

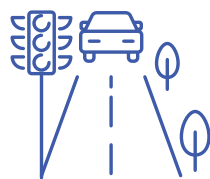


e-con Systems®
Think Vision. Think e-con.

AI-Powered Vision Solutions for Intelligent Transportation Systems

Smarter Vision for Safer Roads

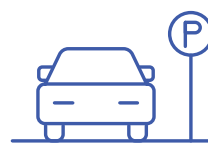
**VISION
ZERO**



Traffic Management



Traffic Enforcement



Parking Management



Tolling



25K+

**ITS Cameras deployed
across North America**

Traffic Management

Sensing



TrafficSenz AI ①
8MP AI Camera

Compute

②



NVIDIA



Ambarella



Qualcomm

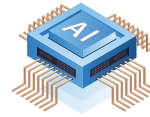
Multi Sensor Fusion

High Performance Edge AI

SDLC Interface Support

Intelligence

③



Vehicle Detection

Vehicle Classification

Vehicle Tracking

Cloud



Secure OTA

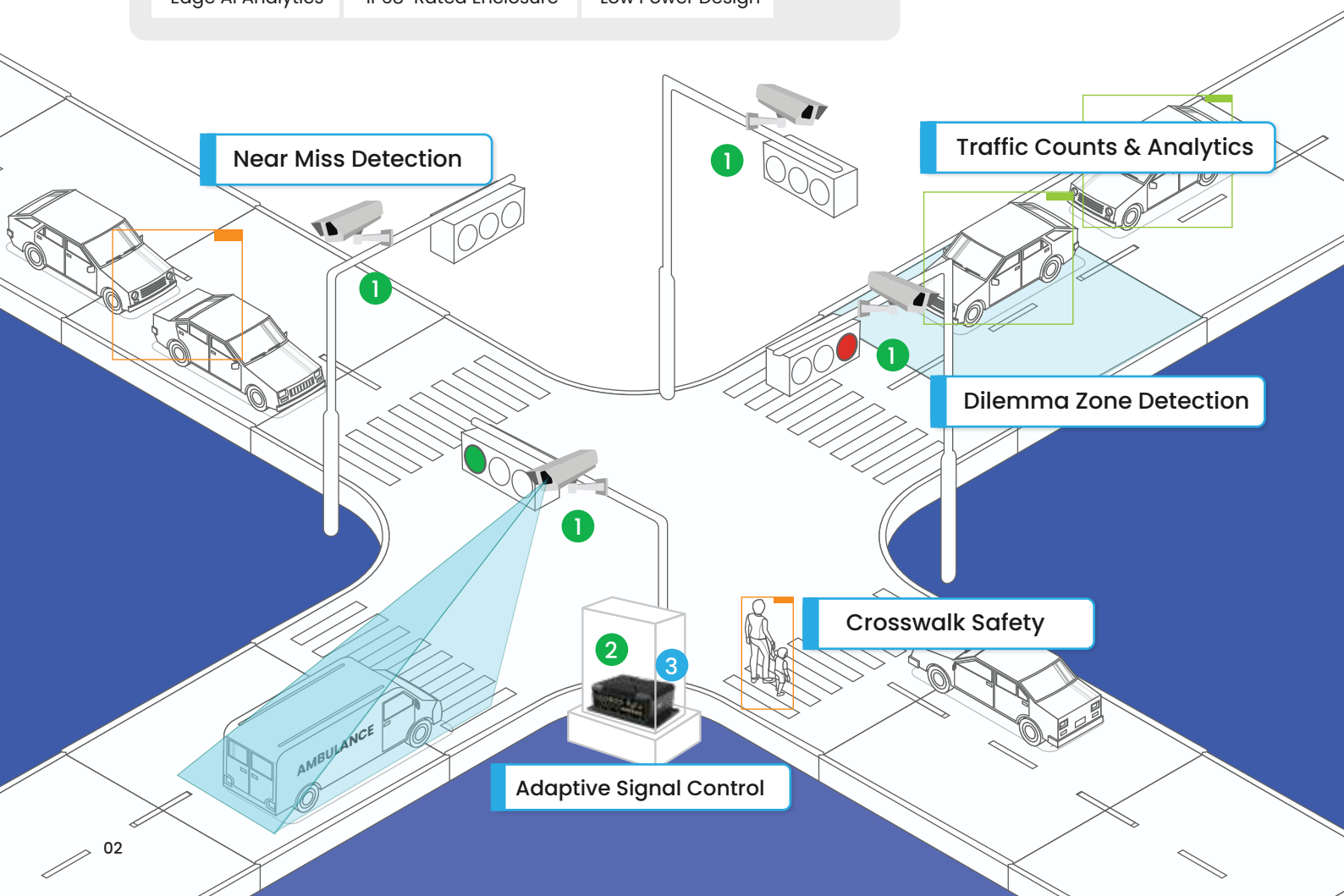
Device Management

Video Management System

TPM/Secure Boot

What is needed?

HDR	High Resolution	Solar Deployment Ready	Low-Light Performance
Edge AI Analytics	IP68-Rated Enclosure	Low Power Design	



Traffic Enforcement

Sensing



TrafficSenz ALPR 1

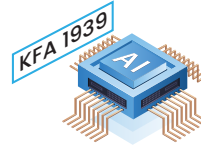
2MP/ 5MP / 8MP ALPR Camera for Mobile Deployments (Single & Dual Vision)



TrafficSenz Pro ALPR 2

5MP/8MP Fixed ALPR Camera (Single & Dual Vision)

