Your AI Model on a Market-Ready Camera

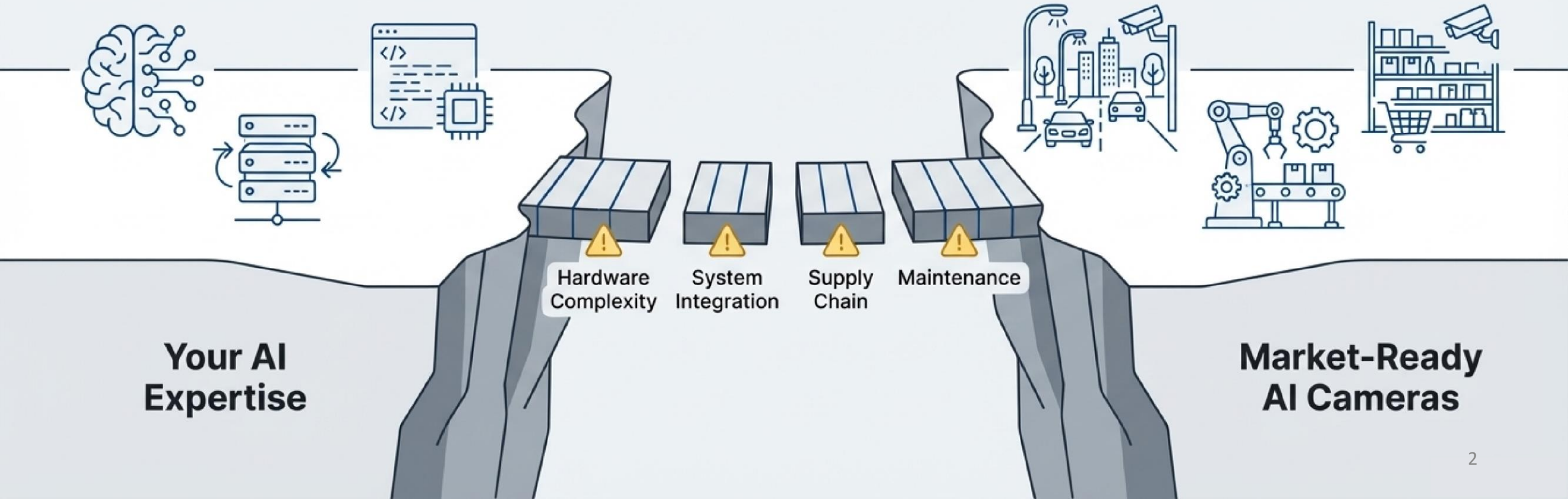
The FlexWATCH® AI SDK is your bridge from AI model to commercial deployment.



SEYEONTECH | FlexWATCH® IP surveillance leader

There’s a Chasm Between a Great AI Model and a Market-Ready Camera

Developing a powerful AI model is one thing. Building, deploying, and maintaining a stable, scalable camera product is another challenge entirely. AI-centric companies often face significant hurdles in hardware commercialization.



Your AI Model Alone Can’t Build a Commercial Camera



Deep Hardware Expertise Required

Developing and tuning camera platforms demands specialized, system-level knowledge far beyond AI modeling.



Diverse Application Needs

A one-size-fits-all camera is unrealistic; every customer and application has unique requirements for form factor, sensors, and performance.



Complex System-Level Integration

Your AI model is only one part of a complex system that includes the video pipeline, networking, security, and lifecycle management.



Ongoing Maintenance Burden

Managing firmware updates, component lifecycles, and hardware revisions across a deployed fleet is a significant and costly costly operational drain.

Introducing the FlexWATCH® AI SDK: Your Bridge to Market

We built our Open AI SDK to empower you. It's designed to seamlessly integrate your custom AI models onto our proven, deployment-ready IP camera platform.



Run Your AI Models

Natively execute one or more of your proprietary models directly on the camera.

