INTERAPT

Transforming security through intelligent automation—where innovation meets protection.

AI-Powered Security for Convenience Stores

Comprehensive AI monitoring solutions that protect your assets, ensure compliance, and optimize operations 24/7

Security	Monitoring	Automation

9+	24/7	40%	100%
AI Solutions	Real-Time	Loss Reduction	Coverage

Theft Prevention   Employee Safety   Compliance Monitoring   Threat Detection

The Challenge

Convenience stores face unique security and operational challenges that impact profitability, safety, and compliance. Traditional surveillance systems fall short in addressing modern threats and operational inefficiencies.

Our Solution

Interapt's AI-powered surveillance platform delivers comprehensive security, operational intelligence, and compliance monitoring specifically designed for convenience store environments.

Problems

Annual Shrinkage Losses

Retail theft costs $112.1B annually, with c-stores particularly vulnerable

Safety & Security Risks

Violence, weapons, and suspicious activities require immediate detection

Employee Management

Monitoring productivity, safety compliance, and preventing unauthorized behaviors

Regulatory Compliance

Food safety, hygiene standards, and regulations require constant vigilance

Key Capabilities

AI-Powered Detection: Real-time identification of theft, violence, weapons, and suspicious activities

Operational Intelligence: Employee efficiency monitoring, mobile usage tracking, and productivity analytics

Compliance Automation: Food safety monitoring, hygiene verification, and regulatory adherence

Safety Monitoring: Fall detection, restricted area alerts, and emergency response triggers

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65%	**40%**	**85%**	**30%**
Reduction in Theft	Faster Response	Compliance Increase	Cost Savings

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Theft & Suspicious Activity Detection

AI-driven pose and object detection to identify suspicious behavior before theft occurs. Helps reduce shrinkage by 30-40% in the first month, auto-flagging 200+ alerts monthly and preventing $5K+ in losses. Alerts triggered in under 30 seconds.

Technical Specs
- YOLO + pose estimation models
- Real-time behavioral analysis
- 80% detection accuracy
- Sub-30 second response time

Key Benefits
- 30-40% shrinkage reduction
- 200+ alerts monthly
- $5K+ loss prevention
- Automated evidence capture

Weapon Detection

Advanced object detection instantly identifies firearms and weapons in real-time, triggering immediate alerts to security personnel and law enforcement. Critical for preventing violent incidents and ensuring customer and employee safety with millisecond response times.

Technical Specs
- YOLO-based weapon detection
- Multi-class object recognition
- 90% detection accuracy
- 20ms GPU latency

Response Actions
- Instant alert notification
- Automatic lockdown protocols
- Law enforcement dispatch
- Video evidence recording

Violence Detection

Video Classification model with OSNET backbone and 3D Convolutions detects physical fights or violent actions. If the system detects violent activity for a certain period, it raises an alert so staff can respond quickly. Test accuracy: 75%, GPU latency: 80ms.

Technical Specs
- OSNET + 3D Convolutions
- Videos: 224X224X3, 45 frames
- GPU: 2.5GB, latency: 80ms
- Test accuracy: 75%

Smart Response
- Real-time fight detection
- Immediate staff alerts
- Continuous model training
- Evidence capture & archiving

INTERAPT

Employee Efficiency & Mobile Use Monitoring

Leverage privacy-first person ReID to monitor shifts, task times, and breaks—unlocking insights to boost employee efficiency and productivity. Track mobile device usage during work hours to ensure staff focus and customer service quality.

Mobile Usage Tracking

Olivia is using mobile since 18:57 for 19.55 seconds

Olivia

Mobile Tracking

Key Features
- Privacy-first person ReID
- Shift & task time tracking
- Break duration monitoring
- Mobile device usage detection

Business Impact
- 25% productivity increase
- Improved task completion
- Enhanced customer service
- Data-driven scheduling

Privacy Note: All monitoring uses anonymous ReID technology - no personal data is stored

Time Tracking

Sarah is not wearing gloves since 3:59 for 0.35 seconds

Sarah : No hand gloves

HYGIENE Tracking

Food Safety & Hygiene Monitoring

AI detects safety gear like gloves, hairnets, and helmets in real time, ensuring SOP compliance and hygiene in QSRs and production kitchens. Automated monitoring of food handling procedures to meet health department standards.

Detection Capabilities
- Glove detection & compliance
- Hairnet/headgear verification
- Safety helmet monitoring
- Hand washing compliance

Compliance Benefits
- 100% SOP compliance tracking
- Health department readiness
- Automated violation alerts
- Audit trail documentation

Regulatory Compliance

FDA	OSHA	Local
Standards	Compliant	Health Dept

Fall Detection

YOLO computer vision model recognizes people and estimates their body position. If a person is seen falling and remains on the ground without getting up for a short time, the system triggers an alert so staff can respond quickly. Test accuracy: 80%, GPU latency: 20ms.

Technical Specs
- YOLO model for body position
- GPU: 700MB, latency: 20ms
- Test accuracy: 80%
- Continuous model updates

Response Protocol
1. Instant staff notification
2. Location pinpointing
3. Emergency services alert

Restricted Area Detection

YOLO model identifies people in camera footage. If the foot point of a person intersects with a restricted area polygon (Region of Interest), an alarm is triggered for entering the restricted area. Test accuracy: 85%, GPU consumption: 700MB, GPU latency: 20ms.

Technical Specs
- YOLO person detection
- Customizable ROI polygons
- Test accuracy: 85%
- Periodic training updates

Foot point intersection triggers alarms for restricted area entry.
Future: ROI updates for camera angle changes

Open Door Detection

CV2 – an AI tool that checks if doors are open. If a door in a sensitive or restricted area is left open, the system notifies staff so it can be closed quickly. Test accuracy: 82%.

Model & Logic
- CV2 AI tool
- Monitors sensitive areas
- Immediate notifications
- Test accuracy: 82%

Applications
- Cooler/freezer doors
- Loading dock doors
- Entry/exit monitoring
- Emergency exits

Future: ROI updates for camera angle/door location changes

Unattended Baggage Detection

YOLO AI model identifies people and objects combined with MiDas for distance measurement. The system checks if a bag is left behind without an owner nearby. If the bag remains unattended for a short duration, an alert is sent. Test accuracy: 75%.

Technical Details
- YOLO + MiDas distance
- GPU: 3GB total
- Latency: 100ms combined
- Test accuracy: 75%

Response Actions
- Staff investigation alert
- Owner proximity tracking
- Security notification
- Regular detection updates

Security Priority: Critical for high-traffic & high-value areas