

ADVANTECH

Enabling an Intelligent Planet

Intelligent Transportation Systems

- Advantech Overview
- Rolling Stock & Wayside Solutions
- Management Infrastructure Solutions
- Roadway & In-Vehicles Solutions
- Advantech Successful Cases
- Certified Systems & IoT Solution Matrix



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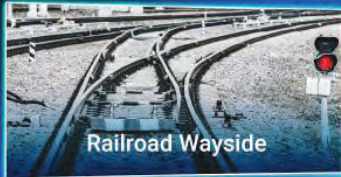
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Intelligent Transportation Systems



Rolling Stock



Railroad Wayside



Roadside & In-vehicle



Tunnel & Highway



Public Transportation



Station



Drive Safety Excellence

- IEC 62443 fortified cybersecurity
- Ensure system integrity & reliability



IT/OT Convergence

- Streamline diagnostics & operations
- Elevate the customer experience



Mobility Innovation

- Seamless IoT system integration
- Sustainable energy management



Partner Ecosystem

- Integrated R&D and production
- Joint design for future products



3U/6U CPCI Legacy & Serial



Wireless Gateways & Routers



Industrial Switches

Edge Controllers & Data Acquisition



On-board Controllers



Edge AI Inference Systems

Advanced ITS Solutions for Railway, Roadway and In-Vehicle

Rolling Stock

- Rugged computing certified to EN 50155 & EN 50121-3-2 ensures operational safety.
- Real-time passenger information enhances comfort and safety.

Highway & Tunnel Management

- Real-time traffic monitoring enhances road safety.
- Automated environmental control ensures rapid emergency response.

Wayside / Signaling

- Complies with SIL for safe, reliable signaling.
- Supports FRMCS for secure, fast communication.

Operations and Maintenance (O&M)

- IoT-based predictive maintenance reduces downtime.
- Integrated fare collection improves station efficiency.

