GXi Imbedded Intelligence.

An added suite of Video Content Analysis options for the Ganz PixelPro & Ganz Thermal G2 Series.

More than 16 Intelligent Features Including:

> Dwell Detection
> Directional Detection
> Removed Object Detection
> Tailgating Detection
> Object Classification
> Object Counting
> Color Filter
> Logic Rules

GANZ
Security Solutions

by

Security Driven by **Intelligence**.

GXi Technology adds a suite of Imbedded Intelligence options to both the Ganz PixelPro and Thermal G2 camera series. The Imbedded Intelligence Technology maximizes your surveillance capability with a powerful set of built-in real-time video analysis tools, WDR with tone mapping and edge recording to SD card.

GXi's Imbedded Intelligence provides analysis of video utilizing advanced image-processing algorithms for a proactive approach to security management. The result is actionable intelligence in real-time, tailored to your specific security requirements.

Retail Management Intelligence and Security

Transportation and Traffic Surveillance, Management and Security

Education

Financial

Government Infrastructure/ Industrial

GXi Imbedded Intelligence Features and Benefits:

> Intuitive web browser interface

> Real-time on-screen annotation of the object tracking and segmentation bitmap (blobs) gives information about the operation of the Imbedded Intelligence.

> High quality tracking engine

> Instant alarm notifications

> Intelligent event search with video

> Flexible licenses with add on functions

> Unique, easy to use, patented 3D calibration

> Real-time display of object classification, speed, area and height

> Speed filter with upper and lower speed thresholds

> Filters for object class (people, group of people, vehicle, clutter, etc.)

> Selection of object classification defined by user

> Full forensic metadata stream in XML format

GXi
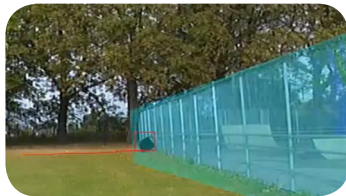TECHNOLOGY

Imbedded Intelligence Content Analytics

Intrusion Detection
For perimeter security and crime prevention cameras can be used as intrusion detection sensor. An alarm is generated when a pre-determined object (person or vehicle) crosses into the detection zone. Equally, an alarm is generated when an object crosses from the inside to the outside of a detection zone.
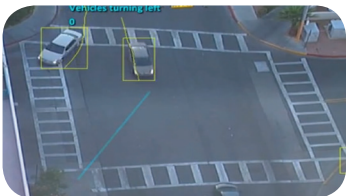
People and Vehicle Counting
This feature counts the people and vehicles that pass through the setup "lines" with precision. It recognizes directions, so it can differentiate whether they are entering or exiting. It can also measure the speed of the objects. This feature is ideal for retail: counting customers, identifying trends and alerting staff when a group gathers in a defined location..

Stopping and Dwell Detection
Objects that are stopped inside a zone, or remain inside a zone for longer than the defined amount of time will trigger an alarm. Ideal for identifying a loitering person.

Directional Detection
Objects that travel in the configured direction (within the limits of the acceptance angle) through a zone or over a line trigger an alarm. This can be used for traffic control and entry/exit monitoring.

Tailgating Detection
Object tailgating is defined as two objects crossing a virtual line or zone within in a pre-defined time frame. This is suitable for vehicles or with people in an access control setting.

These examples represent only a few of the ways GXi's Imbedded Intelligence enables you to capture the real-time data needed for mutiple security applications.

GXi License List

| Camera & Encoder Functions | Pre-Installed Licenses | | | Advanced Functions* | | | | | | | | | | | |
| | | | | Surveillance* | | | | | | | | | Counting* | | Tracking* |
	Number of Detection Zones	Tamper Detect	Presence (Intelligent Motion Sensor)	Enter/Exit	Appear/Disappear	Stopped	Dwell	Direction Filter	Speed Filter	Tailgating	Abandoned and Removed	Color Filter	On-screen Counting	Counting Line	PTZ Autotracking
1080p Cameras ZN-xxXE Series / ZN1-xx	40	●	●	●	●	●	●	●	●	●	—	●	●	●	●**
Thermal Cameras ZNT1-H Series	40	●	●	●	●	●	●	●	●	●	—	—	●	●	—-
Video Encoder ZS1 Series	Optional	Optional	Optional	●	●	●	●	●	●	●	—	●	●	●	—

Requires license to activate functions (see table below)
**Pre-installed in PTZ camera*

| GXi Imbedded Intelligence Features | Free Licenses | | | Advanced Functions | | | | | | | | | | | | |
| | | | | Surveillance | | | | | | | | | Counting | | Tracking | Rules |
	Number of Detection Zones	Tamper Detect	Presence (Intelligent Motion Sensor)	Enter/Exit	Appear/Disappear	Stopped	Dwell	Direction Filter	Speed Filter	Tailgating	Abandoned and Removed	Color Filter	On-screen Counting	Counting Line	PTZ Autotracking	Logic Rules
ZNS-PRES-1	40	●	●	—	—	—	—	—	—	—	—	—	—	—	—	—
ZNS-COUNT-1	40	●	—	—	—	—	—	—	—	—	—	—	●	●	—	—
ZNS-ACCESS-1	40	●	●	—	—	—	—	—	—	●	—	—	●	●	—	—
ZNS-DETECT-1	40	●	●	—	—	—	●	●	●	—	—	—	—	—	—	—
ZNS-FOLLOW-1	40	●	—	—	—	—	—	—	—	—	—	—	—	—	●	—
ZNS-SURV-1	40	●	●	●	●	●	●	●	●	●	—	—	●	—	—	—
ZNS-PRO-1	40	●	●	●	●	●	●	●	●	●	—	●*	●	●	—	—
ZNS-ADVANCED-1	40	●	●	●	●	●	●	●	●	●	—	—	●	●	—	●
ZNS-TRACK-1	40	●	●	●	●	●	●	●	●	●	—	—	●	—	●	—

ZN-STB-1 - Embedded Video Stabilization

* Not supported on ZNT1-H Series Thermal Cameras

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