Case Study

LANTRONIX®

INDUSTRY:

Retail and Consumer

Lantronix Powers Parking and Security of Mall of America

Success Highlights

- · Significant cost and time savings
- Improved parking experience for visitors
- Reliable, stable and weather-resistant powering system
- · Remote configuration, monitoring and management
- · Sitewide video security system

Case Study Overview

The Mall of America, located in Bloomington, Minnesota, is the largest shopping mall in the United States and is home to retail, dining and entertainment. With nearly 40 million visitors each year, the mall offers approximately 15,000 parking spaces in its vast parking system. To make parking easier for guests, the Mall of America worked with Park Assist, a Lantronix customer, to implement a parking guidance system.

Lantronix empowers smart cities with advanced IoT solutions that deliver fast deployment and cost-effective virtual and physical security.

- Jacques Issa, VP of Marketing, Lantronix

CHALLENGE: Power Advanced Outdoor Camera-Based Parking System

Park Assist needed to power and manage its advanced camera-based sensing system to monitor the parking spaces at the Mall of America. The outdoor, high-perched cameras added another layer of difficulty to this project.

Park Assist was challenged with finding a solution that would:

- Power large digital signage that displays the number of open parking spaces on each level
- Integrate signage with the high-perched outdoor camera surveillance system
- Enable camera system to collect video and rich data that drives the core intelligence of the system.
- Eliminate the need to dig up asphalt to install in-ground bay sensors
- Enable wireless connections, eliminating the need to trench new cables
 throughout the parking areas
- Connect live parking availability status to Park Assist mobile app





Lantronix SESPM Series

SESPM Series Switch is a Layer 2 managed switch with (4) 10/100/1000Base-T IEEE 802.3bt compliant PoE++ ports and (1) combination 10/100/1000Base-T RJ-45 or 100/1000Base-X SFP port (additional optional ports available) that is ideal for use in security and surveillance, PoE lighting, digital signage and many other applications.

https://www.lantronix.com/ products/sespm1040-541-lt-xxseries-4/



SOLUTION: Lantronix's SESPM Series Switch

Park Assist selected Lantronix's flagship smart city switch, the Self-Enclosed Managed Hardened Gigabit Ethernet PoE++ Switch (SESPM) to power its S1 Outdoor Surface Lot System advanced camera-based sensing system. With the SESPM, Park Assist was able to provide the smart signage and outdoor camera system that the Mall of America needed to provide real-time parking availability monitoring for its guests.

The SESPM features include:

- · Compact size, form factor and flexibility
- · Ability to simplify the connection and powering of outdoor devices
- 24V Passive PoE Module to power the 24VDC wireless system
- Enclosure that is NEMA 4X/I-66-rated to withstand harsh outdoor elements
- Incorporation of its own power supply, fuse protection, surge protection a nd tamper detection
- Four IEEE 802.3af/at/bt PoE ports
- 90 watts of power on multiple ports to power the PoE cameras



RESULTS: Powered Parking Solution That Reduces Time and Expense

With cameras mounted on the parking ramp as well as overlooking the surface lot to provide an omniscient view, the SESPM enables Park Assist's S1 System to monitor multiple parking bays while collecting video and data. It also functions as a sitewide video security system, acting as a constant visual deterrent to crime that provides visitors with an added sense of safety.

The SESPM also reduced Park Assist's time and expense challenges of maintaining the powered devices connected to the switch. With the same mobile app used to configure the switch before installation, Park Assist technicians can now connect to the switch to make modifications, troubleshoot, monitor or reboot the cameras and radios via Bluetooth[®] Low Energy (BLE) technology. This eliminates the need for a scissor-lift for access, saving up to \$1,000 per instance.

Benefits Include:

- · Real-Time Parking Availability Monitoring
- Power to PoE cameras and radios
- · Accessibility via Bluetooth Low Energy Technology
- · Sitewide Video Security System
- Wireless Monitoring and Troubleshooting
- · Significant Cost and Time Savings



Lantronix 24V Passive PoE Combo Port Module

Lantronix's Passive PoE Combo Port Module is used to activate a 2nd combination 10/100/1000Base-T maintenance port with 24VDC for powering 24V non-standard PoE powered devices or to activate a 2nd 1000Base-X uplink port.

https://www.lantronix.com/ products/sespm-2p-24v-cp/

About Lantronix

Lantronix Inc. is a global provider of secure turnkey solutions for the Internet of Things (IoT) and Remote Environment Management (REM), offering Software as a Service (SaaS), connectivity services, engineering services and intelligent hardware. Lantronix enables its customers to accelerate time to market and increase operational up-time and efficiency by providing reliable, secure and connected Intelligent Edge IoT and Remote Management Gateway solutions.



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