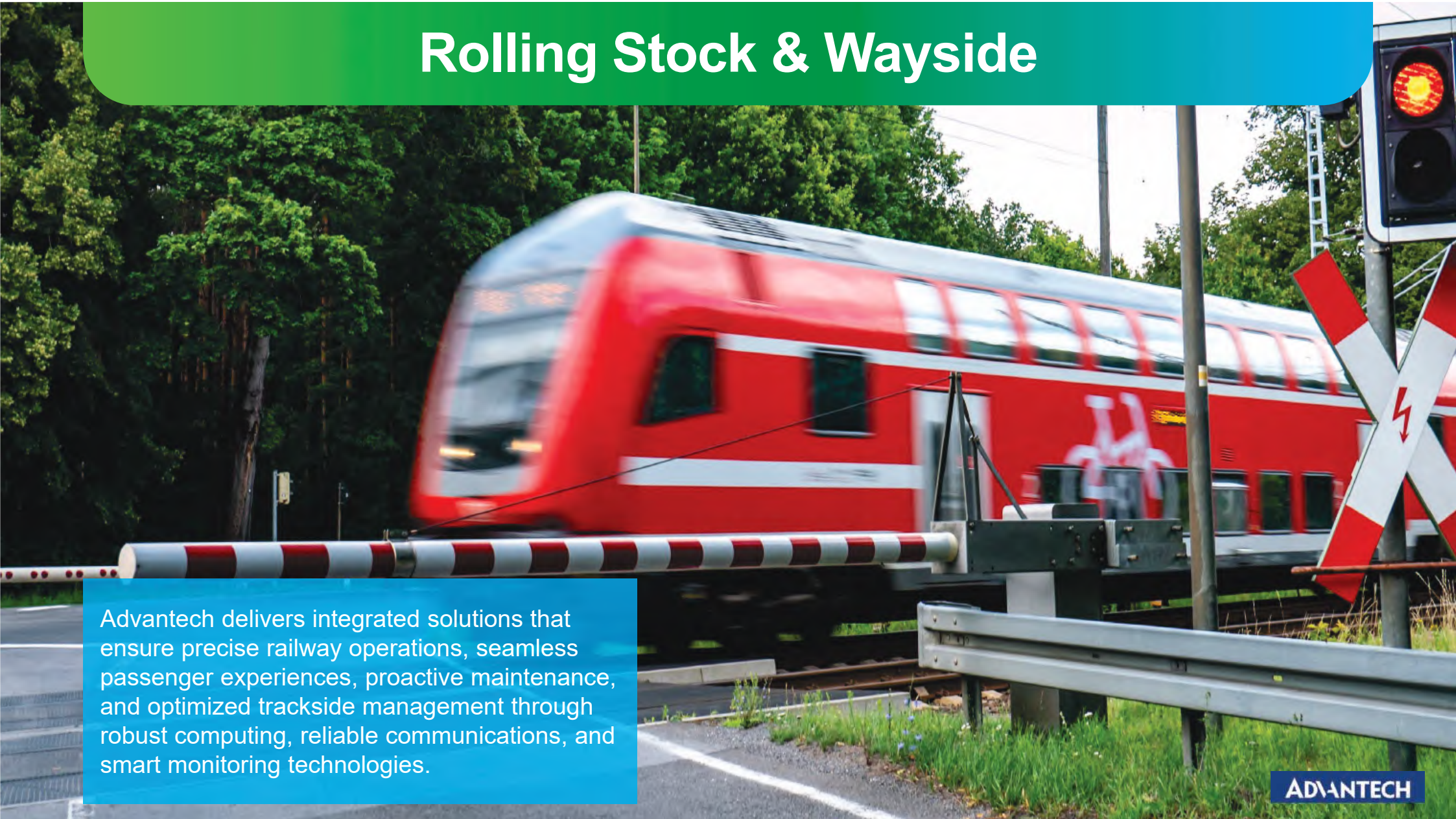
In-Vehicle Computing

- Certified rugged computing ensures reliable vehicle control.
- V2X connectivity enables cooperative driving safety.

Cooperative Road Infrastructure

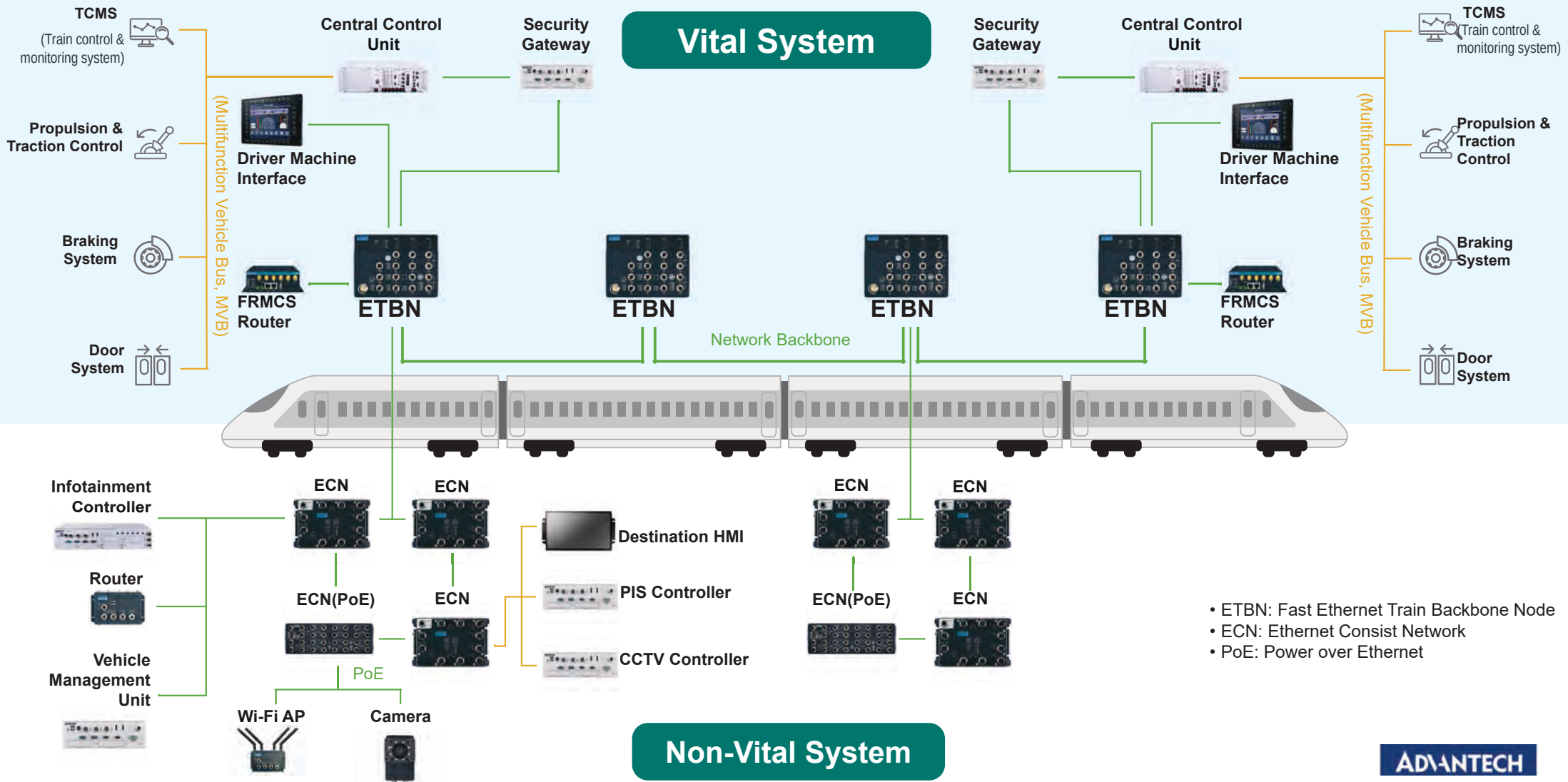
- V2X connectivity optimizes traffic flow and safety.
- Real-time road monitoring prevents incidents and delays.

Rolling Stock & Wayside

A red and white high-speed train is captured in motion, crossing a railway crossing. The train is blurred, indicating speed. In the foreground, a red and white striped barrier is lowered across the tracks. To the right, a railway crossing sign with a red 'X' and a lightning bolt is visible, along with a flashing red light. The background consists of lush green trees.

