

# Edge AI Challenges in Transportation Applications

## Dust & Outdoor Conditions

Innodisk's product includes rugged, fanless designs with wide temperature tolerance, which are essential features for outdoor conditions



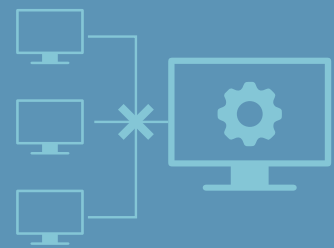
## Poor Image Quality

Innodisk's customized camera image quality ensures that customers always get the perfect image



## Remote Maintenance

With the support of Innodisk iCAP (Cloud Administration Platform), remote maintenance can be performed from any locations, offering flexibility and convenience



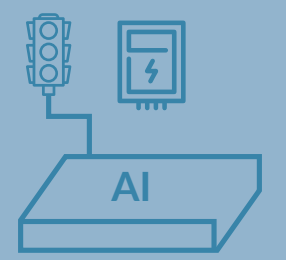
## Disaster Recovery

InnoAgent's out-of-band (OOB) signaling provides consistent access, even in situations where primary network is unavailable, ensuring robust disaster recovery capabilities



## Limited I/O

Numerous I/O options facilitate multiple device connections, removing the need for hubs and adapters and providing enhanced connectivity



## Group Management

Innodisk AI Suite SDK allows the latest AI models to be deployed to all devices in the network via the iCAP platform

