperature and humidity are relatively stable. When placing signage and media players outdoors, though, conditions can change dramatically. Temperatures will vary significantly throughout the year, rain will fall and humidity levels will change.

One major US signage supplier encountered these issues when placing signage in situations including alongside city sidewalks, in bus shelters and a variety of other outdoor deployments. In addition, that supplier needed a player that could fit into tight spaces and included capabilities such as wireless access, automatic power on/off scheduling and the ability to manage the media player remotely.



The solution

To overcome the challenges that come with deploying a media player in an outdoor environment, the signage supplier partnered with IBASE Technology to incorporate IBASE's SE-102-N series digital signage player into its outdoor signage networks.

The SE-102-N is an ultra-slim fanless and noiseless system measuring just 19.5mm thick, allowing it to be fitted into the tightest spaces behind displays. The player comes with a low-power Intel® Atom™ x7-E3950 @ 2.0GHz quad-core processor with Intel® HD Graphics, combining efficiency and excellent performance to ensure industrial-grade reliability for stable operation.



In addition, the SE-102-N supports extended operating temperatures of -40°F (-40°C) to +158°F (+70°C) and meets extreme system reliability requirements that allow for its use in a wide range of harsh outdoor environments. It features built-in hardware EDID (extended display identification data) simulation to prevent convergence issues caused by display/cable problems or failure to identify EDID.

The player also comes with IBASE's unique iSMART intelligent energy-saving and Observer monitoring technologies that feature automatic power on/off scheduling, automatic power

recovery, low temperature boot protection and hardware monitoring. It supports a Mini PCI-E slot for optional WiFi, Bluetooth, 4G and video capture functions.

The results

So far, that digital signage supplier has placed networks driven by the SE-102-N digital signage player in a number of outdoor deployments without a single instance of failure. The player delivers compelling and valuable content in dual 4K UHD HDMI displays to targeted audiences in outdoor environments.



The SE-102-N allows the supplier to manage and update content remotely, eliminating the need for a technician to physically visit the site. In addition, the player can be powered off in low-traffic situations, saving on energy costs. Its small form factor enables the player to be used in deployments where space is at a premium.

With those features, and more, the SE-102-N promises to be the perfect media player solution for virtually any outdoor deploying, delivering flawless, reliable performance for years to come.

Features of the SE-102-N Outdoor Digital Signage Player

- iSMART - for EuP/ErP power saving, auto-scheduling and power resume
- Intel® Atom™ Processor x7-E3950 @ 2.0GHz
- Intel® Pentium® N4200 @ 2.5GHz or Celeron® N3350 @ 2.4GHz
- Intel® HD Graphics (Gen 7-LP) 4EU
- 2x DDR3L-1866 SO-DIMM, Dual Channel, Max. 8GB (Non-ECC)
- DDR3L-1600 for N3350 only
- 2x HDMI 1.4b
- 1x Mini PCI-E (full-size) for Wi-Fi, Bluetooth, 4G, or TV tuner options
- Fanless, super slim and compact design
- Wide-range operating temperature from -40°C to 70°C

About the sponsor:

IBASE is a leading embedded PC manufacturer with a special focus on high quality and high performance digital signage media players. We offer a full range of products that cater to the needs of customers for different applications and create unique and successful experiences for our users worldwide. A full product lineup is available for various requirements that include entry-level, mid-range or high-performance signage players, which comes with segregated airflow or fanless designs. Our long life-cycle digital signage systems offer one, two, four, six and 12 HDMI outputs - all supporting 1080P or 4K resolution for every individual content. Most IBASE signage products have been certified by international well-known signage software companies.

IBASE is an associate member of the Intel® Intelligent Systems Alliance, a global ecosystem of 200-plus member companies that provide the performance, connectivity, manageability and security that developers need to create smart, connected systems. Learn more at intel.com/go/intelligentsystems-alliance. Intel® and Intel® Core™ are registered trademarks of Intel® Corporation in the United States and other countries.