Advantech delivers integrated solutions that ensure precise railway operations, seamless passenger experiences, proactive maintenance, and optimized trackside management through robust computing, reliable communications, and smart monitoring technologies.

Modern Train Control Systems



Modern Train Control Systems for Critical Operations

Designed to ensure the safe, efficient, and reliable operation of rail vehicles by integrating advanced technologies that monitor, control, and optimize train performance.

Advantages

- **Reliable Communication for Train-to-Ground Connectivity**
Advantech provides advanced wireless solutions like GSM-R, LTE-R, 4G/5G, and Wi-Fi, ensuring secure, real-time communication for train control, monitoring, and safety, even in challenging environments, while enhancing data transmission reliability.
- **Support for Autonomous Systems and ETCS Integration**
Advantech's solutions integrate ETCS, autonomous systems, and GPS/GNSS, enabling precise location tracking and automated train operations, ensuring safety, efficiency, and seamless railway performance.

Recommend Products



- 10.4" & 12.1" touch panel
- UIC 612-01 keypad layout
- EN 50155 OT4: -40~70°C

ITA-8100

Driver Machine Interface (DMI)



- Microsoft Azure Certified (ESC) certification
- SuperCap-based power backup module

ITA-580

Train Security Gateway



- Supports IEC 61375-2-3 (TRDP)
- IEC 61375-2-5 (TTDP)

EKI-9512-ETB

Fast Ethernet Train Backbone Node

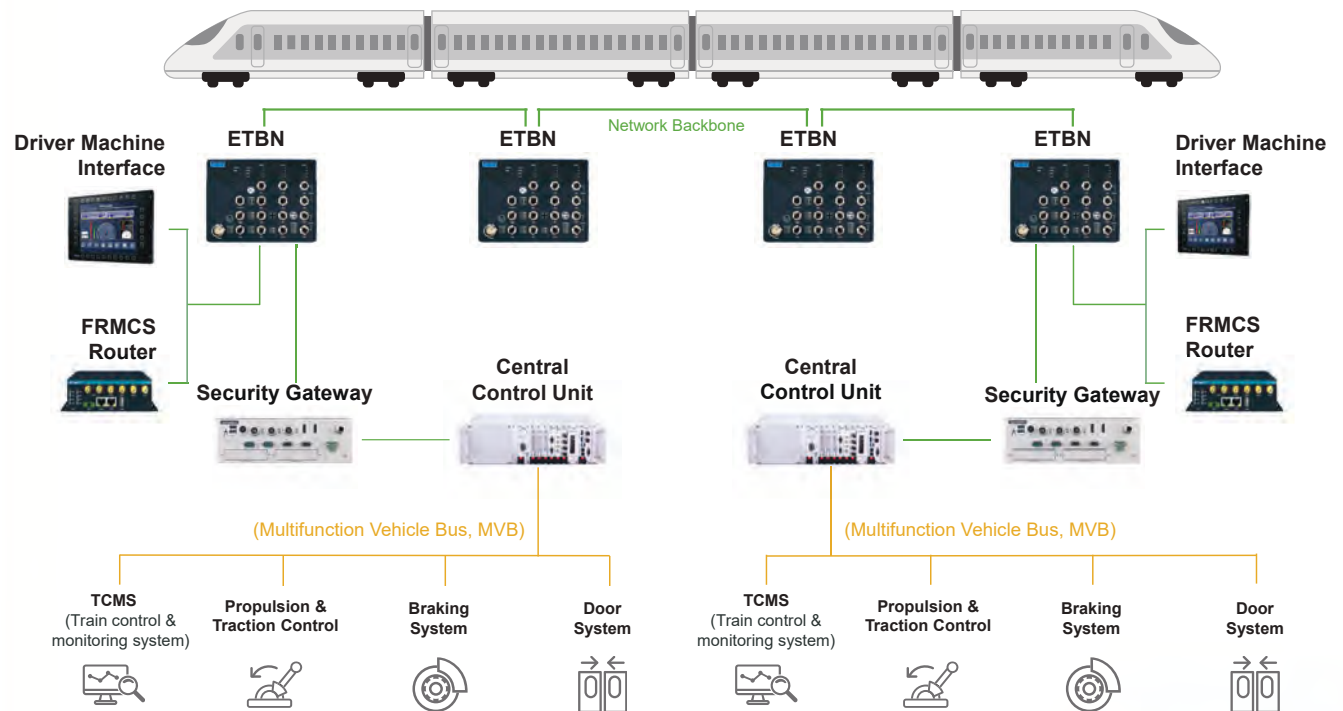


- 3U CPCI-S 19" System
- x86 & ARM based single or multi platform integration

3U CPCI Series

Central Control Unit

System Architecture



- ETBN: Fast Ethernet Train Backbone Node

Train Information & Infotainment Systems

Advantech offers solutions for real-time passenger updates, entertainment, and seamless connectivity, ensuring smooth operations and enriched passenger experiences through robust computing, communication, and display technologies.

