



# AI Cloud Surveillance Solution

Intelligent Surveillance at the Edge and Cloud — One Platform



## Smarter Security, Simplified – AI Surveillance, NVR-Free, and One Cloud



- ✓ AI Surveillance: AI at the edge and in the cloud—detect, analyze, and respond faster with intelligent surveillance powered by contextual AI.
- ✓ NVR-free: Cameras with built-in storage offer scalable deployments while ensuring data privacy.
- ✓ One Cloud: Centrally manage all cameras—EnGenius Cloud delivers real-time control, monitoring, and AI insights from a single platform.

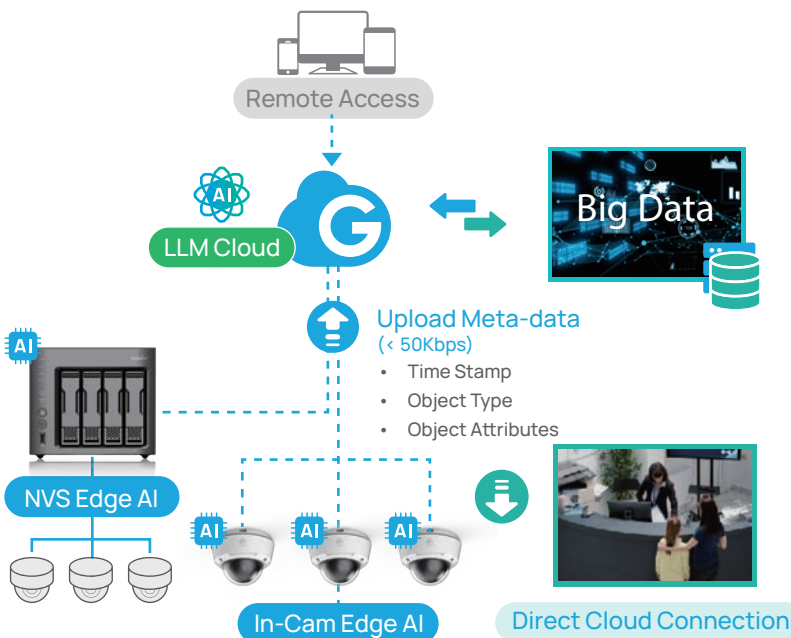
## Advantages of Cloud-based AI Surveillance

### Cloud AI

- Contextual AI behavior understanding (LLM)
- Natural language AI-powered search
- Real-time alerts for advanced scene recognitions

### Scalable AI with Big Data Expansion

The cloud-based AI continuously learns and improves without hardware upgrades, and collects detailed information for enhanced data analysis.



### Cloud AI + Edge AI

#### Intelligent Real-Time Alerts:

AI detects suspicious objects and activities, sending instant notifications for quick incident responses.

#### Flexible Operation and Integration:

LLM cloud is optional. If temporarily disabled, In-Cam Edge AI still works with EnGenius Cloud.

#### Tailored Solutions for Specific Needs:

Customizable templates for scenarios like school safety or construction sites, ensuring the system meets various security needs.

### Edge AI

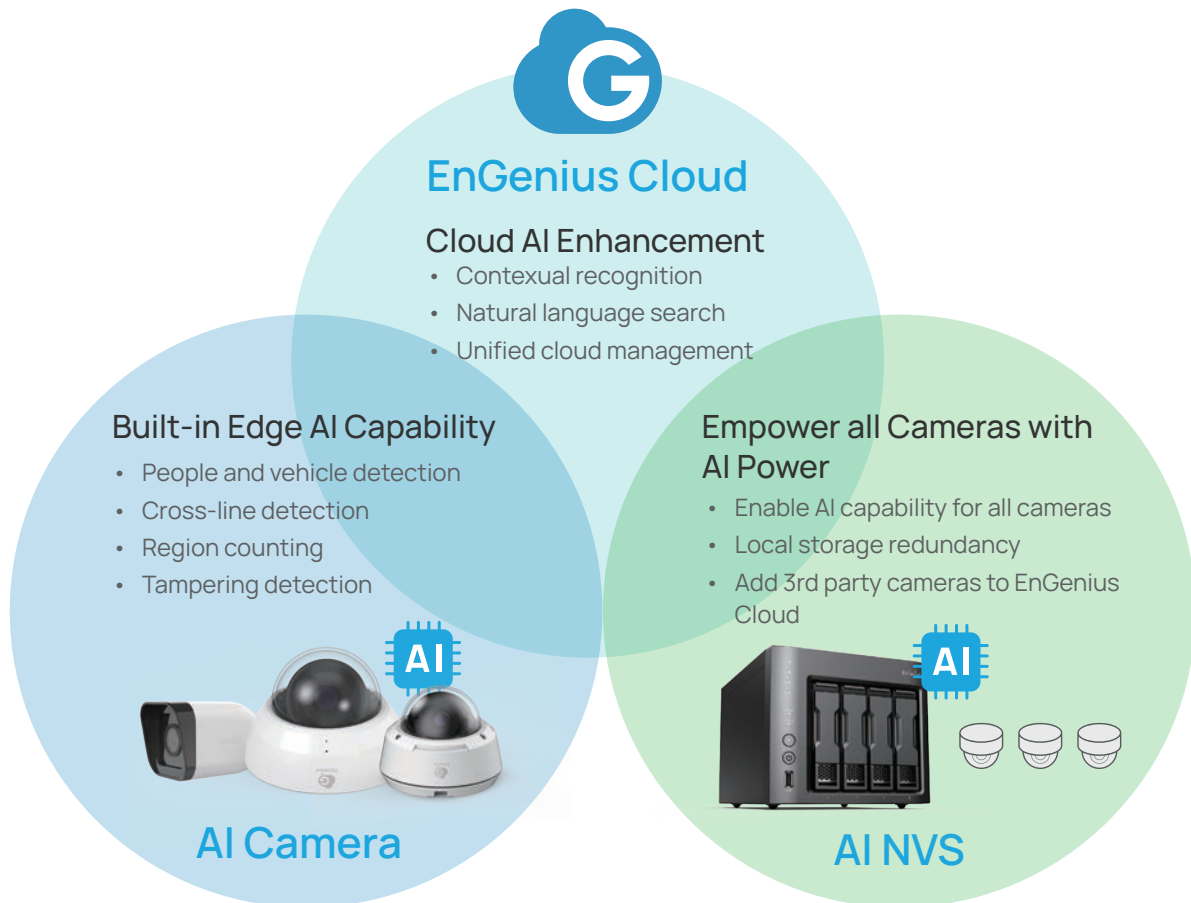
- Motion Detection
- Smart Motion Search
- Instant notifications for object and motion detection

### AI-Camera Edge Computing

Reducing Cloud bandwidth usage while utilizing the power of cloud search with video metadata.