Intelligence



ALPR & Analytics

Vehicle Detection

Vehicle Classification

Vehicle Tracking

Compute



NVIDIA



Ambarella



Qualcomm

Multi Sensor Fusion

High Performance Edge AI

SDLC Interface Support

Cloud



Secure OTA

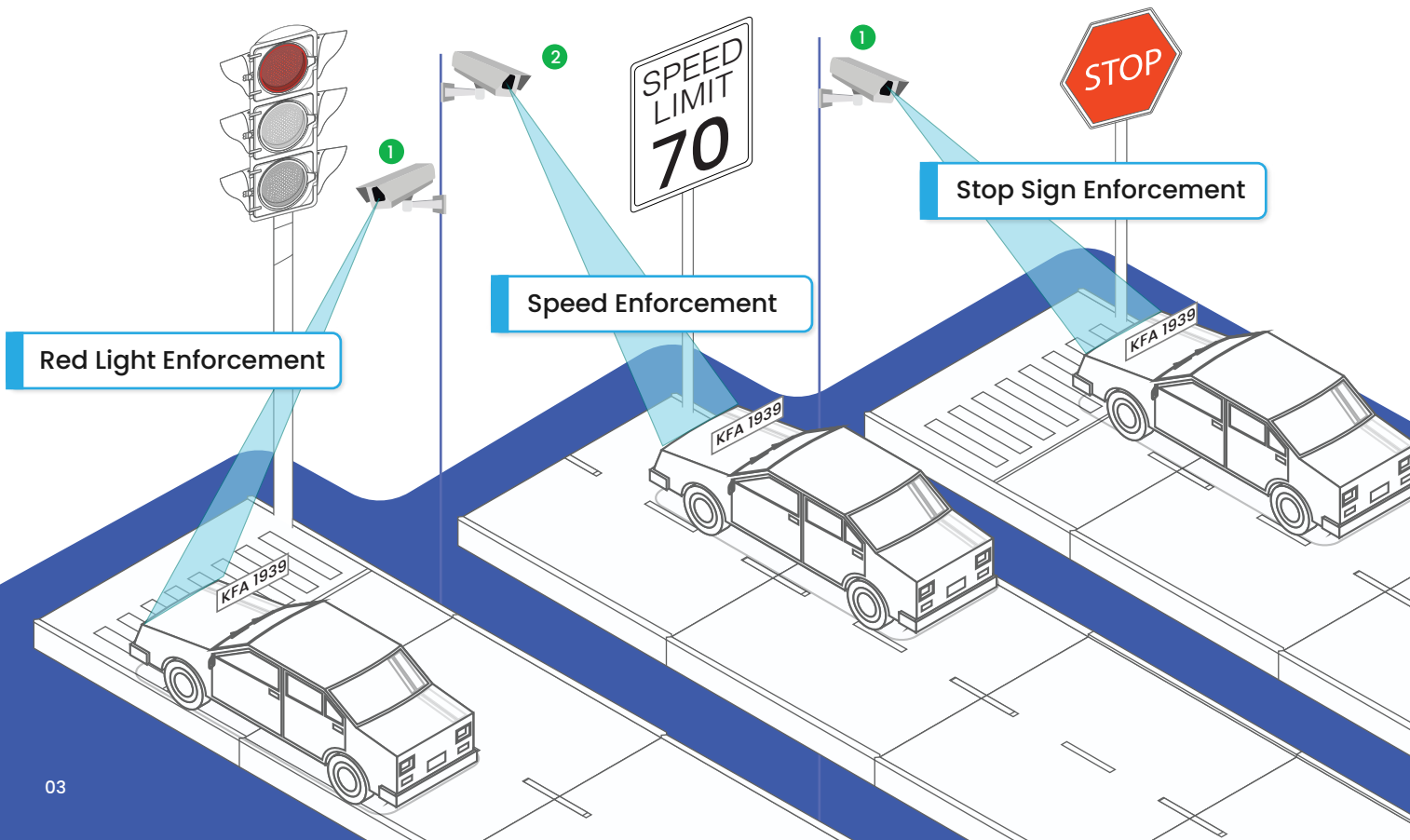
Device Management

Video Management System

Evidence Management

What is needed?

HDR	High Resolution	Global Shutter	Solar Deployment Ready	Low Power Design
Edge AI Analytics	IP68-Rated Enclosure	Low-Light Performance	Speed Radar Integration	



Parking Management

Sensing



TrafficSenz ALPR 1

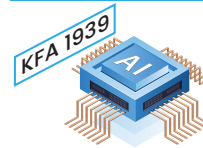
2MP/ 5MP / 8MP ALPR Camera
(Single & Dual Vision)



ParkSenz AI 2

8MP AI Camera

Intelligence



ALPR & Analytics

Vehicle Detection

Vehicle Classification

Vehicle Tracking

Compute



NVIDIA



Ambarella



Qualcomm

Multi Sensor Fusion

High Performance Edge AI

SDLC Interface Support

Cloud



Secure OTA

Device Management

Video Management System



Tolling

Sensing



TrafficSenz ALPR ①

2MP / 5MP / 8MP ALPR Camera
(Single & Dual Vision)

