Everything You Should Know About Outdoor Kiosks

A Comprehensive Guide to Outdoor Kiosks

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When planning a new kiosk deployment, one of the first and most important things to consider is where the kiosk will be located—more specifically, if it will be located indoors or outdoors. While indoor and outdoor kiosks are designed to fill a variety of the same roles—from information sharing, to ticketing, bill payment, interactive digital signage, food ordering, and more—they aren't all created equal. From quality to durability, componentry, security, and resistance to extreme weather, there are numerous factors one should consider prior to making the decision to install an outdoor kiosk or selecting a kiosk manufacturer to help them do so.

KEY FEATURES OF OUTDOOR KIOSKS

While outdoor kiosks have many of the same functionalities as their indoor counterparts, many aspects of their design vary due to their physical location. As an unattended outdoor solution, durability, security, and resistance to extreme weather and temperatures are all key features of an outdoor kiosk.

DURABLE

Outdoor kiosks should be built for long-lasting durability. Exterior finishes, including powder coating and lexan laminated graphics, enable kiosks to maintain their original appearance over time, despite exposure to the elements.

SECURE

Due to the fact that outdoor kiosks typically function as a completely unattended solution, they should be designed to discourage and prevent tampering. Equipping kiosks with security features, including strategically placed stiffeners, extra weld points, and compression locks helps to reduce the risk of potential security issues.

WEATHER-RESISTANT

Designed with the outdoor elements in mind, outdoor kiosks should be built to withstand a wide variety of environmental factors, including extreme temperatures and direct sunlight. They should also be sealed to help reduce and prevent the intrusion of water, smoke, and dust.

MANUFACTURING

Arguably one of the most important steps in the kiosk buying and design process, kiosk administrators should conduct sufficient research prior to selecting a manufacturer to bring their outdoor kiosk vision to life. While there are certainly similarities between indoor and outdoor kiosks, it's crucial that the selected manufacturer has experience building outdoor-specific kiosks. Quality and safety certifications are also important to consider, especially when it comes to outdoor deployments.

ISO 9001:2015

ISO 9001 is the most widely recognized international standard for quality management systems. Organizations use the standard to demonstrate the ability to constantly provide products and services that meet customer and regulatory requirements. Released on September 23, 2015, ISO 9001:2015 is the most recent addition. While quality plays a major role in the success of all kiosk and digital signage deployments, it is especially crucial for those that will be located outdoors.

UL SELF-CERTIFICATION

UL brings clarity and empowers trust to support the responsible development, production, marketing, and purchase of goods, solutions, and innovations. The Universal Laboratories (UL) certification is one of the most well-known and widely recognized safety certifications and it focuses largely on making products safer to use.
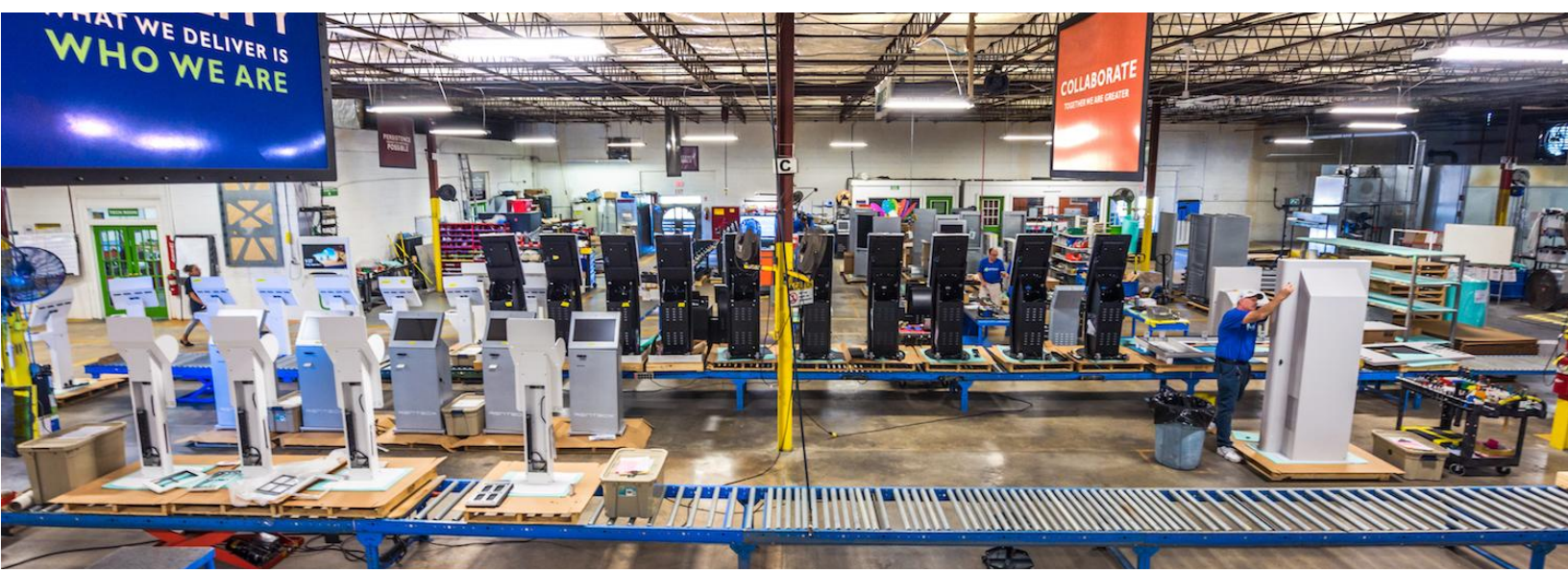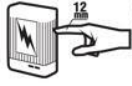
DURABILITY

