

INTELENSE · KENVISION

Deep Insights Into Your Campus Safety & Security

8 Use Cases — AI-Powered Video Analytics for Educational Institutions

Smarter surveillance. Faster response. Safer campuses.

24/7
Continuous Monitoring

<3 sec
Alert Latency

97%
Detection Accuracy

8
Use Cases

● SECURITY

● SAFETY

● THREAT

● OPERATIONS

● TRANSPORT

● EMERGENCY

USE CASES — ALL 8 MODULES

01 **SECURITY**

■ Intruder & Perimeter Detection
Gates · Corridors · Restricted Areas · After-Hours Zones
 Unauthorized visitors entering school premises represent one of the most serious safety risks in educational institutions. KenVision monitors all entry points, perimeter fences, corridors, and restricted staff zones 24/7, triggering instant alerts the moment an unauthorized individual is detected.

■ HOW IT WORKS

AI cross-references movement against authorized-entry schedules and zone permissions. Unknown faces near restricted areas or gate breaches trigger a <3 second silent alert to the security team's device with camera feed and location.

✓ KEY IMPACT

- ✓ Prevents unauthorized campus access
- ✓ Instant alert to security in <3 sec
- ✓ After-hours zone breach detection
- ✓ Full audit trail of all entry events

02 **SAFETY**

■ Violence & Aggression Detection
Classrooms · Hallways · Cafeterias · Sports Grounds
 Bullying, fights, and aggressive confrontations in schools often escalate rapidly — and by the time staff notice, harm may already have occurred. KenVision's AI detects abnormal body movement patterns, sudden physical contact, and crowd-formation behaviours, enabling intervention before escalation.

■ HOW IT WORKS

Pose estimation and motion anomaly models flag rapid limb movements, falls, crowd-gathering, and posture patterns associated with physical conflict. Staff receive a real-time alert with live video clip and GPS zone location.

✓ KEY IMPACT

- ✓ Early intervention before escalation
- ✓ Covers blind spots staff cannot monitor
- ✓ Timestamped incident evidence
- ✓ Reduces physical harm on campus

03 **THREAT**

■ Weapon & Threat Monitoring
Entry Gates · Hallways · Classrooms · Public Spaces
 KenVision's object detection models scan all camera feeds in real time, detecting visible weapons, smoke, fire, and emergency distress signals, triggering immediate high-priority alerts that reach security, administration, and emergency contacts simultaneously.

■ HOW IT WORKS

Object recognition models trained on weapon profiles detect items in hand or partially concealed. Smoke and fire detectors integrated with camera feeds provide visual confirmation. Priority-level alerts are sent within 3 seconds across all configured devices.

✓ KEY IMPACT

- ✓ Highest-priority threat alert within 3 sec
- ✓ Smoke & fire visual confirmation
- ✓ Multi-recipient simultaneous alerting
- ✓ Supports faster emergency service response

04 **OPERATIONS**

■ Crowd Flow & Zone Analytics
Entire Campus · Hallways · Assembly Areas · Grounds
 During peak transition times, assemblies, or emergency drills, crowd bottlenecks can create hazards and confusion. KenVision maps movement patterns across all monitored zones, identifying high-traffic areas, congestion risks, and underutilised spaces in real time.

■ HOW IT WORKS

Overhead camera feeds generate real-time heatmaps of pedestrian density. Zone-crossing analytics track movement flows between classrooms, corridors, and exits — surfacing bottlenecks and informing timetable or layout decisions.

✓ KEY IMPACT

- ✓ Real-time crowd density heatmaps
- ✓ Bottleneck and congestion alerts
- ✓ Informs timetable and facility planning
- ✓ Emergency evacuation flow monitoring

05
OPERATIONS

■ Queue & Congestion Monitoring

Cafeterias · Entrances · Bus Zones · Washroom Corridors

Long queues at cafeterias, entrances, and bus staging zones are a daily friction point in school operations. KenVision monitors queue lengths and waiting times in real time, alerting operations staff when thresholds are breached so they can open additional counters or redirect traffic.

■ HOW IT WORKS

Queue length is estimated via camera-based headcount in designated wait zones. Alert thresholds are configurable per zone — when exceeded, operations staff receive a nudge with current count and wait-time estimate.

✓ KEY IMPACT

- ✓ Reduced student waiting times
- ✓ Configurable queue length alerts
- ✓ Improves cafeteria service efficiency
- ✓ Reduces crowding-related incidents

06
OPERATIONS

■ Space Utilisation & Classroom Insights

Classrooms · Libraries · Labs · Common Rooms

KenVision uses occupancy analytics and heatmaps to measure actual room usage versus scheduled usage — helping administrators optimise timetables, reduce energy costs in empty spaces, and right-size facility investments with real data.

■ HOW IT WORKS

Occupancy detection counts people in frame per room and logs utilisation across the day. Weekly and monthly reports surface the highest and lowest utilised spaces, enabling data-driven scheduling decisions.

✓ KEY IMPACT

- ✓ Accurate room occupancy tracking
- ✓ Energy savings in unused spaces
- ✓ Data-driven timetable optimisation
- ✓ Informs future infrastructure planning

07
TRANSPORT

■ Parking & Gate Automation

School Gate · Staff Parking · Bus Bay · Parent Drop Zone

School drop-off and pick-up windows are among the highest-risk periods in a school day. KenVision analyses vehicle movement, monitors gate access, and manages traffic flow for school buses, staff, and parent vehicles, reducing congestion and improving pedestrian safety.

■ HOW IT WORKS

Number plate recognition and vehicle classification identify authorised vehicles. Gate entry and exit events are logged automatically. Congestion in drop zones triggers staff alerts to redirect traffic before gridlock forms.

✓ KEY IMPACT

- ✓ Authorised vehicle recognition
- ✓ Automated gate event logging
- ✓ Drop-zone congestion alerts
- ✓ Safer pedestrian-vehicle separation

08
EMERGENCY

■ Emergency Response & Incident Logging

Campus-Wide · All Monitored Zones

KenVision centralises all incident alerts, maintains a timestamped video log of every event, and provides a single dashboard view for security coordinators managing a live emergency — whether a medical incident, fire alarm, intruder alert, or physical altercation.

■ HOW IT WORKS

All threat and anomaly detections feed into a unified incident log with video clip, zone, timestamp, and alert recipient record. During active incidents, the dashboard highlights affected zones in real time and logs every action taken.

✓ KEY IMPACT

- ✓ Centralised incident command dashboard
- ✓ Timestamped video evidence for every alert
- ✓ Multi-zone simultaneous monitoring
- ✓ Supports post-incident review and reporting