



Luna
AI Service

AI-EDG16T

AI Server for CCTV | High-Performance Edge Computing Unit



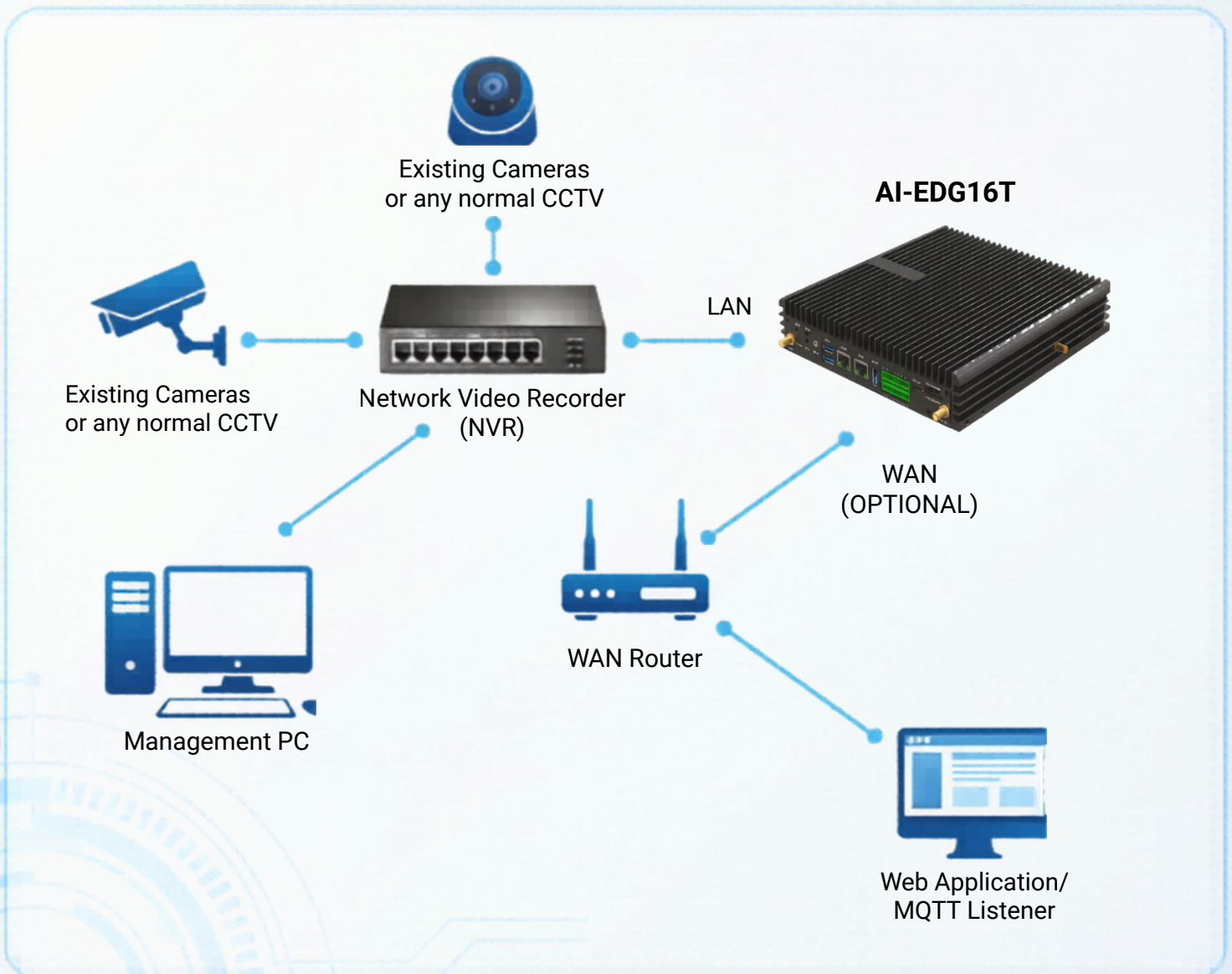
**Transform Your Existing CCTV
into an Intelligent System with
Advanced AI Analytics.**



