

Smart Parking Monitoring Solution in Auto Repair Shop

Location: Japan

Location
Japan

Industry Segment
Retail

Related Products
Parking Management Camera

Overview

In Japan's competitive automotive repair and retail industry, customer experience and transparency in after-sales service have become key differentiators. Many repair shop owners are now seeking ways to provide customers with real-time visibility into the repair process while maintaining detailed visual and data records to prevent potential disputes.

To address these emerging needs, Milesight deployed a total of 5,600 Parking Management Cameras across multiple auto repair shops in Japan, delivering a smart, automated solution that enhances operational transparency, customer satisfaction, and business efficiency.



Challenges



Scene Variability

Unlike traditional parking facilities, auto repair shops involve small-scale, high-turnover parking areas that require precise monitoring of vehicle occupancy and turnover



Customer Experience Expectations

Vehicle owners want to stay informed about repair progress in real time, reducing uncertainty during waiting periods



After-Sales Disputes

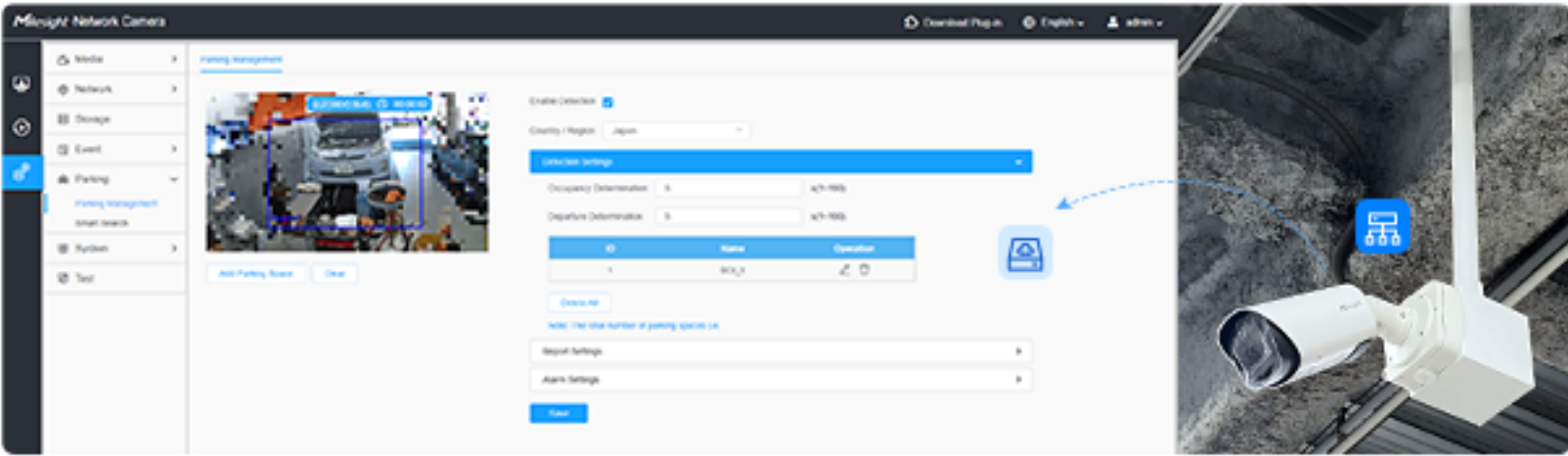
The absence of standardized evidence collection often leads to disagreements over repair quality and vehicle condition at delivery



Localization Needs

Accurate recognition of Japanese license plates and seamless integration with Google platforms were essential to ensure system reliability and compatibility in the local market

Solution



Milesight's AI-powered Entrance & Exit Cameras, integrated with PlateXpert license plate recognition technology, formed the foundation of a fully automated and transparent repair management system:

Automated Vehicle Detection

When a vehicle enters a repair bay, the camera automatically detects occupancy changes and updates the system in real time

Accurate License Plate Recognition

Advanced AI algorithms precisely recognize Japanese license plates, linking vehicle identity with service progress. This data is transmitted to a Google-based backend system, enabling centralized management and real-time visualization for both operators and customers

Vehicle Departure Detection

Upon repair completion, the camera detects the vehicle's exit from the bay, triggering workflow updates and closing the operational loop

Cloud Synchronization & Evidence Archiving

All video footage and plate recognition data are securely stored for future reference, ensuring standardized documentation of the entire repair process

Localized Optimization

The system was fine-tuned to meet Japan's technical and regulatory standards, including optimized recognition for local plate formats, lighting environments, and network protocols



Results & Benefits



Enhanced Customer Transparency

Car owners can view their vehicle's repair status anytime, improving trust and overall satisfaction



Reliable Evidence Retention

Synchronized video and data storage provide a verifiable audit trail, significantly reducing disputes related to repair quality or delivery conditions



Operational Efficiency

Automated detection of vehicle movements eliminates manual record-keeping, optimizing workflow and turnover in repair bays



Localized Innovation

By adapting AI-powered license plate recognition to the auto repair environment, this project pioneered a new, Japan-specific use case for smart parking technologies

Conclusion

The successful deployment of 5,600 Milesight Parking Management Cameras across Japan's auto repair shops marks a significant step toward transparent, data-driven, and customer-centric automotive service management. By merging AI detection, license plate recognition, and cloud-based integration, Milesight has not only addressed long-standing operational challenges in the automotive service sector but also redefined the application of LPR technology in intelligent parking monitoring and management.

Related Products



Parking Management Camera