## Seamlessly Connecting Edge, Cloud, and Storage

EnGenius Cloud brings AI to both the edge and the cloud, enabling real-time detection and centralized control. For flexible deployments, AI-NVS extends the surveillance intelligence to third-party cameras and unifies management across all devices. The solution is scalable and bandwidth-friendly, with local video storage that keeps sensitive data safe and private.

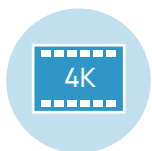


### Redefining Surveillance with Intelligent EnGenius AI Cameras



#### Intelligent Design

- Built-in NPU for edge AI processing
- Built-in storage supporting up to 512GB for local recording
- AES-256 encryption ensures microSD recordings remain protected and unplayable on other platforms (ECC500)



#### Professional-Grade Video

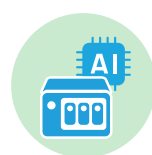
- Up to 8MP (4K) ultra-high resolution
- High sensitivity and low-light performance with Sony STARVIS™ sensor
- Infrared illumination range up to 30 meters



#### Easy Deployment and High Durability

- Easy installation with PoE power support
- Rugged IP66/67 dust- and water-resistant design
- Durable IK10 impact-resistant housing
- NDAA/TAA Compliant

### Enhance Existing Non-EnGenius Cameras with AI-Powered NVS



#### AI Enablement for Any Camera

- Convert ONVIF cameras into AI-enabled devices
- Real-time AI processing with built-in NPU
- Accurate and proactive alert notifications



#### Enterprise-Grade Storage

- Reliable protection with high-availability RAID
- Supports 30+ days of continuous recording
- Reliable 24/7 continuous operation



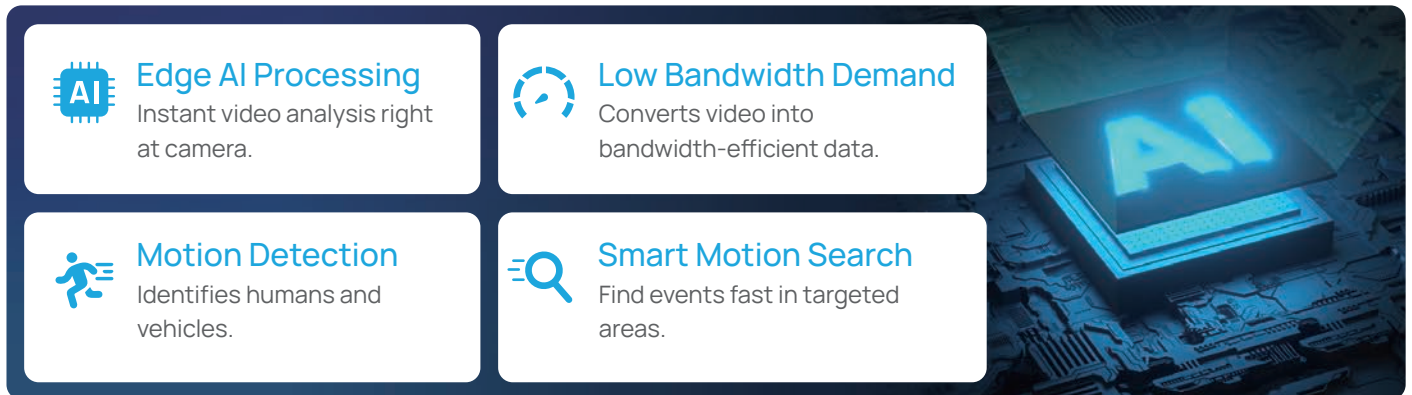
#### Unified Management Platform

- Seamless integration with EnGenius Cloud
- Centralized management for multi-brand cameras
- Complete network integration with EnGenius products

## Edge AI

## The Camera that Thinks

EnGenius Edge AI cameras, equipped with built-in NPUs and NVS-based AI processing compatible with third-party cameras, convert bulky video into streamlined metadata—enabling instant object detection and recognition at the source. No bandwidth strain, just smart security.



### Edge AI Processing

Instant video analysis right at camera.

### Low Bandwidth Demand

Converts video into bandwidth-efficient data.

### Motion Detection

Identifies humans and vehicles.

### Smart Motion Search

Find events fast in targeted areas.

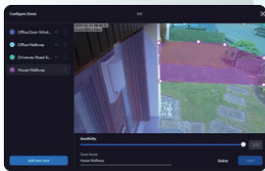
## Cloud AI

## Beyond Detection: Cloud AI Prevents the Unexpected

Our Multimodal LLM-powered AI understands sequences of actions, not just isolated frames. It reads human interactions and complex scenarios in real-time, transforming your cameras into intelligent security analysts. While others merely detect motion and attributes.

## Camera Detection

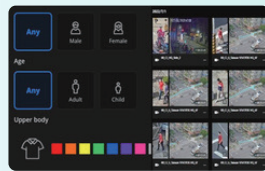
Motion search of pre-defined region



Motion

## Camera Edge AI

Object search with pre-defined attributes



## Object Attributes



People



Gender, Clothing Color, Backpack Type



License Plate Recognition



Facial Recognition

## Object Attributes



Vehicle



Vehicle Type and Color

## Cloud AI &amp; Edge AI

## Context-Aware AI Analysis Across Continuous Video Streams

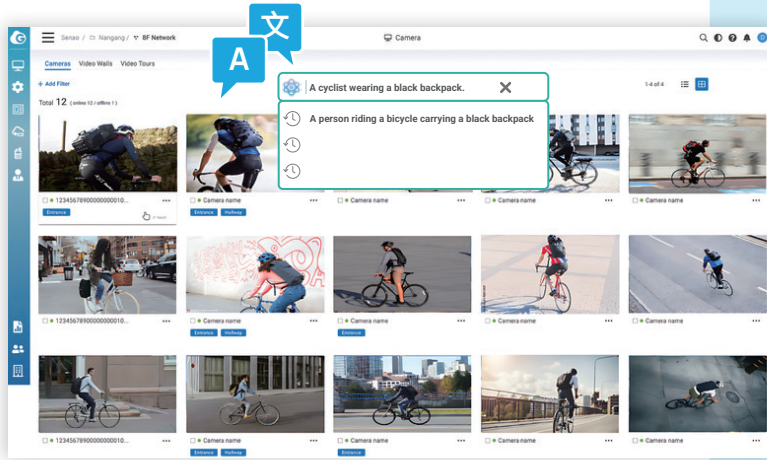
Analyzes ongoing video rather than snapshots to detect developing situations like safety violations and workflow deviations. Delivers preventive alerts before incidents escalate through advanced contextual understanding.



