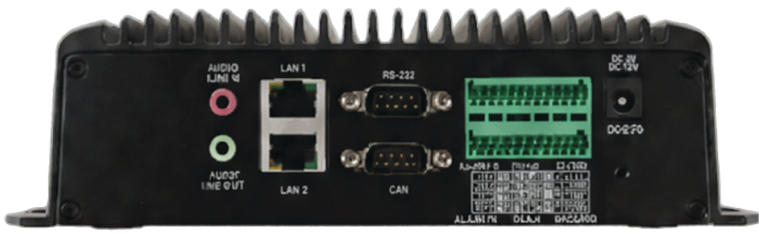
AI BOX GEN3

ZN-AIBOXxx-ULT
8-16 Channel AI Analytic Appliance



On-Device Edge VLM
A vision-language model runs entirely on the appliance, analyzing and interpreting video scenes on-device — with no cloud dependency and full data sovereignty.

60+ On-Prem AI Apps
Advanced analytics at the edge, no cloud dependency.

Multi-AI Algorithms
Multiple algorithms on a single channel at once.

Human Behavior Analysis
Behavioral and attribute detection in real time.

Up to 16 Native Channels
16-channel native AI processing.

Fanless Wide-Temp
Rugged fanless chassis, no moving parts.

Protocols & VMS
Broad protocol and VMS interoperability.

P2P Mobile Alarm
Push alarms to mobile, no port forwarding. (optional)

Cloud Dashboard
Centralized fleet monitoring. (optional)

NDAA Compliant
Industrial-certified, secure build.

AI APPLICATIONS
Pre-Installed and Licensable AI Applications

Our suite of AI applications covers a range of areas, including safety, security, retail, and traffic analytics, organized into three distinct tiers.

Applications marked with ✦ feature Gen3 performance enhancements.

BASIC PACKAGE

Dynamic Privacy Masking, Dynamic Face Masking, LP Masking, Basic Attribute, Queue Management, Heatmap, Intrusion Detection, Loitering Detection, People Counting, Vehicle Counting, Zone Counting, Multi-Zone Counting, Virtual Fence, Stopping Detection, Stay & Go: Enter / Exit Detection, Speed Anomaly Detection, Occupancy Car Counting, Occupancy Counting

ADVANCED PACKAGE

Crowd Detection, Advanced Visitor Analysis, Hand & Foot Intrusion, Intentional Body Gaze Detector, ✦ Imminent Threat, ✦ Fallen Person Detection, Animal Detection,

✦ Fire & Smoke Detection, Vehicle Type Counting, Vehicle Type Detection, Thermal Intrusion Detection, Fisheye Video, Advanced Attribute

EXTRA LICENSES

LPR - US / Europe / JP / KR, Advanced Heatmap, ✦ No PPE, Aggressive Detection, PTZ Tracking, Human Prolonged Stay, Bullying Detection, Forklift No Helmet, Forklift Detection, Forklift Non-Driver Detection, Staff Exclusion People Counting, Covered Face Detection, Reverse Movement Detection, Vehicle Zone Presence, Road Pedestrian Detection, Covered Face Detection, Vehicle Queue Management, Object Location Trailing, Dust-Proof Clothing Detection, Tailgating, Age Filter, Phone-Walking Detection, Unsafe Lifting, Spill Detection, Out of Uniform, CloseCam Covered Face, Bear Detection, Gun Detection

16-CHANNEL EXTENSION MODE

Intrusion Detection, Loitering Detection, People Counting, Vehicle Counting, Zone Counting, Multi-Zone Counting, Virtual Fence, Stopping Detection, Stay & Go, Enter / Exit Detection, Occupancy Counting, Speed Anomaly Detection

GANZ

AI BOX GEN3

ZN-AIBOXxx-ULT
8-16 Channel AI Analytic Appliance

		ZN-AIBOX08-ULT	ZN-AIBOX16-ULT
VIDEO	Max. Video Input	4K @ 60 fps (2M @ 240 fps)	4K @ 120 fps (2M @ 480 fps)
	Input Method	RTSP, RTSP over HTTP/S, Onvif	
	Input Format	H.265 / H.264	
	Output Stream	RTSP over TCP / UDP, Websocket, HTTP/S	
AUDIO	Audio Input / Output	1 × Line-In (3.5 mm jack) / 1 × Line-Out (3.5 mm jack)	
EVENT ACTION	System Events	Tamper, Alarm-In, Virtual Alarm-In, Video Loss / Recovery, Disarm, Recurrence, Login, System Start	
	Action Handlers	HTTP, TCP, FTP, E-mail, S3, VMS, Onvif, Audio Back-Channel	
	Combine Rules	Yes — combine with other events	
	Pre / Post Snapshot	Yes	
	Annotated Stream	Yes	
ALARM I/O	Alarm Input	4CH DI (0–30V input)	
	Relay Output	4CH (≤3A, 30VDC / 250VAC) NO/COM/NC	
STORAGE	Internal SD	1 × internal SD card slot	1 × internal SD card slot
	NVMe SSD	Not supported on the current 8-channel model	2 × M.2 M-Key (2280) NVMe SSD (option
INTERFACE	Storage	1 × USB 3.0	
	RS-485 /	1 × RS-485 (Full-duplex, 4-line T/B) / 1 × RS-232 (D-SUB9)	
	Wiegand	1ch input / 1ch output	
	LAN	2 × 10/100/1000 BASE-T	
	mini PCIe	1 × Mini-PCIe	
	SIM	1 × micro SIM slot (option)	
	Antenna	Not supported	
POWER	Power Supply	12V / 3.3A · DC +9V ~ +36V	
	Consumption	Max. 23 W	TBD
	ETC	Watchdog · RTC · Fanless · Reset · 4 × tri-color LED	
ENVIRON	Operating Temp	−40°F ~ 158°F / 10–90% NC	TBD
CHASSIS	Dimensions	8.4" W × 6.9" D × 2.4" H (213.6 × 175.8 × 60 mm)	
	Weight / Mount	3.5 / 5.1 lb (1.75 / 2.5 kg)· Desk, Wall (VESA 200×100)	
	Certifications	CE · FCC · KC	

DIMENSIONS

WIDTH
8.4" / 213.6 mm

DEPTH
7" / 175.8 mm

HEIGHT
2.4" / 60.0 mm