Advantages

• Real-Time Passenger Information Systems (PIS)

Advantech offers powerful computing and communication solutions for real-time passenger information. These solutions enable accurate, dynamic updates for schedules, delays, and station information, ensuring a seamless travel experience and efficient service management.

• Advanced Infotainment Systems for Passenger Comfort

Advantech's solutions integrate high-definition displays, media servers, and Wi-Fi connectivity, delivering interactive infotainment experiences such as entertainment, news, and travel information, which enhance passenger comfort and engagement throughout the journey.

Recommend Products



EKI-6333AC-M12
On-board Wifi AP / Clint

- Design with dual radio modules
- Supports IEEE 802.11n MIMO 2T2R



EKI-9528E
Managed PoE Ethernet Switch

- EN 50155, EN 50121, EN 45545-2 compliant
- X-Ring Pro for rapid and predictable convergence



ITA-520
Vehicle Management Unit

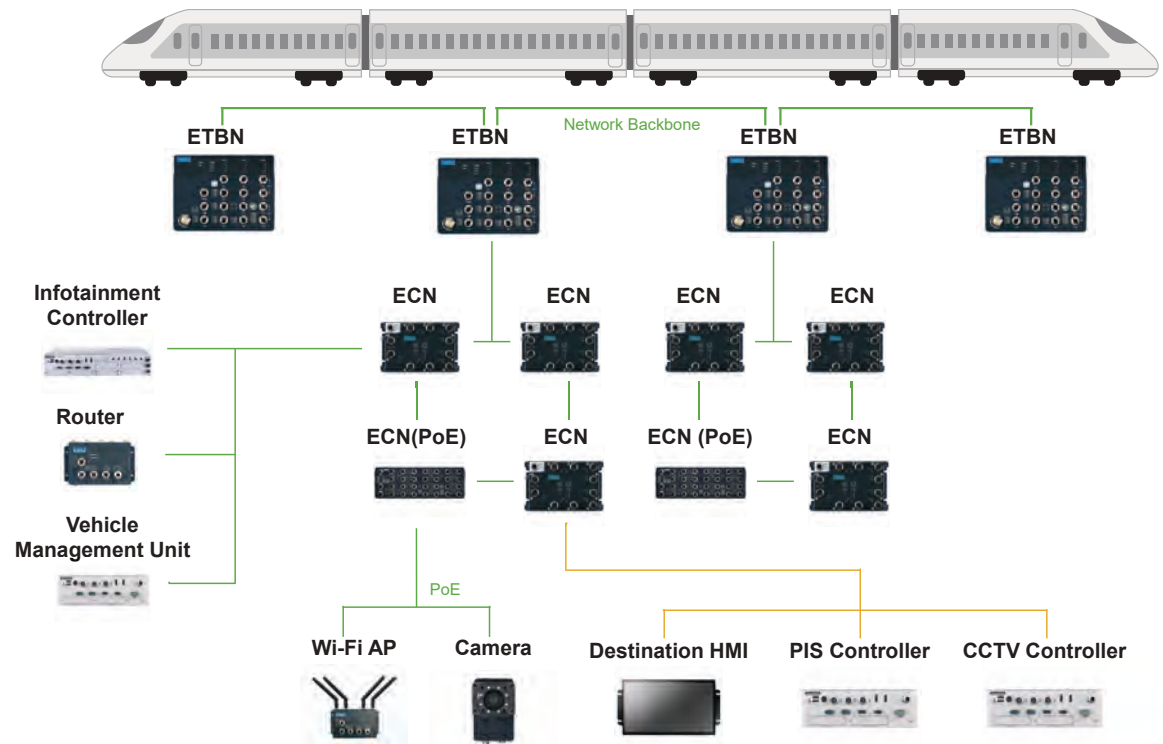
- 2U rack-mount EN 50155 fanless computer
- 3 x 2.5 GbE ports in M12 X-Coded; LAN bypass



ITA-7220
Rolling Stock Panel PC

- 22" LCD panel, 1920 x 1080 pixels resolution
- 24 / 48 / 72 / 110VDC isolation power input

System Architecture



- ETBN: Fast Ethernet Train Backbone Node
- ECN: Ethernet Consist Network
- PoE: Power over Ethernet

Intelligent Train & Infrastructure Inspection

Advantech provides comprehensive solutions for data sensing, acquisition, digitalization, and AI-driven analytics, enabling predictive maintenance and automated AI vision inspection to ensure railway safety and operational efficiency.

Advantages

• End-to-End Data Intelligence for Predictive Maintenance

Advantech integrates sensor networks, data acquisition systems, and edge computing to collect and analyze real-time infrastructure and train health data. This enables intelligent operation, early fault detection, and predictive maintenance, reducing downtime and optimizing asset lifespan.

• AI Vision for Automated Railway Inspection

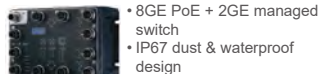
With high-performance AI computing and machine vision technology, these solutions enable automated visual inspections of tracks, tunnels, and overhead lines, detecting defects with high precision, reducing manual labor, and ensuring railway infrastructure integrity.

