



# AI and Video Analytics



## FEATURES

- Capable of over 50+ intuitive AI apps (on-premise)
- Multi AI Algorithms running on single channel
- Advanced human behavior analysis
- Supports up to 16 camera channels
- Wide temperature range: without fan: -22°F ~ 158°F
- Supports various protocols and VMS
- P2P-based mobile alarm viewer
- LTE & GPS support (option)
- Internal recording with M.2 NVME SSD (optional)
- Cloud-based dashboard (optional)
- Optional Model: ZN-AIBOX-PRO-LTE (LTE support)
- Hybrid AI boost mode support
- NDAA Compliant

## AI BOX PRO



### AI-Based

Intuitive AI video analytics



### False Alarm Reduction

Multi-level AI-based



### Multiple AI Apps

Running simultaneously on each channel



### Accurate Event Detection

Using scene interpretation



Model		8-channel Basic AI application package	16-channel (Extension) mode *Basic AI application package	8-channel *Advanced includes Basic Package
Pre-installed Packages		<ul style="list-style-type: none"> <li>Dynamic Privacy Mask</li> <li>Dynamic Face Masking</li> <li>LP Masking</li> <li>Basic Attributes (Color of Clothes)</li> <li>Queue Management</li> <li>Basic Heatmap</li> <li>Intrusion Detection</li> <li>Loitering Detection</li> <li>People Counting</li> <li>Vehicle Counting</li> <li>Zone Counting</li> <li>Multi Zone Counting</li> <li>Virtual Fence-Stopping</li> <li>Stay &amp; Go</li> <li>Enter/Exit Detection</li> <li>Speed Anomaly Detection</li> <li>Occupancy Counting</li> <li>Occupancy Car Counting</li> </ul>	<ul style="list-style-type: none"> <li>Intrusion Detection</li> <li>Loitering Detection</li> <li>People Counting</li> <li>Vehicle Counting</li> <li>Zone Counting</li> <li>Multi Zone Counting</li> <li>Virtual Fence</li> <li>Stopping Detection</li> <li>Stay &amp; Go</li> <li>Enter/Exit Detection</li> <li>Occupancy Counting</li> <li>Occupancy Car Counting</li> <li>Thermal Intrusion Detection (in the case of installing thermal license)</li> </ul>	<ul style="list-style-type: none"> <li>e-Crowd Detection</li> <li>Advanced Visitor Analysis</li> <li>Hand &amp; Foot Intrusion</li> <li>Intentional Body Gaze Detector</li> <li>Imminent Threat</li> <li>Fallen Person Detection</li> <li>Animal Detection</li> <li>Fire &amp; Smoke Detection</li> <li>Vehicle Type Counting</li> <li>Vehicle Type Detection</li> <li>Thermal Intrusion Detection</li> <li>Fish-eye Camera support</li> <li>Advanced Attribute</li> </ul>
	AI Applications	<ul style="list-style-type: none"> <li>LPR-US, LPR-Europe, LPR-JP, LPR-KR</li> <li>Advanced Heatmap</li> <li>No PPE</li> <li>Illegal Dumping</li> <li>Aggressive Detection</li> <li>PTZ Tracking</li> <li>Human Prolonged Stay</li> <li>Staff Exclusion People Counting</li> <li>Forklift No Helmet</li> <li>Forklift Detection</li> <li>Forklift Non-Driver Detection</li> <li>Reverse Movement Detection</li> <li>Vehicle Zone Presence</li> <li>Road Pedestrian Detection</li> <li>Work Vehicle Hazard Detection</li> <li>Bullying Detection</li> <li>Vehicle Queue Management</li> <li>Hybrid AI Boost apps</li> </ul>	n/a	<ul style="list-style-type: none"> <li>LPR-US, LPR-Europe, LPR-JP, LPR-KR</li> <li>Advanced Heatmap</li> <li>No PPE</li> <li>Illegal Dumping</li> <li>Aggressive Detection</li> <li>PTZ Tracking</li> <li>Human Prolonged Stay</li> <li>Staff Exclusion People Counting</li> <li>Forklift No Helmet</li> <li>Forklift Detection</li> <li>Forklift Non-Driver Detection</li> <li>Reverse Movement Detection</li> <li>Vehicle Zone Presence</li> <li>Road Pedestrian Detection</li> <li>Work Vehicle Hazard Detection</li> <li>Bullying Detection</li> <li>Vehicle Queue Management</li> <li>Hybrid AI Boost apps</li> </ul>
Event Action	System Events	Tamper Detection, 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 (Camera speaker)		
	Combining Rules w/ Other Events	Yes		
	Pre/Post snapshot	Yes		
	Annotated Video Stream	Yes		
Video	Max. Video Input Resolution	4K @ 60 fps (2M @ 240 fps)	2M @ 240 fps	4K @ 60 fps (2M @ 240 fps)
	Video Input Method	RTSP, RTSP over HTTP/S, Onvif		
	Supported Input Video Format	H.265 / H.264		
	Video Output Stream Method	RTSP over TCP/UDP, RTSP over Websocket, RTSP over HTTP/S		
Audio	Audio Input	1 x Audio Line-In (3.5mm audio phone jack)		
	Audio Output	1 x Audio Line-Out (3.5mm audio phone jack)		

Interface	USB	1 x USB3.0
	RS-485	1 x RS-485 (Full-duplex 4line T/B)
	RS-232	1 x RS-232 (D-SUB9)
	Wiegand	1ch input / 1ch output
	LAN	2 x 10/100/1000 BASE-T Ethernet (ETH1/ETH2)
	Mini PCIe Slot (LTE, GPS Module)	1x Mini-PCIe (for LTE-cat4 / GPS (GNSS) Modem module)
	SIM Slot	1x micro SIM Slot
Alarm I/O	Antenna	2x 50Ω SMA Female for Main Antennas (OPTION) 1x 50Ω SMA Female for GPS(GNSS) Antenna (OPTION)
	Alarm Input	4CH DI (0-30V Input)
Storage	Relay Output	4CH Relay (Up to 3A and 30VDC/250VAC output) NO/COM/NC (Terminal Block)
	Internal SD	1 x Internal SD Card Slot
Additional	NVMeSSD	1 x M.2 M-Key Slot (for M.2 2280 NVMeSSD) / Recording license 8-ch(OPTION)
	Watchdog	Yes
	RTC	Yes
	Fan	No
	Factory Reset button	Yes
Power	LED Indicators	1 x Power LED (3-Color), 1 x Status LED (3-Color), 1 x Alarm in LED (3-Color), 1 x Alarm out (3-Color)
	Power Supply	12V/3.3A adapter, DC +9V ~ +36V (DC Input Voltage)
	Consumption	Consumption 16 Watts (without NVMeSSD)
Environment	Temperature/Humidity	-22°F~158°F (-30°C ~ 70°C) / 10 ~ 90% NC (without NVMeSSD) / -4°F ~ 140°F (-20°C ~ 60°C) / 10 ~ 90% NC (with commercial NVMeSSD)
Chassis	Dimensions (W x D x H)	8.4 x 6.9 x 2.4" / 213.6 x 175.8 x 60mm
	Weight (Net/Gross)	3.3/ 4.9 lbs. / 1.5/2.2 KG
Mounting		Wall or Desk mount
Certifications		CE, FCC, KC, UKCA