Bully

AI-powered Search

Search Like You Say It



Intuitive Search:

- Use everyday language or multiple languages to find exactly what you need, just like using Google.

Comprehensive Coverage:

- Seamlessly search across your entire camera network and multiple locations.

Rapid Results:

- Locate and share relevant footage in minutes, not hours.

Precision Filtering:

- Refine searches with specific details like appearance, actions, date, and time.

Alert and Notifications

AI-Alerts: Your Real-time Security Guard

Edge AI instantly notifies you of rule-based violations like intrusions or crowd density limits, while cloud AI recognizes complex scenarios such as fights or user-defined specific behavior—delivering smart alerts before situations escalate.

Edge AI Camera Alerts

Rule-based detection monitors intrusions, line crossing, crowd density with counting, object detection, and camera tampering.



Cloud AI Alerts

Instantly alerts you to critical scenarios like fights, bullying, accidents, and weapon detection through AI-powered behavioral analysis.



## Custom SD Alert (Software-Defined Alert)

While predefined AI alerts handle common scenarios like fights and arson, every organization faces unique operational challenges requiring customized detection beyond standard alerts. EnGenius goes beyond conventional predefined alerts by introducing Contextual SD-Alert—empowering you to create intelligent, industry-specific detection tailored to your exact operational needs.

### ✓ Customize Your Own Alerts Using Natural Language

#### SD-Alert

Person making physical contact with child

- No Code / No Retraining
- No Hardware Dependencies
- No Software Installation
- Multi-language supports

### ✓ Smarter alerts built on Contextual Intelligence

Leverages cloud-based LLM agents to trigger alerts based on complete behavioral patterns and sequences, preventing alerts from irrelevant movements or partial activities

### ✓ Teach Your AI What Matters: User-Defined Contextual Intelligence

Train your AI with site-specific knowledge to make smarter decisions. Define what's normal for your environment:

### ✓ Address Specific & Unique Needs across Diverse Industries



### User Entry Scene Description

#### Staff Uniform Features

- The person wearing a blue vest with the supermarket logo is a clerk.

#### Normal Behaviors

- Umbrellas and water bottles should not be classified as weapons.

#### Special Notes

- If over 4 people queue, note number of people.

## How SD-Alert Works

### Define Alert Condition

#### SD-Alert

Someone performs .....

Setting alert condition by **Natural Language**, like:

*"Someone performs dangerous stunts on a bicycle in the park"*

### Analyze with Cloud AI



Cloud AI analyzes & recognizes:

- *High-speed riding*
- *Standing actions*
- *No-hands cycling*
- *Jumping curbs*

### Detect Across Cameras



Cam 1



Cam 2

It can detect events **across different cameras** and send pro-active alerts.

# Face Recognition


## Capture Once Face. Track Everywhere.

Don't let a turned head break your evidence chain. EnGenius AI cameras instantly identifies individuals and tracks across entire camera networks, presented in a seamless chronological timeline, allowing users have a rapid investigation without video fatigue. \*The face recognition is exclusively supported by ECC500 and higher-tier camera models.




**John Collins** VIP

**9:23 AM**  
Entrance



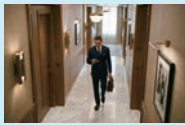
**Camera 01**  
Male, dark hair, navy suit, carrying a suitcase, walking fast.

**11:06 AM**  
Lobby

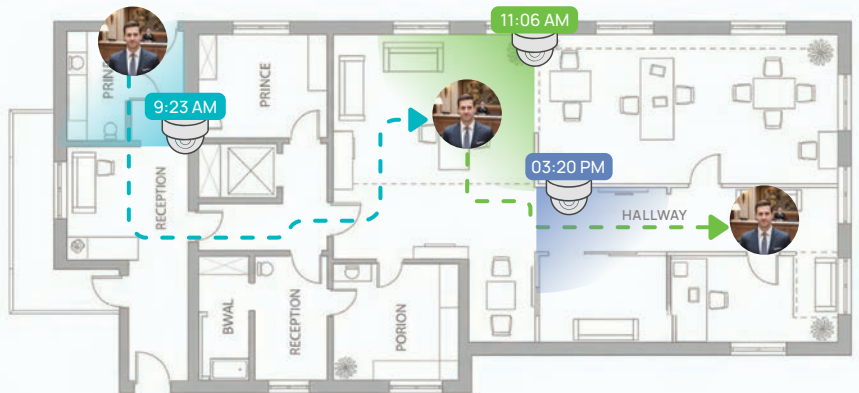


**Camera 02**  
Male, dark hair, navy suit, carrying a suitcase.

**3:20 PM**  
Corridor



**Camera 03**  
Male, dark hair, navy suit, looking at a phone.



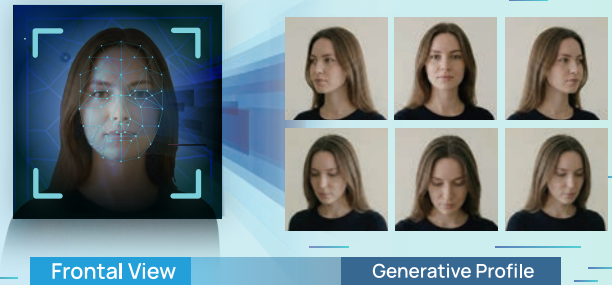
### Multi-Person Simultaneous Face Recognition

Unlike systems that can only detect one person at a time, the AI camera can recognize multiple faces at once—even in busy lobbies or crowded retail spaces.



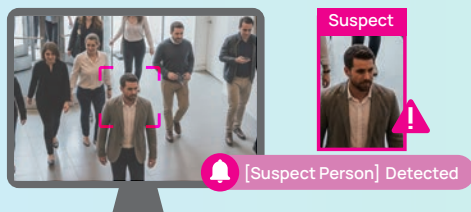
### Generative Facial Recognition

Identify specific individuals with one front photo to track across multiple cameras. Utilizes genAI to intelligently link various face angles to rapidly provide the location of the subject throughout the entire facility.



