

Milesight LPR Cameras Modernizes High-Traffic Event Parking in Minnesota, United States

Minnesota, United States

Location
Minnesota, United States

Industry Segment
Parking

Milesight Partner
Inugo

Related Products
Milesight AI Road Traffic PTZ Bullet Plus Camera

Overview

A large multi-level parking facility in Minnesota, United States, required a smarter and more efficient way to manage vehicle access for high-traffic events. With more than 1,600 parking spaces across eight levels, the facility serves multiple nearby event venues and accommodates a complex mix of monthly parkers, staff, VIPs, season pass holders, and transient visitors.

To replace its aging pay-on-entry parking system, [15 Milesight AI Road Traffic PTZ Bullet Plus Cameras](#) were deployed across eight entry and exit lanes, providing reliable license plate recognition as the front-end foundation for automated access control, digital payment, and intelligent parking management through [Inugo's cloud-based platform](#).



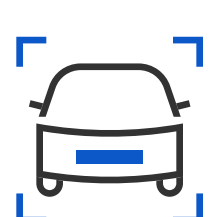
Challenges

The existing pay-on-entry parking system had reached the end of its service life and could no longer support the facility's increasingly complex operations.



Severe Event Traffic Congestion

Manual payment collection at entry slowed vehicle throughput, causing queues to extend onto surrounding streets during major events and requiring police assistance for traffic management.



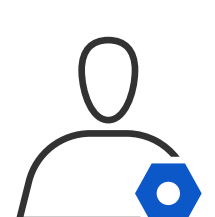
Complex Parking User Management

The facility needed to simultaneously accommodate more than 10 user groups, including monthly parkers, staff, VIPs, season pass holders, and transient visitors, each with different access privileges and parking rates.



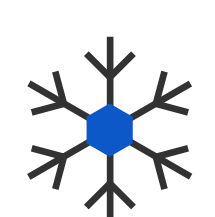
Limited Visibility into Parking Activity

The legacy system provided little visibility into vehicle entry and exit activity, making it difficult to identify monthly parkers who overstayed or gain real-time insights into occupancy and parking behavior.



Manual Handling of Special Access Requests

VIP parking and last-minute access requests required manual intervention, increasing the operational workload during already busy event periods.



Harsh Minnesota Winter Conditions

Cameras installed at outdoor entry and exit lanes needed to operate reliably through sub-zero temperatures, snow, ice, moisture, and road salt exposure while maintaining dependable license plate capture day and night.

Solution

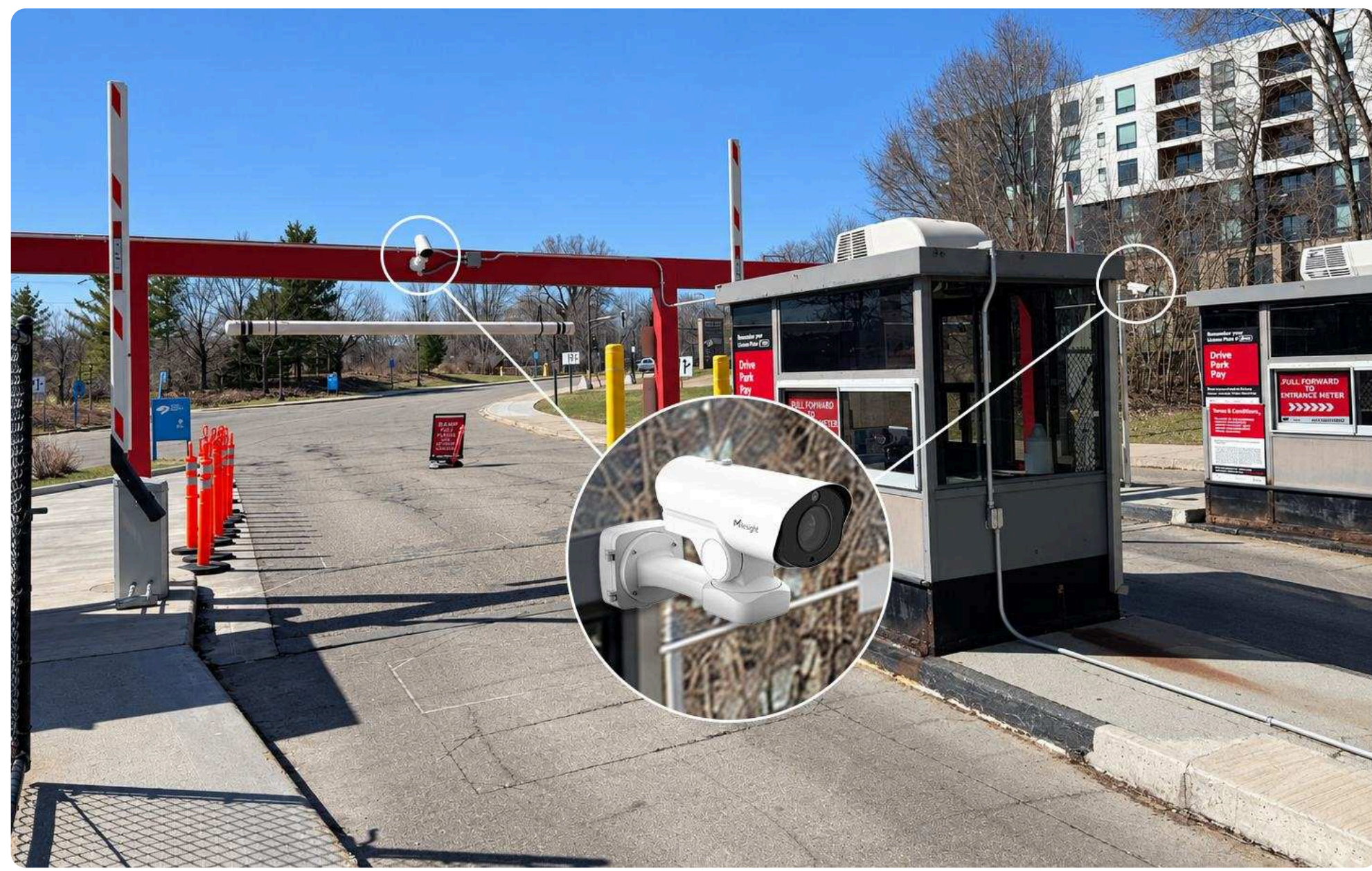
To modernize vehicle access and improve traffic flow, [15 Milesight AI Road Traffic PTZ Bullet Plus Cameras](#) were deployed across eight entry and exit lanes as the front-end vehicle identification layer of the new LPR-based parking system.