Compute



NVIDIA



Ambarella



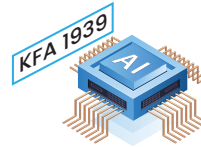
Qualcomm

Multi Sensor Fusion

High Performance Edge AI

SDLC Interface Support

Intelligence



ALPR & Analytics

Vehicle Detection

Vehicle Classification

Vehicle Tracking

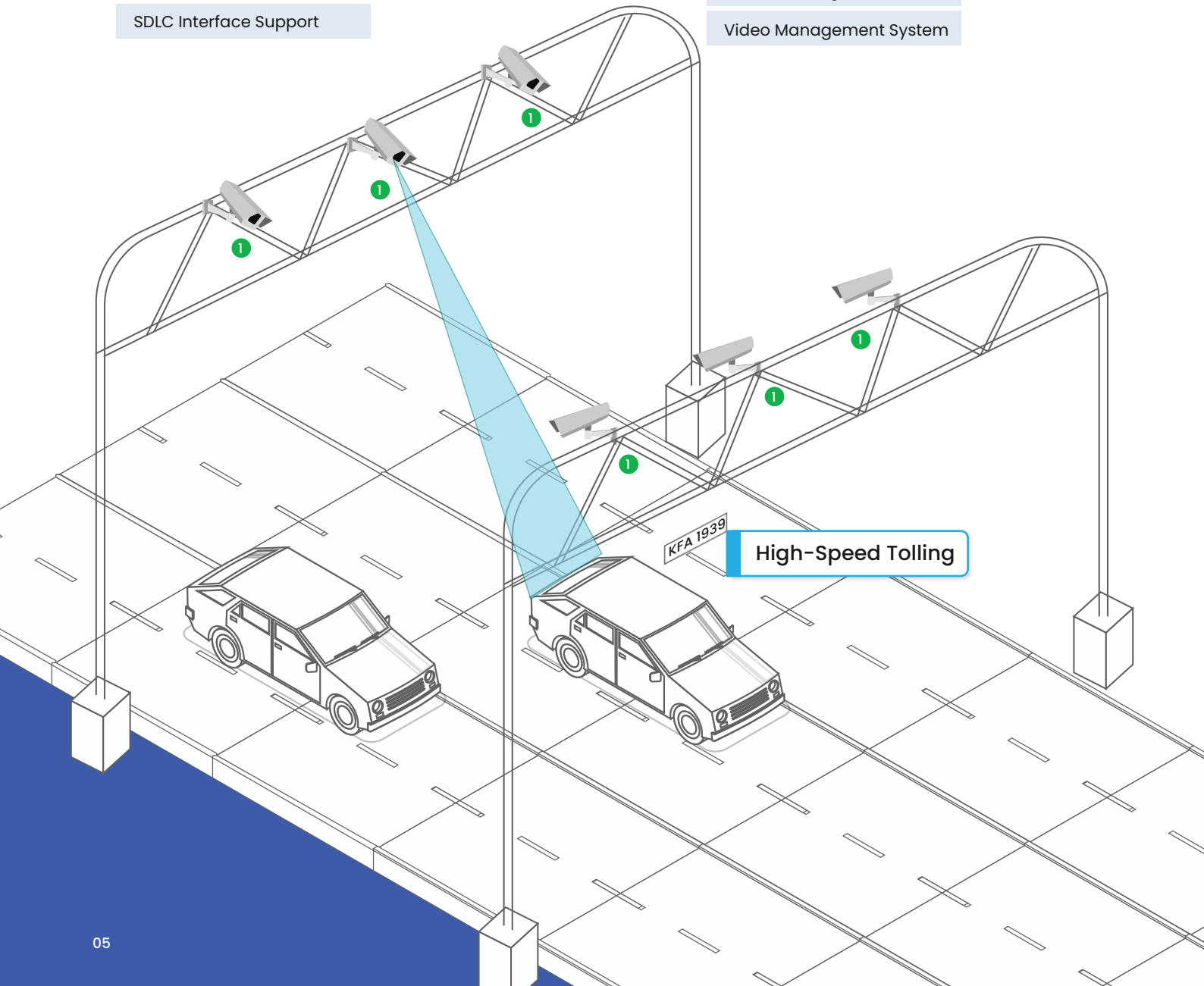
Cloud



Secure OTA

Device Management

Video Management System



ODM Products

e-con Systems offers Smart ODM Products for *ITS Technology & Solution Providers* to accelerate deployment and reduce time-to-market. The products can also be customized for specific smart transportation applications

ALPR Camera Series

Sensing

			
Product Variants	TrafficSenz AI	TrafficSenz ALPR	TrafficSenz Pro ALPR
Resolution	8MP	2MP 5MP 8MP	5MP 8MP
On-board NPU	4 TOPS	12 TOPS	Up to 100 TOPS
Optical Zoom	3x	5x & 10x	20X
Distance Capture	Up to 70 feet	Up to 150 feet	Up to 300 feet
Maximum Capture Speed	<30 mph	Up to 150 mph	Up to 200 mph
Typical Deployments	Smart Intersections	Mobile Enforcement & Tolling on Freeways	Fixed Enforcement & Tolling on Freeways

Parking Camera Series

Sensing

		
Product Variants	ParkSenz Lite	ParkSenz AI
Resolution	5MP	8MP
On-board NPU	1.2 TOPS	4 TOPS
Optical Zoom	Fixed Lens	3x
Distance Capture	Up to 30 feet	Up to 70 feet
Typical Deployments	Smaller parking lots	Larger parking facilities

AI Vision Box Series

Compute

The AI Vision Box is a rugged, compute platform for intelligent traffic monitoring, enforcement, and intersection analytics. It works seamlessly with our ALPR cameras and ALPR software to enable real-time, on-device analytics for both fixed and mobile deployments. By processing data at the edge and transmitting only metadata to the cloud, the system reduces bandwidth usage, minimizes latency, enables faster decision-making, and enhances road safety.