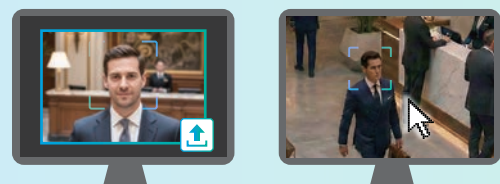
### Real-Time Alerts for Specific Face

Get immediate notifications when persons of interest or tagged individuals are detected through edge AI processing, ensuring instant response times.



### Seamless Face Search

Easily track individuals with just a simple photo upload or from a click in the footage. The system will instantly find the detected person across every camera—making investigations faster and easier.



## AI Surveillance Use Cases and Customization

### Serverless Deployment

Eliminates the need for predefined AI servers, allowing flexible setup for different workplace safety requirements.

### Setup Custom Rules

Create custom safety rules using natural language using commands (NLP prompt).

### Real-time Alert

Get instant notification for critical events and take proactive action before situations escalate.

### Campus Security

#### Smarter Surveillance for Safer Campuses

AI cloud cameras provide instant alerts and live video insights, enabling proactive protection for schools. From detecting intruders and bullying to monitoring restricted areas, the system responds instantly to threats and enables staff to take proactive action before situations escalate. With natural language search, finding footage is simple—streamlining incident response and strengthening overall campus security.



Bullying



Invasion/Burglary



Crowd Panic

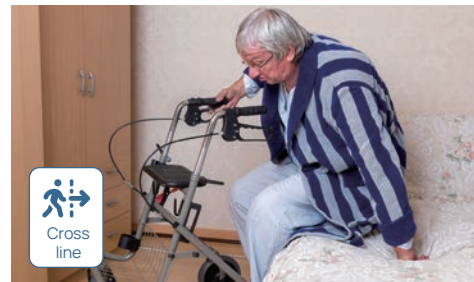
### Care Center

#### AI-Powered Safety for Assisted Living

AI cloud cameras enhance safety and efficiency in nursing centers by detecting falls, monitoring nighttime movement, recognizing aggressive behavior, and managing visitor access. With real-time alerts and natural language video search, caregivers can respond faster, take proactive action before situations escalate, and review incidents more effectively—ensuring better care and peace of mind.



Slip and Fall



Off-bed/ Cross-line

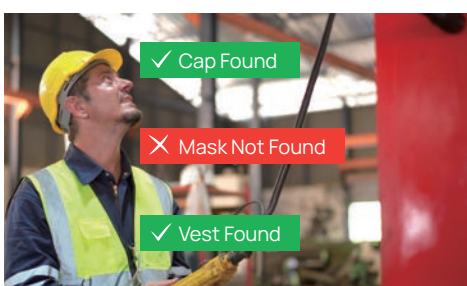


Elderly Abuse

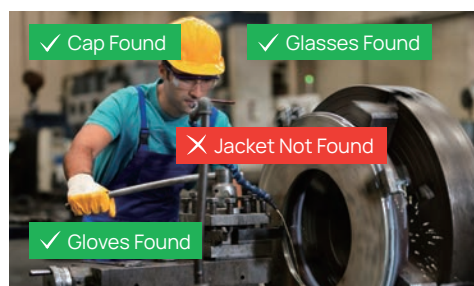
### Factory or Construction Site

#### PPE (Personal Protective Equipment) and SOP Detection

Widely required in agriculture, manufacturing, transportation, construction, and hospital to reduce the number and costs of workplace injuries.



Scene A - Level 3 Safety



Scene B - Level 4 Safety



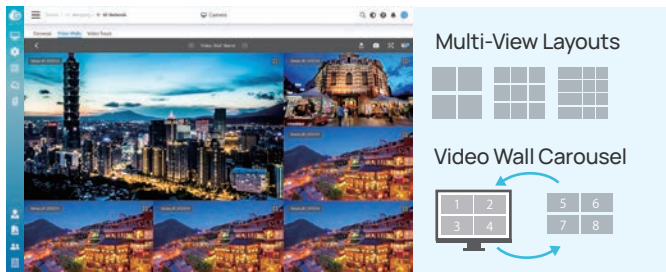
SOP Violation

# Surveillance Management

## Real-Time Monitoring

### Seamless Live Video Surveillance

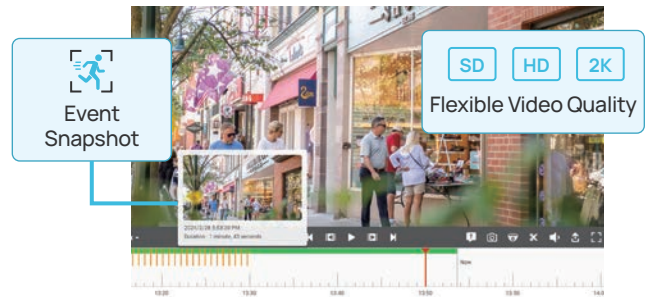
Provide live video monitoring with multi-view layouts, a video wall carousel, and shareable video wall URLs. It ensures seamless access and collaboration while maintaining privacy by not saving footage to the cloud by default.



## Video Playback

### Advanced Video Playback

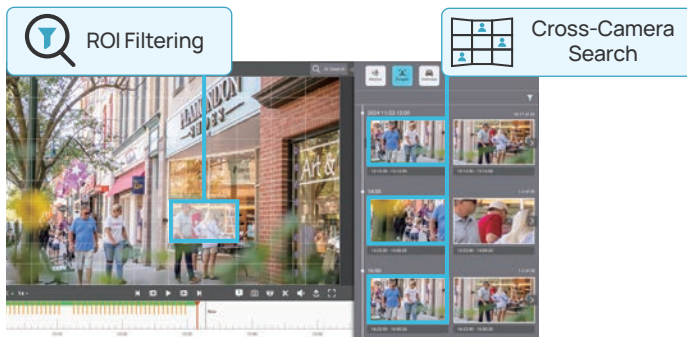
Offer advanced video playback with immediate access through local storage, event snapshots for quick and easy timeline navigation, and flexible video quality settings. Share video URLs or export videos effortlessly when suspicious activity is detected.