The cameras capture license plate information and [integrate with Inugo's cloud-based parking management platform](#), enabling vehicles to be automatically identified and matched with their [corresponding access permissions, parking accounts, or payment status](#). This replaces the previous cashier-based entry process with a faster and more automated parking experience.

Reliable LPR with Front & Rear Plate Coverage

Milesight cameras were strategically positioned to capture both front and rear license plates, ensuring reliable vehicle identification regardless of plate placement or vehicle orientation.

Combined with high-resolution imaging and strong low-light performance, the cameras provide clear and consistent license plate capture across varying daytime and nighttime conditions, supporting accurate vehicle matching throughout the complete entry-to-exit journey.



Built for Harsh Minnesota Winters

With cameras installed at outdoor entry and exit lanes, reliable performance under severe winter conditions was critical. The ruggedized Milesight AI Road Traffic PTZ Bullet Plus Camera is designed for demanding outdoor environments, helping maintain stable operation despite sub-zero temperatures, snow, ice, moisture, and road salt exposure.

This durability ensures continuous vehicle identification throughout the year, even during Minnesota's challenging winter months.



Seamless Integration with Inugo for Automated Parking Access

License plate data captured by Milesight cameras is integrated with Inugo's cloud-based parking management platform, turning LPR recognition into automated access, payment, and parking management actions.

The integrated system enables:

- License plate-based entry and exit
- Automated gate-up and gate-down operation
- Digital parking payments
- Automatic identification and charging of monthly parker overstays
- Flexible access management for VIPs, staff, monthly parkers, season pass holders, and transient visitors
- Real-time visibility into occupancy, revenue, and parking activity

With reliable LPR data serving as the foundation for these workflows, the facility can manage complex parking scenarios with significantly less manual intervention.

Results

The deployment transformed the facility from a manual pay-on-entry operation into a streamlined, LPR-driven parking environment. Faster automated vehicle access has [significantly reduced traffic congestion](#) during major events, eliminating the previous need for police to manage traffic around the facility. Monthly parker overstays can now be [automatically identified and charged](#), while [Inugo's centralized platform](#) gives operators real-time visibility into occupancy, revenue, and parking behavior across more than 1,600 spaces. With Milesight AI Road Traffic PTZ Bullet Plus Cameras providing reliable license plate capture and robust outdoor performance, the facility now has a scalable foundation for efficient, automated parking access — even through demanding Minnesota winter conditions.

Related Products



AI Road Traffic PTZ Bullet Plus Camera

- Flexible Pan, Tilt and Zoom Tasks
- 5X/12X/20X/23X AF Lens
- 1/1.8" Sensor & 0.002Lux Starlight
- 90fps High Frame Rate
- Traffic Violation Detection
- Intelligent AI-powered LPR Algorithm
- Evidence Camera Linkage
- Plate Data Management

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