Key Features	Darsi Pro
Edge AI Processing	Up to 100 TOPS onboard performance
Multi-Camera Support	2× M12 PoE, 4× RJ45 PoE, 2× USB 3.2 & 1× M12 Non-PoE
Wireless Connectivity	Wi-Fi, 4G/5G & V2X compatibility
SSD Storage	Local video and analytics log storage, expandable up to 2TB
Industrial I/O Integration	SDLC communication with GPIO support
Industrial Design	IP67-rated fanless rugged enclosure
Operating Temperature	-34° C to 74° C
Compliance	NEMA TS2, NDAA, TAA & BABA Ready

Product Variants



Ambarella

12 TOPS

Optimized for low-power & solar-based deployments



Qualcomm

48 TOPS

Mid-tier, multi-camera capable platform



NVIDIA

Up to 100 TOPS

High-performance, multi-camera edge platform

Industry-Leading ALPR SDK

Intelligence

e-con Systems' Industry-leading ALPR SDK leverages advanced deep-learning models to support the complete ALPR workflow, including vehicle and license plate detection, recognition, classification, tracking, and real-time metadata generation. Optimized for edge and cloud deployments, the SDK delivers reliable performance under high-speed traffic, low-light conditions, and adverse weather.



99.1%
ALPR Accuracy

Up to 60°
Camera Tilt Support

Up to 200 mph
Vehicle Speed Support

30–60 px
Low Pixel Density

Day & Night
Reliable Recognition

Rain / Fog / Mist
Adverse Weather Support

Key Capabilities

- | AI based Vehicle Detection, Tracking & Classification
- | License Plate Detection & Recognition
- | Vehicle Make, Model & Color Recognition
- | Real-time Metadata Generation

Supported Platforms



Optimized For

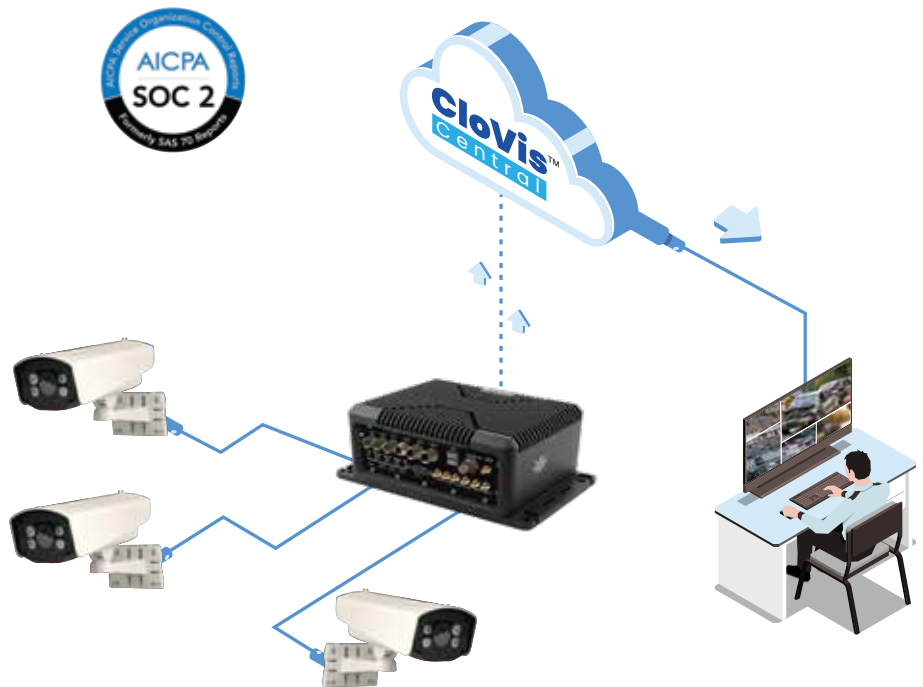
Traffic Management | Traffic Enforcement | Tolling | Parking

Centralized Cloud Platform for Remote ITS Device Operations

CloVis Central™ enables centralized monitoring, management, and deployment of multi-camera edge vision systems across traffic management, tolling, parking, and traffic enforcement infrastructure.

The platform provides real-time visibility into device health, AI performance, network utilization, storage availability, system status, evidence management, and secure remote operations – helping simplify large scale ITS operations while reducing field maintenance effort.

Handles **4M+** events per month with scalable cloud architecture designed to support increasing loads



Key Capabilities

Remote Device
Management & Health
Monitoring

OTA Firmware & AI Model
Deployment

Event Detection & Alerts

Performance & System
Analytics

Centralized Configuration
Management

Secure Access Control &
Authentication

Evidence Package Collection & Management

e-con Systems offers customizable OEM camera modules for enabling **ITS Technology / Solution Providers** to build optimized smart mobility solutions. Built for seamless integration with edge AI and embedded platforms, these solutions help accelerate development and reduce time-to-market.