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The Power of AI at the Edge

AI-EDG16T is an AI Edge Computing Server with a dedicated TPU (Tensorflow Processing Unit) or NPU (Neural Processing Unit) chipset. It is designed to inference Computer Vision AI or machine learning models which analyze video stream from CCTV and can transform your existing Camera structure to perform alert, trigger another device or even collecting multiple type of data for your 3rd party Business Intelligence (BI) platform












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Seamless Integration & Powerful Performance

-  **High AI Performance:** Equipped with an 8-core ARM CA53@1.6GHz processor and dedicated TPU/NPU, delivering high-definition video intelligent analysis for 16 channels with mixed precision operations (int4/int8/fp16/fp32).
-  **Universal Compatibility:** Seamlessly connects to any existing CCTV systems and cameras, transforming them into intelligent devices without replacement of new CCTV
-  **Rich I/O Interfaces:** Features **RS485, GPIO, and HDMI 2.0** ports for sending Alarm in/out signals, enabling control of external devices, and connecting to display systems
-  **Advanced Protocols:** Supports **MQTT protocol and Rest API** for easy integration with third-party applications, dashboards, and BI platforms.
-  **Connectivity:** Includes **LAN/WAN** ports, USB 3.0 ports, Audio (in [inout), CAN, Micro SD card slot, and support for optional wireless backhaul (LTE/5G/Wi-Fi/BT)
-  **Video Capabilities:** H.264&H.265 decoding (16 x 1080P@30fps), encoding (16 x 1080P@30fps), and JPEG codec (1080P@480fps)
-  **Power Efficiency:** Typical Power Consumption of 15W with passive cooling.



PWR

RST

Audio
(in/out)

USB

LAN

WAN

HDMI

RS485/
GPIO

Type-C

MicroSD/
SIM Slot
(optional)



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Standard AI Detections Package



Safety Helmet
Detection



Reflective Vest
Detection



Fighting Detection



Uniform Detection



Face Capturing



Flame and Smoke
Detection



Face Recognition



Vehicle Parking
Detection
(with adjustable alarm delay) *Work with additional application



License Plate
Recognition (LPR)



Mask Detection



People Motion
Detection & Alert



Off-Duty Detection
(Absence Detection)



Line Crossing
Detection



Area Intrusion
Detection



Wander Detection
(Loitering Detection)



Climbing Detection
(e.g., Wall Climbing)



People Counting
(In/Out)



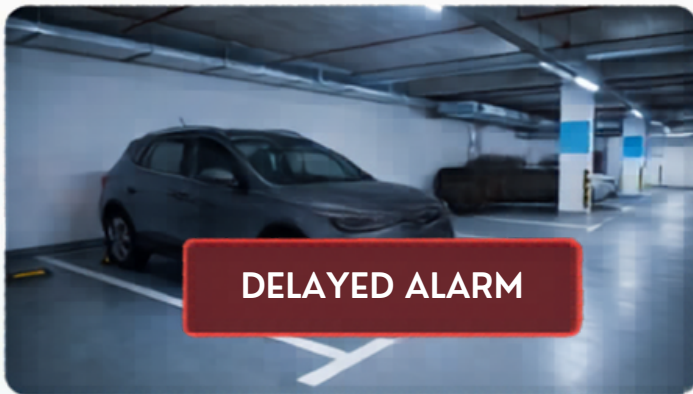
Behavior Detection
(Smoking, Phone Usage)



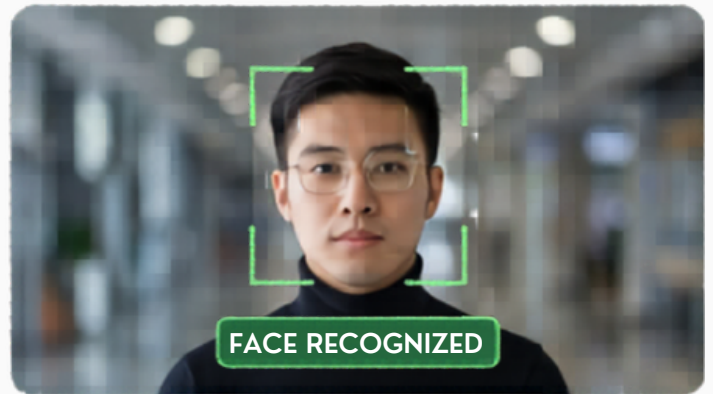
Obstruction Detection
(Fire Exits/Pathways)