Leverage Our Hardware

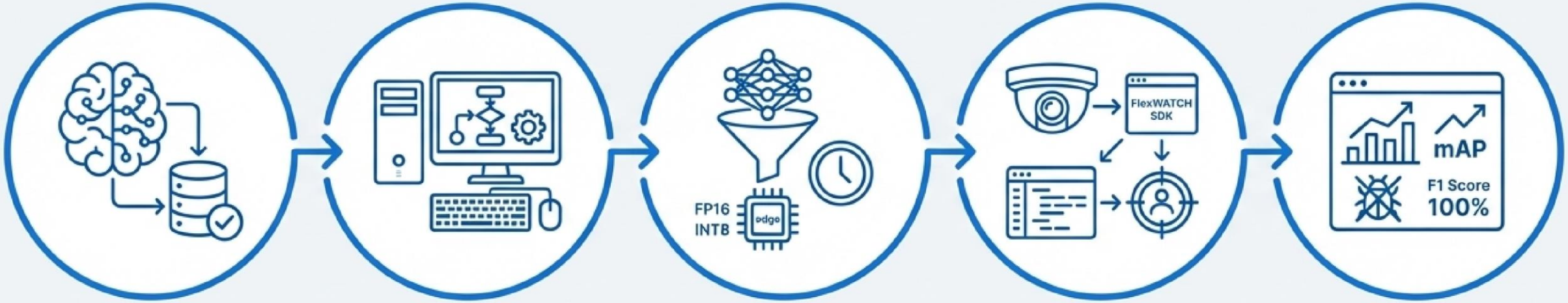
Deploy on a comprehensive range of camera platforms built on multiple SoCs.

Maintain Control

Utilize flexible metadata formats and avoid vendor lock-in.

A Clear, 5-Step Path from Model to On-Device AI

Our SDK integrates your AI into the camera's video pipeline without disrupting core functions like streaming, recording, or security.



1. AI Model Design

Start with your dataset and model architecture.

2. PC-Based Inference

Test and validate your model on a server.

3. Target Compilation

Use our provided tools to compile your model for the target edge device (SoC).

4. Integration

Integrate the compiled model onto a FlexWATCH camera using our SDK. This can be performed by your team or with our support.

5. Validation

Deploy and test the model's performance on the actual camera hardware.

A Platform Built on 25+ Years of IP Surveillance Leadership

Since 1997, Seyeontech has been a pioneer in the IP camera market. We have experienced every stage of building and deploying robust camera solutions for real-world environments under the FlexWATCH® brand.



1997

Founded by 3 developers with a vision to connect the world.



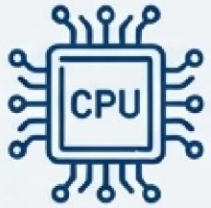
1999

Launched Korea's first IP video server, entering the IP CCTV market.



2004

Signed major contracts with Samsung Electronics and Hyundai Motor Company; developed proprietary middleware.



2015

Commercialized IP camera modules, laying the foundation for AI integration.



Now

A leader in specialized ITS applications and on-device AI camera solutions.

Our Four Pillars of Excellence



25+ Years of Know-How

Deep expertise in commercializing products across various SoCs and operating systems, with in-house development from IP modules to VMS.



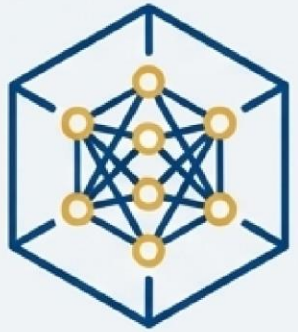
Unmatched Compatibility

Guaranteed forward and backward compatibility. Products from 20 years ago are still compatible with our modern NVRs. Compliant with TTA and NIS security certifications.



In-House R&D Capabilities

Full-stack development capabilities from FPGAs to high-end applications, supporting a wide range of image sensors and commercializing patent-based technologies.



Open AI SDK

An environment empowering developers to port their unique AI features onto our proven AI camera hardware.

An Extensive Hardware Portfolio Built for Flexibility

Camera Modules: The Building Blocks of Innovation



- **Processors**
  Eyenix & Ambarella SoCs (NDAA compliant).
- **Resolution**
  2 Megapixel to 12 Megapixel.
- **Image Sensors**
  Extensive support for SONY sensors (including 307, 335, 462, 678, 900, etc.), supporting both Rolling and Global shutter types.
- **Form Factors**
  Over 20 ‘Lego-style’ modules including 42x42mm, 38x38mm, 1.5-board, and single-board designs.
- **Features**
  Supports BT1120/LVDA/YUV input for zoom blocks, thermal modules, and more.