IP Ratings

IP ratings, otherwise known as Ingress Protection ratings, are used to define the levels of sealing protection that electrical enclosures have against intrusion from foreign bodies, specifically water and solids such as dirt or dust. IP ratings are comprised of two numbers, the first being the enclosure's level of protection against solids and the second being the enclosure's level of protection against water.

An enclosure's level of protection against solids is indicated on a scale of one to six—with one being the least and six being the greatest amount of protection. Enclosures with an IP rating of one are protected against a solid object larger than 50 mm, while enclosures with an IP rating of six are completely dust-tight for up to eight hours.

An enclosure's level of protection against water is indicated on a scale of one to eight—with one being the least and eight being the greatest amount of protection. Enclosures with an IP rating of one are protected against vertically falling drops of water, while enclosures with an IP rating of eight are protected against the effects of being submerged in water and under pressure for long periods of time.

While it's crucial that kiosk administrators of all kinds consider the environment in which their kiosk will be located, it is especially important for those deploying outdoor kiosks, as their kiosks have the potential to be exposed to extreme elements—including water and dust—on a daily basis.

https://www.nemaenclosures.com/blog/ingress-protection-ratings/

COMPONENTRY

While every outdoor self-service kiosk deployment is somewhat different—from the physical design, branding, and overall look and feel of a unit to the function and use case they are designed for—the component makeup of an outdoor kiosk is fairly uniform across the board. From those that make a kiosk easier to use to those that keep them secure, these are some of the most essential components to include in an outdoor kiosk.

OPEN FRAME MONITOR

An open frame monitor is a display device installed as a component within a kiosk chassis and is fully contained within the metal enclosure. Open frame screens have an unfinished look prior to installation and do not contain a bezel. Due to the fact that they are incorporated into the chassis of the kiosk, they can be used for both indoor and outdoor applications.

HIGH-BRIGHT MONITOR

In order to ensure the best possible visibility at all times of the day and night, even in direct sunlight, it's crucial that all outdoor kiosks utilize high-brightness monitors. Designed for use in outdoor applications, and other brightly lit locations, high-bright screens should have at least 2,000 nits of brightness.

COMPRESSION LOCKS

Specially designed to resist tampering, compression locks compress a gasket when they swing into a "locked" position. A secure lock helps to ensure that the physical, data, and network components of the kiosk are protected from tampering.

HVAC

In order to significantly reduce the risk of malfunction due to extreme temperatures, it's imperative that outdoor kiosks include an internal HVAC system to regulate the temperature inside the unit. HVAC units can be seamlessly integrated into outdoor kiosks and are able to effectively disperse heat and air throughout—allowing units to effectively function in a wide variety of climates.

RAIN HOOD & BENDS

While outdoor kiosks are designed for use in all kinds of weather—rain, sleet, and snow included—rain hoods help to further repel and prevent water from entering the unit in addition to reducing the risk for puddling. Strategically placed bends can also serve the same function.

SAFETY GLASS

While it's practically impossible to design and produce an outdoor kiosk that is completely indestructible, there are many precautions that can be taken to prevent and lessen the impact of any damage that might occur as a result of vandalism or natural occurrences. Designed to protect the user, monitor, and components inside, both tempered and laminated safety glass are used in outdoor kiosks. While laminated safety glass is secure, durable, and resistant to the impacts of UV rays, it's tempered counterpart is slightly stronger and more resistant to breakage.

THRU-GLASS

Designed to be installed behind an exterior piece of glass, thru-glass technology communicates with a CPU and a display monitor to allow users to interact with on-screen content by simply touching the glass.

SITE PREPARATION

Regardless of whether a kiosk is being used for interactive digital signage, package pickup, key drop off, food ordering, or wayfinding, site preparation is an important aspect of any kiosk deployment—especially when it comes to outdoor kiosks. Administrators should be sure to consider location, access to power and data, and any town or city ordinances before installing an outdoor kiosk.

LOCATION

Outdoor kiosk locations have to be prepared in advance of installation as they must sit on a level, concrete foundation.

ACCESS TO ELECTRICITY + INTERNET

While electricity and internet access are almost always easily accessible in indoor locations, they can be harder to come by outdoors. Ensuring access to both ahead of time can prevent complications during installation.

REGULATIONS

While towns and local governments very rarely have a say in what businesses or organizations install inside their buildings, regulations may exist limiting outdoor installations or outlining strict processes for adding such installations.

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