Recommend Products



ITA-580
Diagnostic Controller

- SuperCap module for power backup
- Supports an MXM GPU module standards



EKI-9510G-MPW
On-board Ethernet Consist Network

- 8GE PoE + 2GE managed switch
- IP67 dust & waterproof design



MIC-330 V2
Hybrid Controller

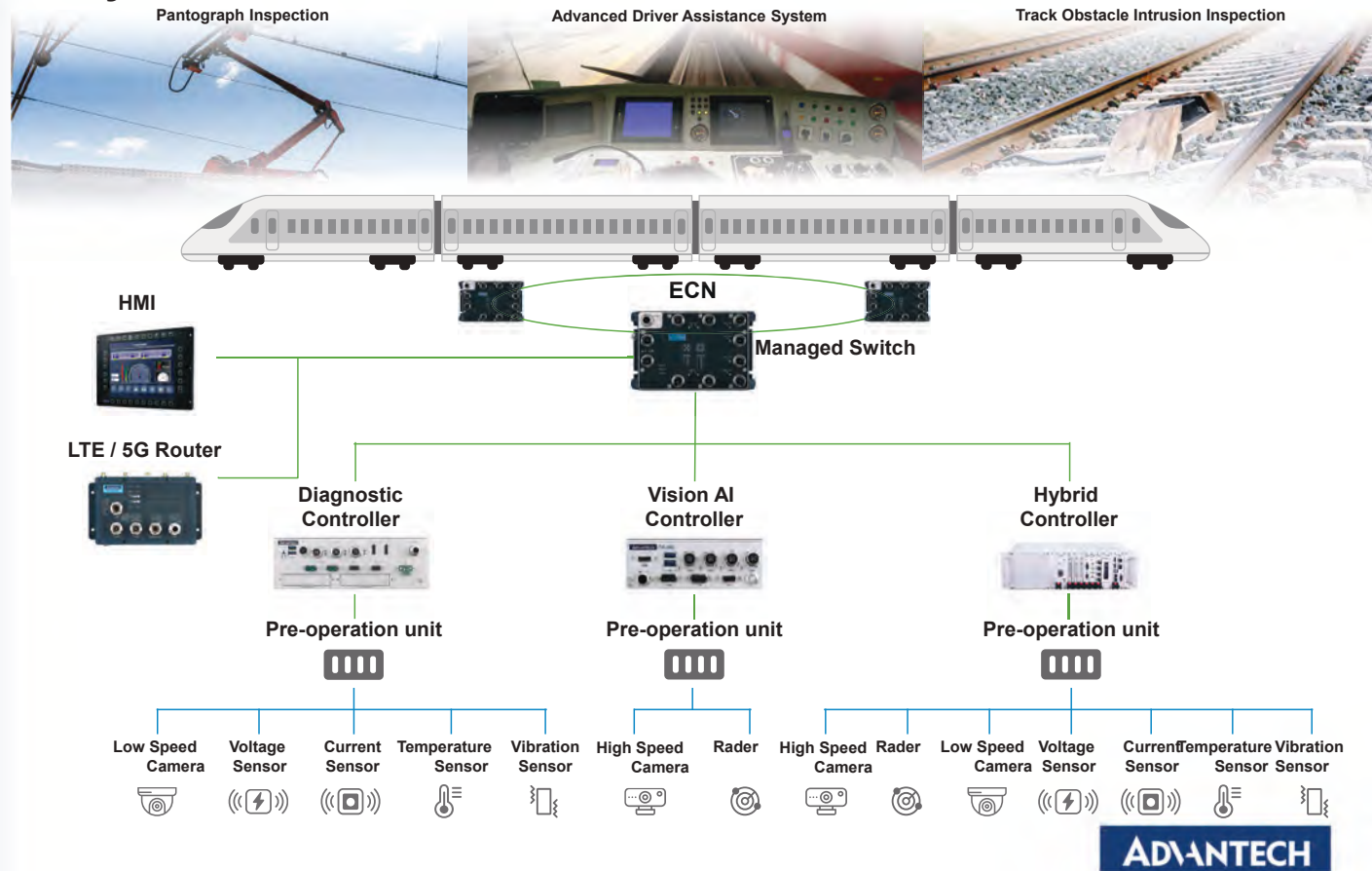
- 3U CPCI-S 19" System
- Supports x86 & ARM based single or multi platform integration



ITA-560
Vision AI Controller

- Embedded NVIDIA® Jetson AGX Orin™ / Orin™ NX / Orin™ Nano platform

System Architecture



Advanced Wayside Control Systems

Advantech enhances railway infrastructure through rugged computing and high-speed communication solutions to ensure reliable signaling, real-time monitoring, and seamless integration with central control systems—improving both safety and operational efficiency.

Advantages

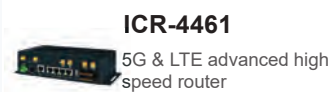
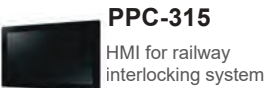
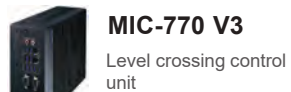
Rugged Computing Solutions for Reliable Wayside Operations

Advantech's industrial-grade edge computers and servers deliver high-performance processing for railway signaling, condition monitoring, and fail-safe control, ensuring continuous and reliable operation in harsh trackside environments.