An Extensive Hardware Portfolio Built for Flexibility

Finished Products: Market-Ready for Rapid Deployment





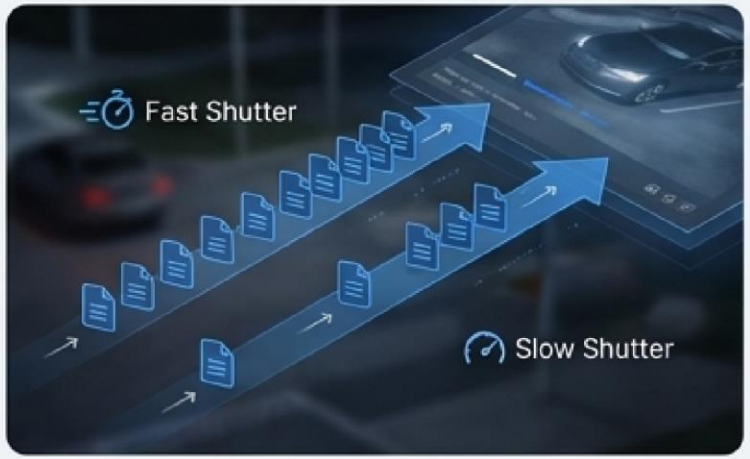




- Full range of 2M to 12M cameras in Dome, Bullet, and PTZ form factors.
- Manufactured using our own proven, NDAA-compliant Eyenix and Ambarella IP camera modules.
- Specialized camera lineups for specific applications.
- Built-in AI Video Analytics support (Intrusion Detection, Line Crossing, Face Detection, LPD, Counting).
- Supports TTA and National Intelligence Service (NIS) security certifications.

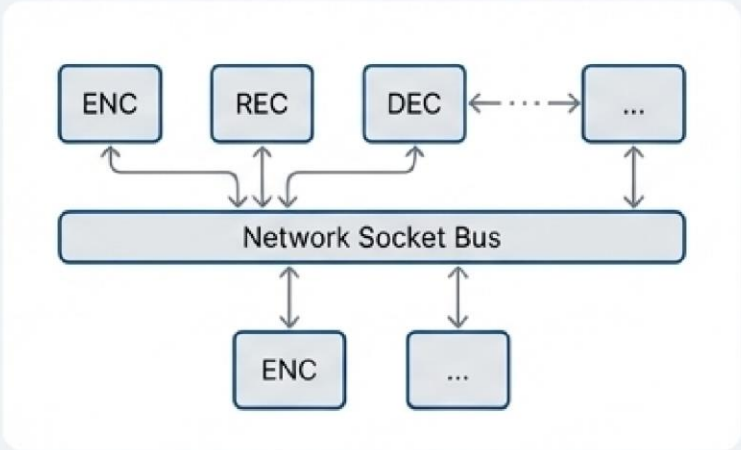
Technology Engineered for Performance, Scalability, and Reliability

Advanced Streaming Capabilities



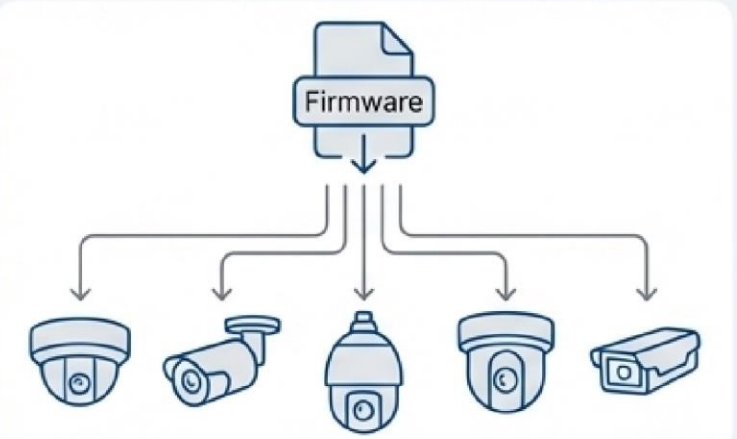
- **Low Latency**: Proprietary streaming for glass-to-glass latency of 150-200msec @ Full HD, crucial for real-time applications.
- **Multi-Shutter Mode**: Simultaneous dual-stream transmission with independent shutter speeds, optimized for challenges like nighttime license plate recognition.
- **Protocol Support**: Full support for RTP/RTSP, RTMPS, RTSP over HTTP/HTTPS, and WebSocket streaming.

Modular "Middleware" Architecture



All software modules communicate via network sockets, allowing for easy scalability from a single physical system to distributed setups. This architecture is common across our IP cameras, NVRs, and VMS.