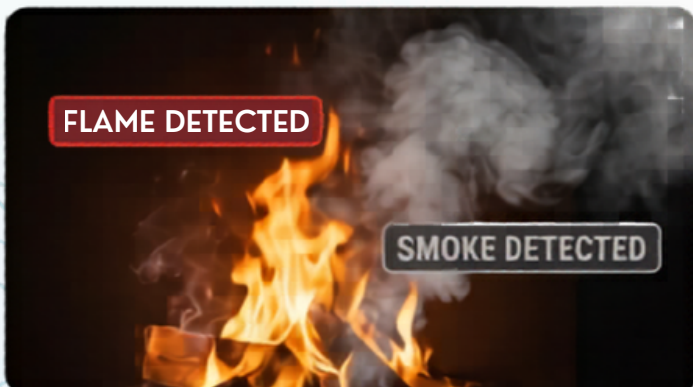
Fall Detection



Vehicle Parking Detection



Face Recognition



Flame and Smoke Detection



Smoking Behavior Detection



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Advanced AI & Industry-Specific Applications

Beyond standard functions, the AI-EDG16T supports a vast library of 100+ AI models for various scenarios, including:



Vehicle & Traffic

Speeding
Counting
Wrong-way
Congestion



Pedestrian & Crowd

Crowd
Density
Face
Counting



Safety & Security

PPE Detection
(Helmet, Vest)
Weapon
Detection
Thermal Anomaly



Infrastructure Monitoring

Crack Detection
Water Leakage
Garbage
Detection



Industrial & Manufacturing

Conveyor Belt
Analysis
Equipment
Status
Object Detection

*Advance AI Detection updates regularly, please check with our team for the most update full detection list.



Vehicle Speeding Detection



PPE Detection



Crowd Density Analysis



Industrial Conveyor Belt Analysis



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Simple Management, Lifetime Value

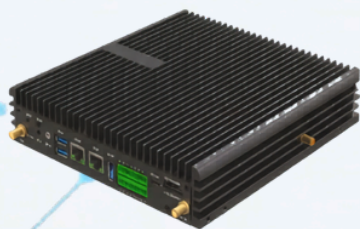
Manage your AI edge system with ease and confidence, backed by comprehensive software support and certified distribution.



Licensed Software: The AI Edge Server is provided with fully licensed software, with **no additional license fees or annual subscription costs** for its entire lifespan



Web & App Management: Easily configure alerts, manage devices, and view data through a user-friendly web application or third-party app integration via MQTT or REST API (HTTP).



AI-EDG16T



Configuration



Data Viewing



Third-party
Integration
(MQTT/API)



Technical Specifications

Note: The AI-EDG16T is designed to be seamlessly compatible with existing CCTV systems and cameras

Feature	Specification
Model	AI-EDG16T
CPU	6-core ARM CA53@1.6GHz
TPU/NPU	17.6 TOPs @ INT8 model inference
Memory	4GB (up to 16GB optional)
Storage	32GB eMMC (SD card up to 1.57TB)
Video Stream Input	RTSP, ONVIF
Support Video Format	MP4, MJPEG
Max. Concurrent Video Stream Decoding	16 channels of 2MP (1920x1080) @ 30fps
Algorithm Slots	Flexible 24-36 Detection Slots
Ethernet Port	2 x 10/100/1000 Mbps adaptive
USB3.0	2 ports
Main Interface	CAN Bus / RS-232 / RS-485 / GPIO / SATA 3.0
Alarm I/O	Alarm In / Alarm Out (via GPIO/RS485)
Optional Interfaces	LTE / 5G / Wi-Fi / BT
Heat dissipation	Passive
Power Consumption	< 30 W, Typical 15 W
Operating Temperature	-20°C to +60°C
Structural Dimensions	219.8mm x 200mm x 46.8mm
Protection Level	IP41
Power Interface	AC 220V



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Your Gateway to Intelligent Surveillance.

Contact us to learn more about how the AI Solutions
can empower your security and operational efficiency
with advanced AI analytics.



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