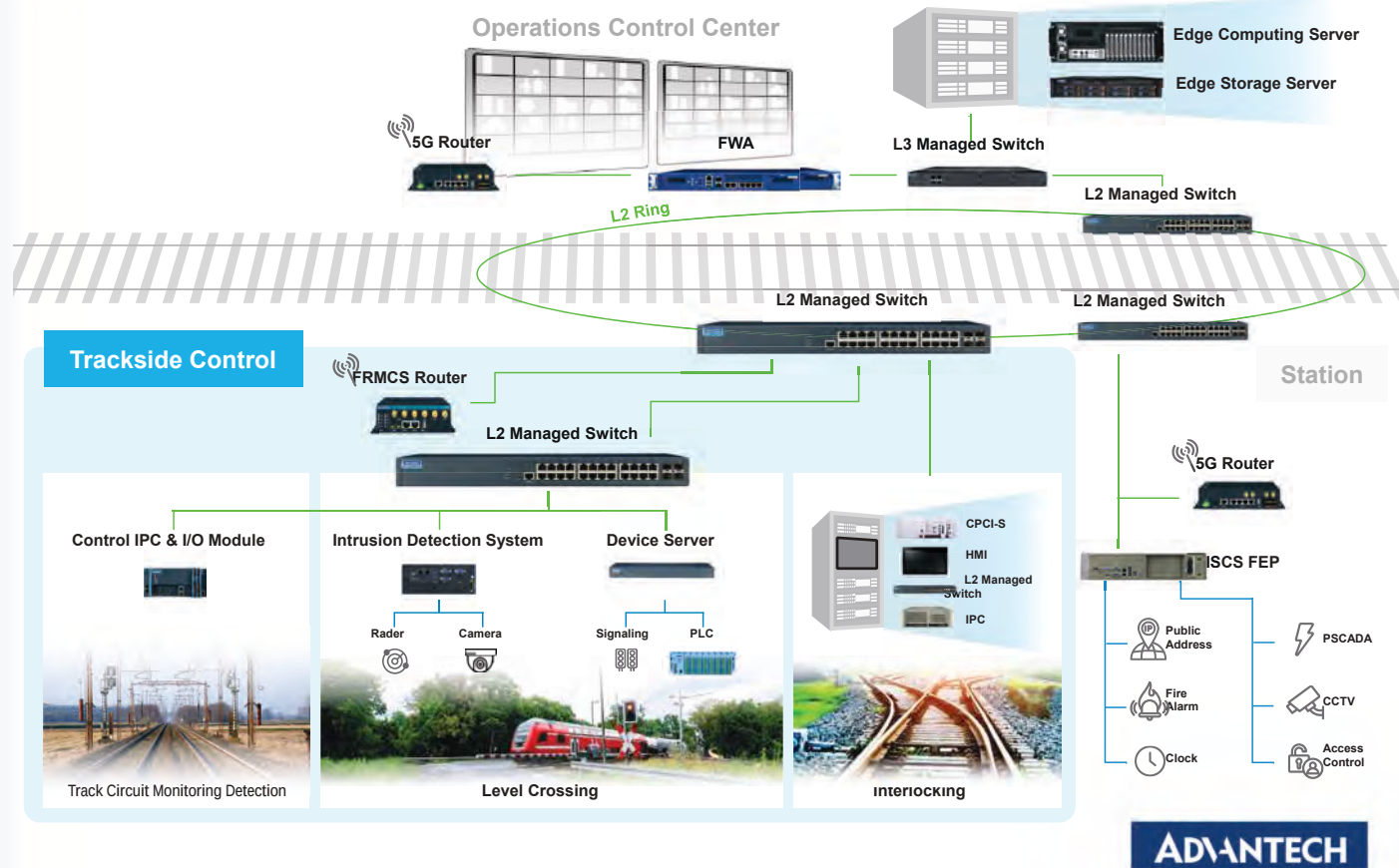
Future-Ready Connectivity for Seamless Railway Communication

With support for FRMCS, GSM-R, and LTE-R, our networking solutions enable secure, real-time data exchange between wayside infrastructure and central control systems, enhancing operational efficiency and system integration.

Recommend Products



System Architecture



Management Infrastructure



Advantech provides industrial-grade computing platforms designed to enhance passenger flow efficiency, streamline fare transactions, and ensure smooth operational control at transport facilities.

Reliable Computing for Automated Ticketing

Our solutions for intelligent Automated Fare Collection (AFC) improve efficiency, enhance security, and elevate the passenger experience in smart stations. Leveraging rugged computing, IoT connectivity, and AI-driven analytics, they enable seamless ticketing, access control, and transaction management.

Advantages

Reliable Computing for Automated Ticketing & Access Control

Advantech's industrial-grade computing solutions power AGM and TCM, ensuring fast and secure ticket validation, passenger authentication, and seamless entry/exit operations even in high-traffic environments.