Single Firmware Management



Our proprietary PNcode system allows a single firmware to support all models (including OEM/ODM). This simplifies updates and guarantees forward/backward compatibility.

Your Strategic Advantages with the FlexWATCH Platform

Partnering with us goes beyond technology; it's about transforming your business model.



Accelerate Time-to-Market: Eliminate the hardware development cycle and go from PoC to full product deployment in record time.



Focus on Your Core AI: Dedicate your engineering resources to what you do best —building great AI models—not camera hardware.



Reduce Total Cost of Ownership (TCO): Benefit from a stable platform and significantly lower maintenance burdens over the product lifecycle.



Ensure Seamless Integration: Leverage high-level compatibility and full ONVIF support (Profiles S, T, G, M) for deep interoperability.



Build on a Proven Foundation: Utilize our 25+ years of industry experience and deep deployment expertise.

A Multi-SoC Roadmap to Match Any Performance Target

Choose the platform that best fits your application. We are continuously expanding our SoC lineup to broaden your options.

Model	SoC	NPU Performance	Supported Frameworks	Example Models	Camera Lineup	Availability
Base	EN675	1.2 TOPS (INT8)	PyTorch	Mobilenet/SSD, Yolo v5	2M~12M	**Now**
Standard	EN683	2.7 TOPS (INT8), 5.4 TOPS (INT4)	PyTorch, TensorFlow	Mobilenet/SSD, Yolo v9, Resnet	2M~12M	Q1, 2026
Premium	Hailo 15H	20 TOPS (INT8)	TensorFlow, Darknet, Caffe, Keras	Yolo, Resnet, MobileNet/SSD, EfficientNet, Hailo Model Zoo	5M~8M(4K)	**Now**
Mid-range	TBD	3.6 TOPS (INT8), 7.2 TOPS (INT4)	PyTorch, TensorFlow, Caffe, Keras	Yolo, Resnet, MobileNet/SSD, RNN	2M~8M(4K)	Q3, 2026

* All technical information can be changed without price notice

A Platform Designed for Your Business Model

We provide a direct path to owning your AI camera solution, without the overhead of building the platform yourself.



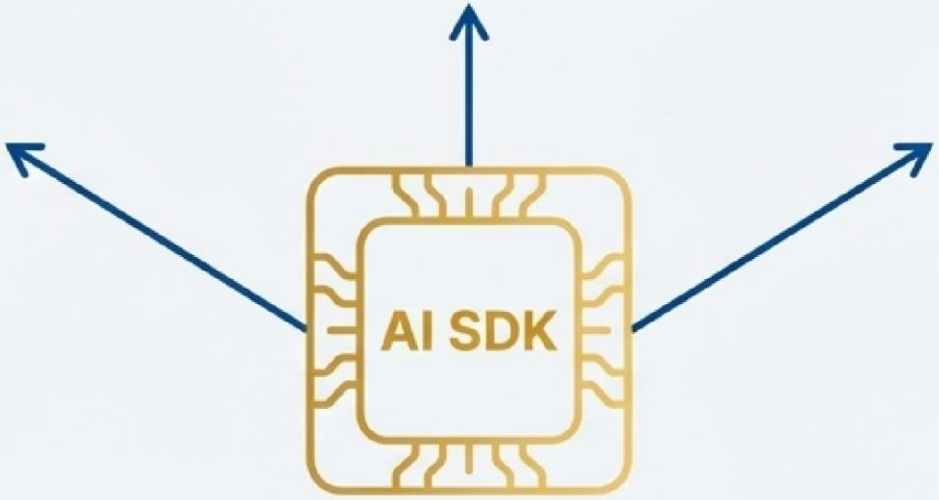
System Integrators (SIs)

For businesses that require custom AI cameras to execute complex, large-scale projects.



AI Companies

For firms developing advanced AI-based solutions that need a reliable hardware partner to commercialize their software.





Solution Providers

For companies looking to accelerate their entry into the AI camera market, from PoC to full product deployment.

Let’s Build Your Custom AI Camera

The FlexWATCH® Open AI SDK is more than a product.
It is an **Entepralise**, **Solution Innovation**, a product.
It is an **Open**, **Scalable**, and **Deployment-Ready** platform for your innovation.
We are ready to actively help you realize your AI vision.

For partnership and technical inquiries:

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SEYEONTECH

FlexWATCH®
IP surveillance leader