## Smart AI Search

### AI-Powered Metadata Search

Leverage AI-powered metadata search to enhance surveillance. With Region of Interest (ROI) filtering and cross-camera search capabilities, users can quickly locate and analyze events across multiple cameras, ensuring comprehensive monitoring and swift response.



## Event Detection & Alerts

### Intelligent Monitoring, Detection and Alerts

Advanced Region/Area and Cross-line Object Detection features crowding detection, restricted area monitoring, accurate counting, and proactive alerts. Efficiently monitor and manage multiple entrances and areas with real-time notifications and customizable settings.



## Floor Plan Mapping

### Efficient Management with Floor Plan Mapping

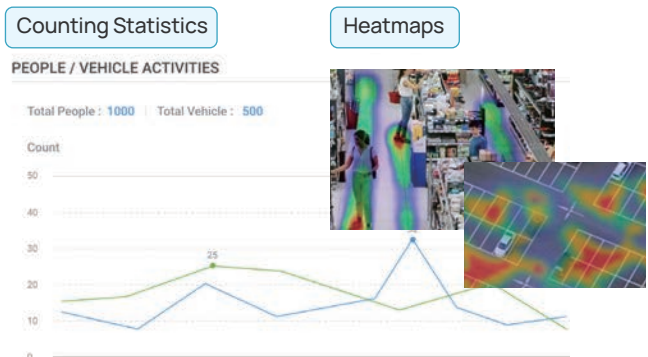
Floor plan mapping lets you see exact camera locations and coverage areas, quickly identify blind spots, and receive real-time alerts. With visual context, you can easily understand where events occur and instantly access live or recorded footage by clicking on camera icons—making surveillance management faster and more efficient.



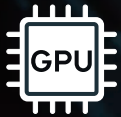
## Video Insights

### Comprehensive AI-Driven Metadata Insights

Use AI-powered metadata to get clear insights into both people and vehicle activity. Easily track counts over time, spot trends, and visualize movement with heatmaps that reveal activity hotspots—helping you strengthen security and improve management.



# Enhance Surveillance with AI-Powered Network Video System



Built-in GPU



RAID1/5/6



AI Capability

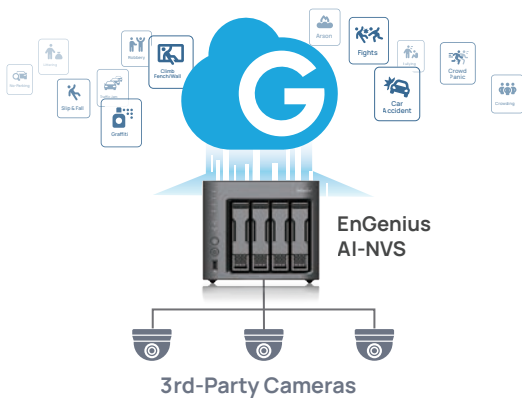


## Effortless AI Upgrade for Non-EnGenius Cameras

The EnGenius AI Cloud NVS integrates seamlessly with ONVIF/RTSP cameras, bringing advanced AI recognition and analytics to your existing infrastructure. This allows businesses to upgrade to intelligent surveillance without a costly, large-scale camera overhaul—drastically reducing deployment expenses while cutting investigation times and preventing evidence loss.

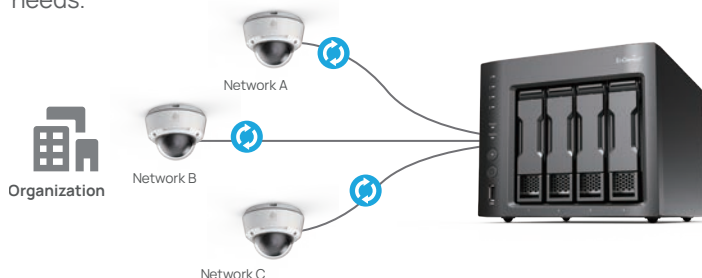
### Transform non-EnGenius Cameras with AI Capabilities

- **Edge AI Capabilities:** Real-time detection and monitoring through GPU-powered local processing, eliminating cloud dependency.
- **Cloud AI Analytics:** Enable intelligent incident detection and business insights through advanced scene understanding and contextual AI analysis.



### Flexible Video Backup

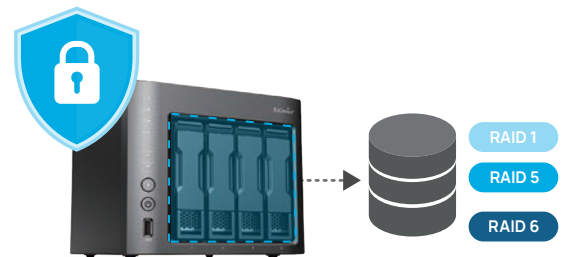
- **Cross-Network Backup:** Secure critical video data via backing up footage across different networks within the same organization to the EnGenius NVS unit.
- **Custom Retention Control:** Customize specific recording retention period or footage size limits to meet legal, regulatory, and business needs.



### Local Storage Redundancy

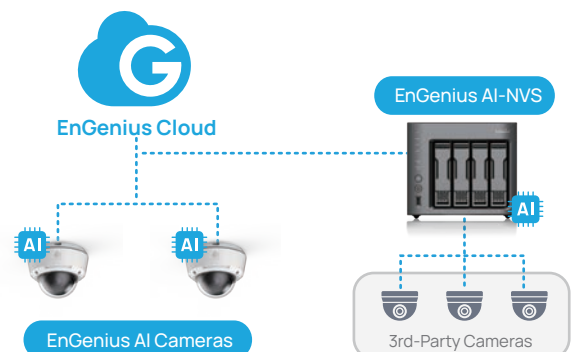
- **Redundant Storage:** NVS backup recording help to secure critical video footage against local storage failures.
- **Robust RAID1/5/6 Storage:** Provides a critical backup layer that complements the in-camera storage against hard drive failures to secure critical video evidence.

\*RAID5/6 are supported by the AI NVS 4-Bay Towers EVS1004D, and higher-tier NVS.



### Unified Security Ecosystem

Bring all your surveillance devices under one centralized platform. With our NVS, legacy and non-EnGenius cameras can be seamlessly connected to the EnGenius Cloud. This unified approach ensures consistent AI performance across your entire network while simplifying system management and maintenance.



# AI-NVS Cloud Management



## Comprehensive Storage Monitoring

At-a-glance visual metrics of storage usage and RAID health to ensure continuous video protection and data integrity.