Beyond imaging hardware, e-con Systems provides deep ISP tuning, lens and field-of-view optimization, form-factor customization, driver development, and sensor integration to deliver superior image quality and reliable AI performance under challenging roadside conditions such as glare, low light, HDR scenes, multi-lane coverage, and fast-moving traffic.



Sensor	Resolution	Category	Core Strength
onsemi	2 MP	Global Shutter	Proven choice for ALPR and red-light detection
Sony	3 MP	Global Shutter	Precise capture of fast-moving vehicles
Sony	3 MP	HDR + Low-Light	Consistent clarity in complex lighting conditions
Sony	5 MP	Global Shutter	High-resolution imaging for traffic enforcement
Sony	8 MP	STARVIS (Low-Light)	Superior night-time visibility for 24/7 monitoring
Omnivision	8 MP	HDR	Ultra-wide dynamic range for multi-lane coverage
Sony	12 MP	Global Shutter	Multi-Lane Coverage – Supports up to 5 lanes
Sony	16 MP	Global Shutter	Multi-Lane Coverage – Supports up to 8 lanes

Key Capabilities

ISP tuning

Lens customization

HDR optimization

Low-light optimization

Diverse Platform Support

Form-factor customization

Why e-con?

20+ years of Imaging Expertise

- 25,000+ ITS cameras deployed across North America
- Expertise in global traffic regulations, regional requirements and certifications
- Advanced ISP tuning and optics integration

ODM Design

- Proven expertise in AI/ML algorithm development
- Experience in NVIDIA®, NXP, TI, Qualcomm™ and FPGA platforms
- Full product development & customization including mechanical design

Manufacturing

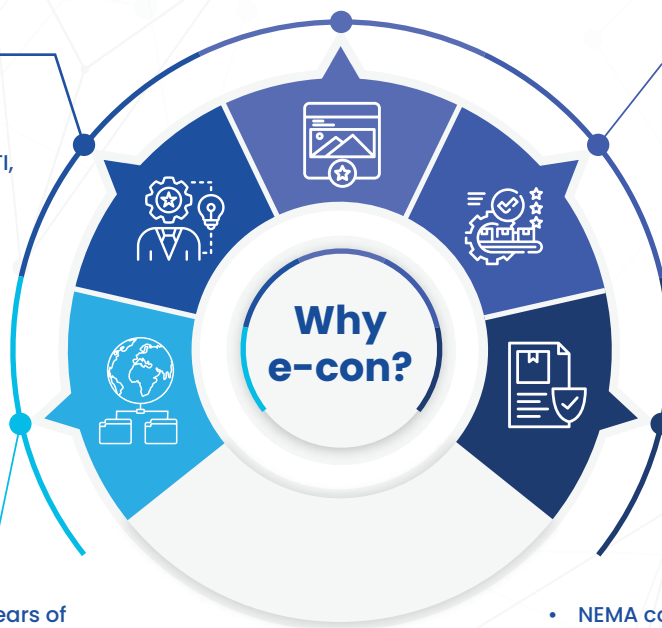
- Scalable manufacturing ecosystem with 2 Million+ cameras delivered globally
- All under one roof – Design, Development, Manufacturing, Testing and Reliability labs
- Proven expertise in Automation and Optimization for high yield rates and short cycle times

Quality & Reliability

- 3-year warranty with 10 years of lifecycle support
- ISO 9001:2015 certified organization
- TAA, BABA, and NDAA compliance
- RoHS, REACH, FCC & CE compliance

Domain Expertise

- NEMA compliant for traffic control systems
- ANPR SDK tailored for regional license plates
- IP68 weatherproof and IK-rated housings for vandal resistance