Smart Self-Service Systems for Hassle-Free Transactions

With high-performance edge computing and interactive display technology, Advantech enhances BOM and TVM, enabling fast ticket purchases, digital payments, and real-time fare updates, improving station efficiency and passenger convenience.

Recommend Products



ITA-178
Station Self-Service Controller

- Rich I/O designs for USB, COM & displays
- Robust anti-vibration design for station gates



IDS-3106
Industrial Open Frame Monitor

- 6.5" VGA LCD panel with LED backlight
- Dual signal interface with VGA & DVI



ACP-4340
IPC for Station Computer System

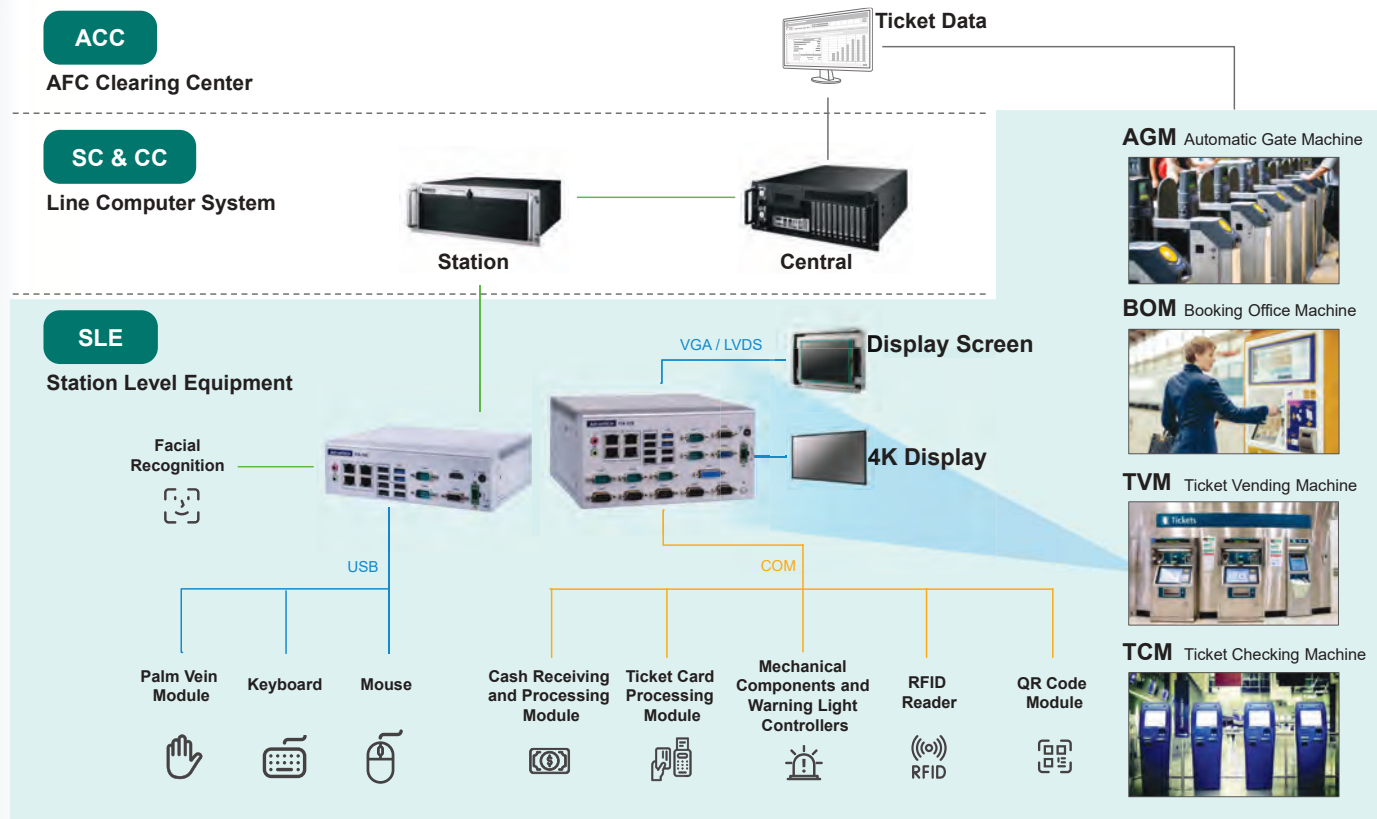
- High scalability with various motherboards
- Front-accessible design for easy maintenance



HPC-7420+ASMB-977
Server for ICSC / Central Control

- 4U 18" short-depth Edge Accelerator Server
- Dual Intel® 4th Gen Xeon® scalable processors

System Architecture



Roadway & In-Vehicles



Advantech supports safer, greener, and more efficient road transportation and specialized vehicle operations with innovative computing and networking solutions that enable smarter management, real-time connectivity, and sustainability across diverse mobility sectors.

Intelligent Highway Management

Advantech provides advanced computing, AI-driven analytics, and centralized network management, enabling real-time traffic monitoring, predictive analytics, and automated control systems. These technologies enhance road safety, traffic efficiency, and smart infrastructure management.