## Seamless 3rd-Party Cam Integration

Monitor, manage, and access footage from non-EnGenius cameras with the same Cloud platform as other EnGenius network devices.

EnGenius AI-NVS

List

+ Add Filter 1-6 of 6 Move to Remove from Network + Add from Inventory

<input type="checkbox"/>	Name	Serial Number	MAC	Model Name	LAN1 IP	LAN2 IP	FW Version	Network	Uptime	Last Update	...
<input type="checkbox"/>	EVS330D	3029C21R74VH	A0:00:00:62:00:00	EVS330D	211.72.124.13	192.168.0.75	sim_v4.0	8F	27 d 18 h 33 m	4 minutes ago	
<input type="checkbox"/>	EVS330D	3029C21R74VH	A0:00:00:62:00:00	EVS330D	211.72.124.13	192.168.0.75	sim_v4.0	8F	27 d 18 h 33 m	4 minutes ago	
<input type="checkbox"/>	EVS330D	3029C21R74VH	A0:00:00:62:00:00	EVS330D	211.72.124.13	192.168.0.75	sim_v4.0	8F	24 days, 19:27:46	4 minutes ago	
<input type="checkbox"/>	EVS330D	3029C21R74VH	A0:00:00:62:00:00	EVS330D	211.72.124.13	192.168.0.75	sim_v4.0	8F	24 days, 19:27:46	4 minutes ago	
<input type="checkbox"/>	EVS330D	3029C21R74VH	A0:00:00:62:00:00	EVS330D	211.72.124.13	192.168.0.75	sim_v4.0	8F	24 days, 19:27:46	4 minutes ago	
<input type="checkbox"/>	EVS330D	3029C21R74VH	A0:00:00:62:00:00	EVS330D	211.72.124.13	192.168.0.75	sim_v4.0	8F	24 days, 19:27:46	4 minutes ago	

Detail Add Cam Delete Cam Add Backup Delete Backup

TOTAL 20.31 TB USED 19.13 TB FREE 1.18 TB

87.2 %

Virtual Camera: 20 % Video Backup: 30 % Others: 40 % Unused: 10 %

DRIVE STATUS

Warming Normal Error Disconnect Hot Spare Standby

CAMERA STATUS

Normal Incompatible Disconnected Edge AI Enabled

FHD FHD FHD FHD FHD FHD AMP SMP Video Backup Amount: 5MP: 1

HD HD HD HD HD HD HD Added Virtual camera Amount: HD: 6 FHD: 6 4MP: 1

# Unified Camera Management



## Centralize for Multi-Brand Cameras

Manage EnGenius and 3rd party cameras from one interface via RTSP/ONVIF. Seamlessly access video wall, live view, playback, and search across all brands.



## Instant AI Upgrade for Any Camera

Transform 3rd party cameras with EnGenius Cloud AI and Edge AI capabilities - Context-aware recognition, smart motion search, and intelligent alerts.

<input type="checkbox"/>	Name	Serial Number	MAC	Model Name	IP Address	FW Version	Uptime	Last Update
<input type="checkbox"/>	Camera name	SN-123456	96:dc:96:76:fa:9f	ECC100	192.168.1.1	1.3.61	24 d 12 h 41 m	3 minutes ago
<input type="checkbox"/>	TPLxxx	SN-123456	96:dc:96:76:fa:9f	C350	192.168.1.1	1.3.61	24 d 12 h 41 m	3 minutes ago
<input type="checkbox"/>	Dahxxx	SN-123456	96:dc:96:76:fa:9f	HFW2441S	192.168.1.1	1.3.61	24 d 12 h 41 m	3 minutes ago
<input checked="" type="checkbox"/>	Hikxxx	SN-123456	96:dc:96:76:fa:9f	D5-2CD2143	192.168.1.1	1.3.61	24 d 12 h 41 m	3 minutes ago

Video Detail Reboot

04:45 315

Online Busiest time Total Entrances

People / Vehicle Activities

Count 100 50 0


02:00 04:00 06:00 08:00 10:00 12:00 14:00 16:00 18:00 20:00 22:00 24:00

Last Snapshot

Info

Type	ONVIF
Resolution	1920x1080
Retention Days	73 days
Edge AI	ON
Cloud AI	OFF
Camera Storage	-
Audio	Microphone
Time Zone	Asia/Taipei

# Built to Perform: AI Surveillance Cameras

 Ultra Low Light

 HDR

 Ultra-wide FOV


 IK10

 IP67

 In-Camera Storage

 PoE

 Up to 4K

 NDAA Compliance

 TAA Compliance



## Edge AI & In-Cam Storage

### Intelligent Edge Architecture

Built-in storage with up to 512GB\* and NPU enable on-camera AI processing and local recording, eliminating the need for external NVR while ensuring data security.

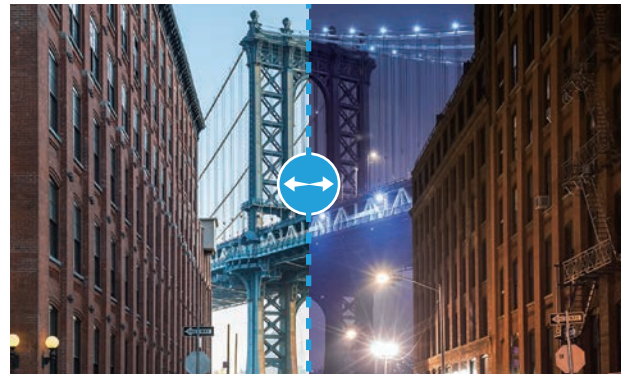
(\* Storage capacity varies by model.)



## Low Light & HDR

### Brilliant Clarity, Day and Night

Experience exceptional clarity with our professional camera lineup: 5MP/ 8MP dome and bullet options, each equipped with Sony Starvis sensors for superior low-light performance and HDR technology for challenging lighting conditions.



## Robust Design

### All-Weather Guardian

Industrial-grade protection with IP66/67 weatherproofing and up to IK10 vandal resistance ensures reliable operation in any environment, indoor or outdoor.