We Standby



Entrepreneurial Spirit



Value Addition



Innovation

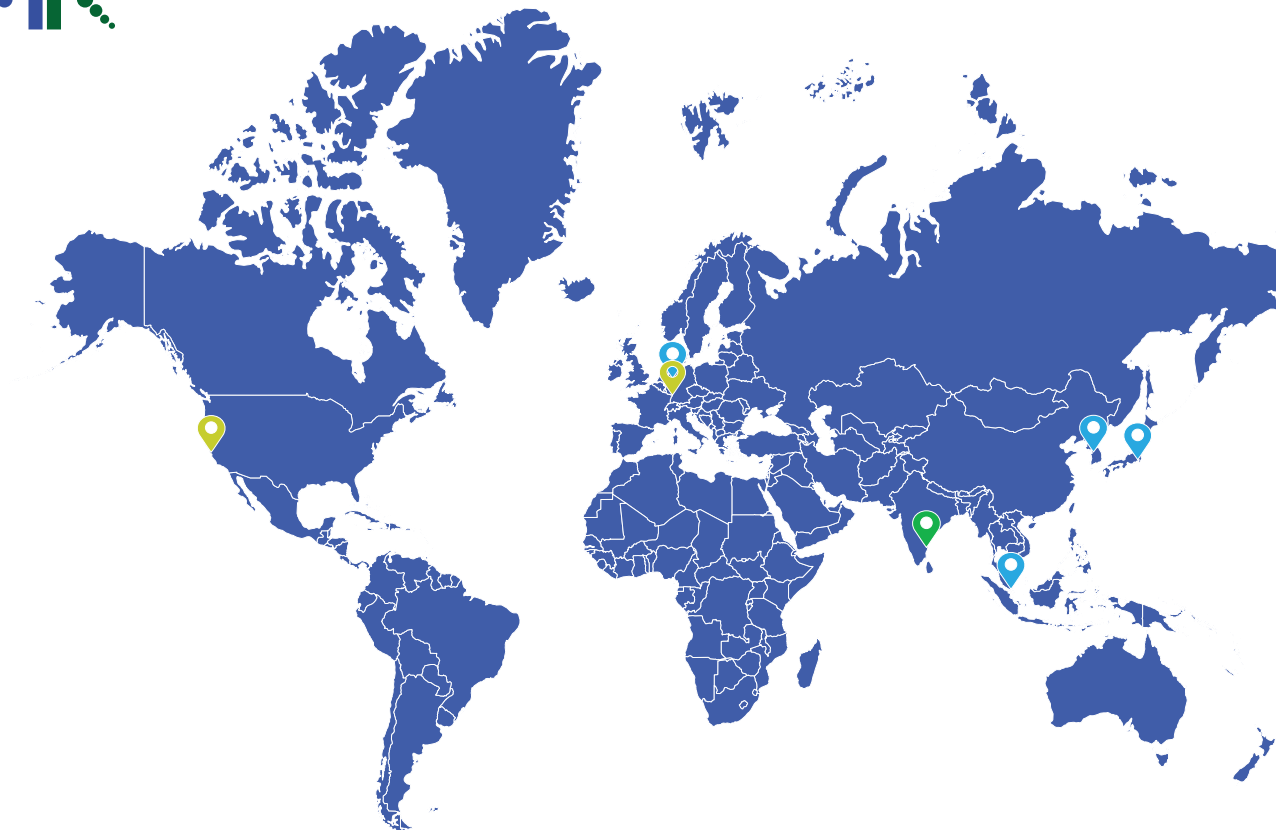


Quality



e-con Systems®

Think Vision. Think e-con.



Headquarters

Unit 43 & 44, SDF-I,
MEPZ SEZ, Tambaram, Chennai 600 045, **India**



e-con Systems USA LLC

3340 Walnut Avenue, Suite #280,
Fremont, CA 94538, **USA**



e-con Systems GmbH

Salbeiweg 65, 76149 Karlsruhe, **Germany**

Distributors



Japan

c/o silicon device Inc
3F, 3-1-2 Edakita Aoba-ku Yokohama
Japan 225-0015



South Korea

c/o CYTHUS Co. Ltd
RM901, Ace Gwanggyo Tower 3.77
Changnyong-daero 256beon-gil, Yeongtong-gu,
Suwon-si, Gyeonggi-do, **South Korea** 16229



ASEAN

c/o Macnica Cytech Pte Ltd
19 Tai Seng Avenue, #03-01,
Singapore 534054



Europe

c/o QUAD GmbH
Windmüllerstrasse 30,
D-59557 Lippstadt, **Germany**



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camerasolutions@e-consystems.com