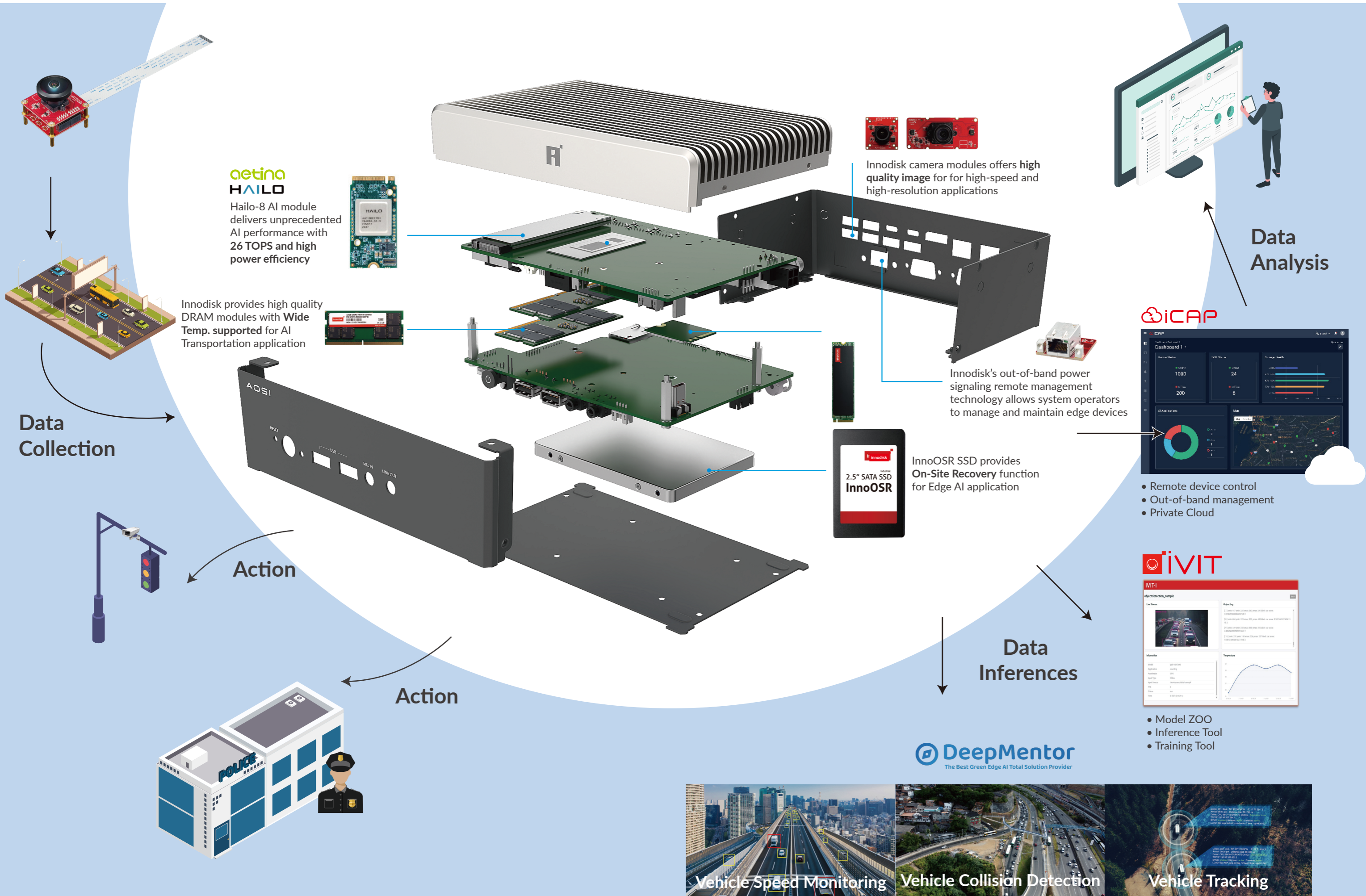


# Innodisk AI for Transportation

Comprehensive AI solutions with industrial design for transportation integrators

The transportation is experiencing remarkable growth within the AI sector, and Innodisk AI offers a comprehensive solution for transportation applications. Our offering range from Out of Band (OOB) disaster recovery solutions to customized AI scenarios in transportation. Innodisk AI provides an all-encompassing approach to fulfill your needs from every angle.

# Innodisk AI Transportation Application



# Successful Stories



## Intelligent Traffic System

Innodisk AI solutions were implemented in Taipei City for speed detection, vehicle traffic counting, traffic flow tracking, and vehicle classification. The result was that accurate recognition was achieved under diverse conditions, including day and night and various weather conditions, from all viewing angles.



## Parking Space Detection

Innodisk AI solutions were applied to identify occupied and available parking spaces, allowing real-time parking space analysis. Users can easily select the areas they wished to monitor via iCAP.

# Innodisk Edge AI Solution

Cloud Management	iCAP Public Cloud / Private Cloud			
AI Training / Inference	iVIT GPU Model ZOO   FPGA Model ZOO   ASIC Model ZOO   3 <sup>rd</sup> Party AI Model			
Edge Utility (SW / FW)	iSMART / iTracker / iOPAL / iRAID	OOB Management	Virtual I/O Technology	
OS Integrations	BSP/Driver/SDK porting & optimization Microsoft Windows / Linux			
Edge Device	AIoT Platform (FPGA / GPU / ASIC / CPU) 	AIoT Peripheral (Embedded Card & Camera / Virtual I/O) 	Flash/DRAM Module 	Wi-Fi6/ Media Server Air Sensor CAN 

# Innodisk Group Solution

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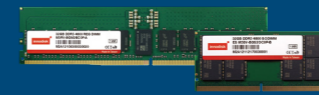
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### SSD



Innodisk SSDs are high-performance storage devices designed for industrial and embedded applications. They offer robustness, reliability, and endurance, with features such as power-loss protection, error correction, and advanced data security.

### DRAM



Innodisk DRAM is a high-speed, high-capacity memory module designed for use in a wide range of industrial applications. It features reliable performance, durability, and advanced data protection, making it ideal for harsh environments.

### Camera



Innodisk camera modules optimize image quality for different AI applications depending on the needs of customers, in order to meet the demand for high-speed and high-resolution applications in different embedded systems.

### Embedded Peripherals



Embedded peripherals like LAN, PoE, CAN bus, DIO, serial port, storage, RAID, and display add functionality to systems. Innodisk aims to create expandable and space-efficient expansion modules to increase flexibility and lower TCO.



Edge AI solutions tailored for AI training, AI inference, and AI computing powered by highly reputable GPU and AI accelerators from NVIDIA.



Communication and system integration for in-vehicle applications enable seamless fleet management and data collection.



Highly reliable wireless software defined network and virtualized connectivity products for Metaverse, Neural Network, and AI computing applications.



Ensuring safe indoor and outdoor air quality through sophisticated and robust sensors.