## Ultra-Wide FOV




### See More, Install Less

EnGenius AI cameras feature a broad Field of View (FOV) of up to 132° for comprehensive surveillance:




- Capture more area with fewer cameras
- Reduce overall hardware costs
- Less blind spots




## EnGenius Cloud AI Camera

Cameras			
			
Model Name	Cam5MP Dome IP67 256GB	Cam5MP Dome IP67 64GB	Cam5MP Bullet IP66 256GB
Model Number	ECC100	ECC100Z	ECC120
Sensor	1/2.8 " Sony Starvis 5MP CMOS	1/2.8 " Sony Starvis 5MP CMOS	1/2.8 " Sony Starvis 5MP CMOS
Lens	Fixed 3.16mm	Fixed 3.16mm	Fixed 4mm
View Angle	H: 102°, V: 71.6°, D: 132°	H: 102°, V: 71.6°, D: 132°	H: 78°, V: 56°, D: 103°
Night Vision	Built-in IR LED illumination and IR cut filter	Built-in IR LED illumination and IR cut filter	Built-in IR LED illumination and IR cut filter
IR Distance	>20m / 66ft	>20m / 66ft	30m / 98ft
Lens Adjustment Range	Manual, Pan: 0° ~ 350°, Tilt: 0° ~ 90°, Roll: 0° ~ 350°	Manual, Pan: 0° ~ 350°, Tilt: 0° ~ 90°, Roll: 0° ~ 350°	Manual, Pan: 0°~90°, Tilt: 0°~90°, Roll: 0°~180°
Resolution	5MP 2592 x 1944 (4:3)	5MP 2592 x 1944 (4:3)	5MP 2592 x 1944 (4:3)
Frame Rate	20 FPS	20 FPS	20 FPS
Video Compression	H.265, H.264	H.265, H.264	H.265, H.264
Streaming Bitrate	768Kbps ~ 2.5Mbps (Optional)	768Kbps ~ 2.5Mbps (Optional)	768Kbps, 1.5Mbps, 2Mbps (Optional)
Video Processing	AE, AWB, AGC, BLC, HLC, WDR, HDR, 3DNR, Privacy Mask, OSD, Video Orientation	AE, AWB, AGC, BLC, HLC, WDR, HDR, 3DNR, Privacy Mask, OSD, Video Orientation	AE, AWB, AGC, BLC, HLC, WDR, HDR, 3DNR, Privacy Mask, OSD, Video Orientation
Audio Format	AAC, G.711	AAC, G.711	-
Microphone	Built-in, 5m / 15ft distance	Built-in, 5m / 15ft distance	Not supported
Speaker	Not supported	Not supported	Not supported
AI NPU	Built-in	Built-in	Built-in
People Detection and Tracking	History search, People counting	History search, People counting	History search, People counting
Vehicle Detection and Tracking	History search, Vehicle counting	History search, Vehicle counting	History search, Vehicle counting
Tampering Detection	Event alert	Event alert	Event alert
Restricted Area Detection	Event alert, Object counting	Event alert, Object counting	Event alert, Object counting
Cross Line Detection	Event alert, Object counting	Event alert, Object counting	Event alert, Object counting
Facial Recognition	-	-	-
EnGenius Cloud AI	Support	Support	Support
Storage Size	256GB on board	64GB on board	256GB on board
Retention Method	24/7 seamless, Auto Recycling	24/7 seamless, Auto Recycling	24/7 seamless, Auto Recycling
Retention Days	Based on video quality and bitrate: 18 days (768kbps), 14 days (1.5Mbps), 7 days (2Mbps)	Based on video quality and bitrate: 5 days (768kbps), 3 days (1.5Mbps), 2 days (2Mbps)	Based on video quality and bitrate: 18 days (Good 768kbps), 14 days (1.5Mbps), 7 days (2Mbps)
Recording Encryption	-	-	-
Storage Redundancy	Support EnGenius NVS and Cloud storage	Support EnGenius NVS and Cloud storage	Support EnGenius NVS and Cloud storage
LED Indicator	System power and status indicator	System power and status indicator	System power and status indicator
RTSP	Supported	Supported	Supported
Reset Button	Internal	Internal	External line
Networking Interface	10/100 MbE RJ45 port	10/100 MbE RJ45 port	10/100 MbE RJ45 port
Power Method	PoE 802.3af Class 3	PoE 802.3af Class 3	PoE 802.3af Class 3
Max. Power Consumption	6.5W	6.5W	7.5W
Operating Temperature	-20°C ~ 50°C / -4°F ~ 122°F	-20°C ~ 50°C / -4°F ~ 122°F	-20°C ~ 50°C / -4°F ~ 122°F
Humidity	98%	98%	98%
Certifications	CE, FCC	CE, FCC	CE, FCC
Enclosure material	Aluminum alloy, Polycarbonate	Aluminum alloy, Polycarbonate	Polycarbonate
Weatherproofing	IP67	IP67	IP66
Resistance	IK10	IK10	-
Dimensions	Ø121.7 x 94.8 mm (Ø4.79 x 3.73")	Ø121.7 x 94.8 mm (Ø4.79 x 3.73")	Ø76x 200 mm (Ø2.99 x 7.88")
Weight	525g / 18.5oz	525g / 18.5oz	330g / 11.64oz
Web Browser	Chrome, Safari, Edge	Chrome, Safari, Edge	Chrome, Safari, Edge
Mobile App	Cloud To-Go on iOS and Android	Cloud To-Go on iOS and Android	Cloud To-Go on iOS and Android

## EnGenius Cloud AI Camera

Cameras			
			
Model Name	Cam5MP Bullet IP66 64GB	Cam8MP Dome IP67 512GB	Cam8MP Dome IP67 NS
Model Number	ECC120Z	ECC500	ECC500Z
Sensor	1/2.8" Sony Starvis 5MP CMOS	1/2.8" Sony Starvis 8MP CMOS	1/2.8" Sony Starvis 8MP CMOS
Lens	Fixed 4mm	Varifocal 3.2 ~ 10.5mm motorized zoom, Remote zoom, AF	Varifocal 3.2 ~ 10.5mm motorized zoom, Remote zoom, AF
View Angle	H: 78°, V: 56°, D: 103°	H: 108.1° ~ 30.3°, V: 56.3° ~ 17.1°, D: 130.9° ~ 34.8°	H: 108.1° ~ 30.3°, V: 56.3° ~ 17.1°, D: 130.9° ~ 34.8°
Night Vision	Built-in IR LED illumination and IR cut filter	Built-in IR LED illumination and IR cut filter	Built-in IR LED illumination and IR cut filter
IR Distance	30m / 98ft	30m / 98ft	30m / 98ft
Lens Adjustment Range	Manual, Pan: 0°~90°, Tilt: 0°~90°, Roll: 0°~180°	Manual, Pan: 0° ~ 350°, Tilt: 0° ~ 60°, Roll: 0° ~ 350°	Manual, Pan: 0° ~ 350°, Tilt: 0° ~ 60°, Roll: 0° ~ 350°
Resolution	5MP 2592 x 1944 (4:3)	8MP 3840x2160 (16:9)	8MP 3840x2160 (16:9)
Frame Rate	20 FPS	20 FPS	20 FPS
Video Compression	H.265, H.264	H.265, H.264, Smart Stream	H.265, H.264, Smart Stream
Streaming Bitrate	768Kbps ~ 2.5Mbps (Optional)	600Kbps ~ 6Mbps (Optional, Adaptive)	600Kbps ~ 6Mbps (Optional, Adaptive)
Video Processing	AE, AWB, AGC, BLC, HLC, WDR, HDR, 3DNR, Privacy Mask, OSD, Video Orientation	AE, AWB, AGC, BLC, LDC, WDR, HDR(120dB), 3DNR, Privacy Mask, OSD, Video Orientation	AE, AWB, AGC, BLC, LDC, WDR, HDR(120dB), 3DNR, Privacy Mask, OSD, Video Orientation
Audio Format	-	AAC, G.711	AAC, G.711
Microphone	Not supported	Built-in, 5m / 15ft distance	Built-in, 5m / 15ft distance
Speaker	Not supported	Not supported	Not supported
AI NPU	Built-in	Built-in	Built-in
People Detection and Tracking	History search, People counting	History search, People counting	History search, People counting
Vehicle Detection and Tracking	History search, Vehicle counting	History search, Vehicle counting	History search, Vehicle counting
Tampering Detection	Event alert	Event alert	Event alert
Restricted Area Detection	Event alert, Object counting	Event alert, Object counting	Event alert, Object counting
Cross Line Detection	Event alert, Object counting	Event alert, Object counting	Event alert, Object counting
Facial Recognition	-	History search, Search by Photo, Target alert, Tracking Timeline	History search, Search by Photo, Target alert, Tracking Timeline
EnGenius Cloud AI	Support	Support	Support
Storage Size	64GB on board	512GB on board	-
Retention Method	24/7 seamless, Auto Recycling	24/7 seamless, Auto Recycling	24/7 seamless, Auto Recycling for external storage
Retention Days	Based on video quality and bitrate: 5 days (768Kbps), 5 days (1.5Mbps), 2 days (2Mbps)	30 days	-
Recording Encryption	-	AES256	AES256
Storage Redundancy	Support EnGenius NVS and Cloud storage	Support EnGenius NVS and Cloud storage	Support EnGenius NVS and Cloud storage
LED Indicator	System power and status indicator	System power and status indicator	System power and status indicator
RTSP	Supported	Supported	Supported
Reset Button	External line	Internal	Internal
Networking Interface	10/100 Mbe RJ45 port	10/100/1000 Mbe RJ45 port	10/100/1000 Mbe RJ45 port
Power Method	PoE 802.3af Class 3	802.3at PoE+	802.3at PoE+
Max. Power Consumption	7.5W	16.1W	16.1W
Operating Temperature	-20°C ~ 50°C / -4°F ~ 122°F	-40°C ~ 60°C / -40°F ~ 140°F	-40°C ~ 60°C / -40°F ~ 140°F
Humidity	98%	5 ~ 90%	5 ~ 90%
Certifications	CE, FCC	CE, FCC	CE, FCC
Enclosure material	Polycarbonate	Aluminum alloy, Polycarbonate	Aluminum alloy, Polycarbonate
Weatherproofing	IP66	IP67	IP67
Resistance	-	IK10	IK10
Dimensions	Ø76x 200 mm (Ø2.99 x 7.88")	Ø145 x 105 mm (Ø5.71x 4.14")	Ø145 x 105 mm (Ø5.71x 4.14")
Weight	330g / 11.64oz	740g / 26.11oz	740g / 26.11oz
Web Browser	Chrome, Safari, Edge	Chrome, Safari, Edge	Chrome, Safari, Edge
Mobile App	Cloud To-Go on iOS and Android	Cloud To-Go on iOS and Android	Cloud To-Go on iOS and Android

## EnGenius Cloud AI NVS

NVS	
	
<b>Model Name</b>	<b>AI NVS 4Bay Tower</b>
<b>Model Number</b>	<b>EVS1004D</b>
Max Camera Connection	16 cameras
Camera Resolution	FHD, 4MP, 5MP, 4K
Camera Interface	ONVIF Profile S, RTSP, EnGenius
RAID	RAID 1/5/6
Storage Retention	24/7 seamless recording and retention
Max AI Empower	2 cameras
Processor	Intel Elkhart Lake x6211E
Memory	8GB
Flash	16GB
Security	TPM v2.0
Drive Interface	SATA 3.0 x 4
Networking Interface	10GbE RJ45 x 1, 1GbE RJ-45 x 1
Display	HDMI 1.4b x 1
USB Port	3.0 Type A x 4, 2.0 Type A x 1
FAN Speed Control	Yes
Thermal Sensor	System x 1, CPU x 1
Buzzer	Yes
Button	Power, Function
LED Indicator	Power x 1, Function x 1, HDD x 4
Power Supply	DC12V@7.5A
Max. Power Consumption	140W
Ambient Operating Temperature	0~50°C (32~122°F)
Ambient Operating Humidity	10~85% RH
People Detection and Tracking	<ul style="list-style-type: none"> <li>• Event detection</li> <li>• Smart Motion Search</li> <li>• People Counting</li> </ul>
Vehicle Detection and Tracking	<ul style="list-style-type: none"> <li>• Event detection</li> <li>• Smart Motion Search</li> <li>• Vehicle Counting</li> </ul>
EnGenius Cloud AI	<ul style="list-style-type: none"> <li>• Natural Language Search</li> <li>• Contextual AI Analysis</li> <li>• SD-Alert</li> </ul>
Kensington Slot	Yes
Enclosure Material	Aluminium alloy, Polycarbonate
Dimensions (L x W x H)	179.6 x 227.5 x 157.0 mm
Weight	2.647Kg
Web Browser	Chrome, Safari, Edge
Mobile App	Cloud To-Go on iOS and Android

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