Advantages

Real-Time Traffic Monitoring and Intelligent Control

Advantech's edge computing, sensor-integrated solutions, and WebAccess/NMS enable real-time traffic data acquisition and centralized network management, supporting automated incident detection, congestion control, and smart traffic signaling to improve highway flow and safety.

Optimized Tolling and Infrastructure Management

With vision edge systems and cloud-based analytics, Advantech enhances toll collection, environmental monitoring, and predictive maintenance for highway infrastructures, ensuring efficient traffic operations and reduced maintenance costs.

Recommend Products



ITA-360
Edge AI for Traffic Management

- Fanless design
- Rich I/O: SATA, USB, LAN, serial port, M.2
- Wide operating temperature



WebAccess/NMS
Browser-based NMS Software

- Cross-browser, cross-platform based on HTML5
- Google Maps and GPS location tracking



EKI-7712E-4FI
L2 Managed Ethernet Switch

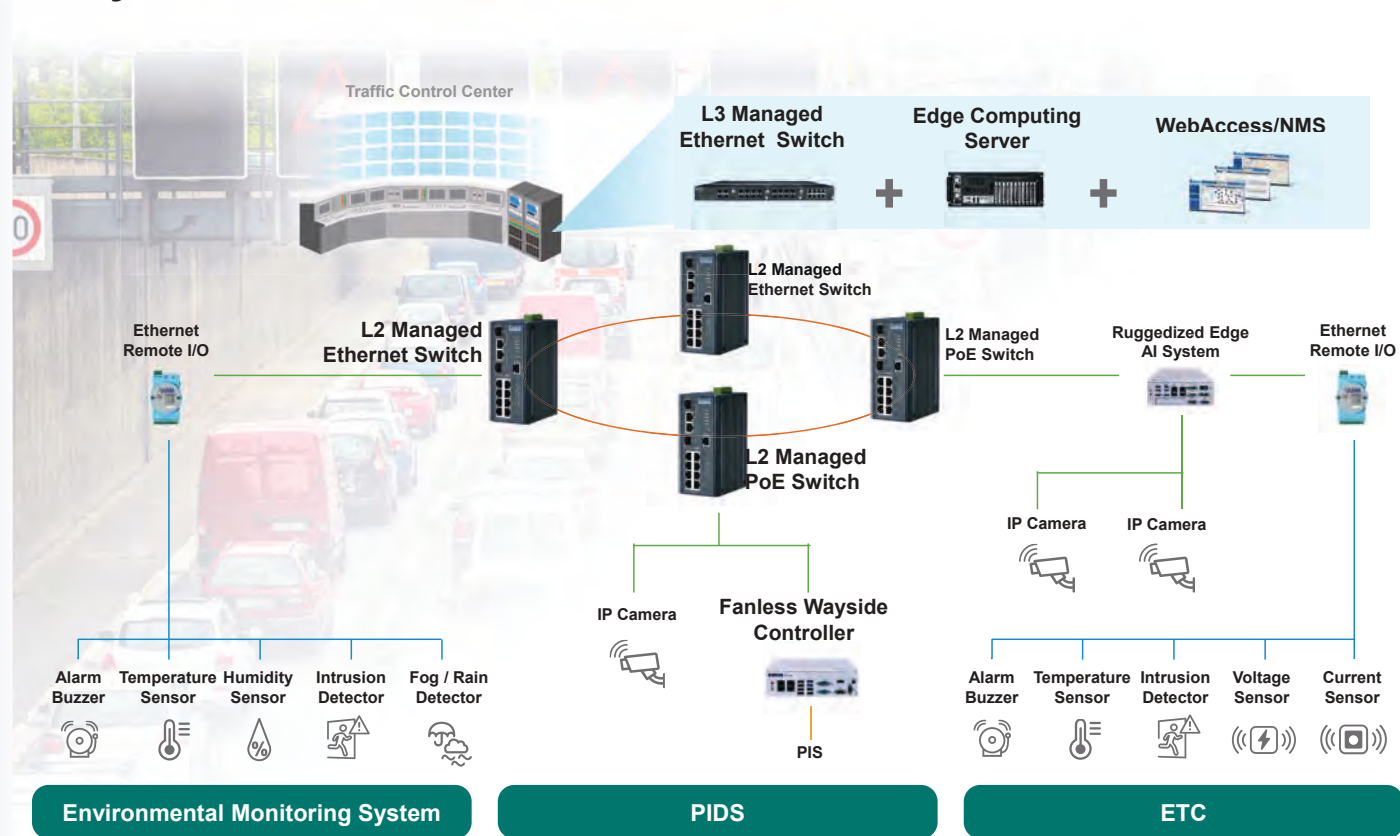
- 8 x Fast Ethernet ports + 4 SFP ports
- Redundancy: X-Ring Pro, RSTP/STP



EKI-7712G-4FPI
L2 Managed PoE Switch

- 8 x Gigabit Ethernet ports + 4 x SFP ports
- Redundancy: X-Ring Pro, RSTP/STP

System Architecture



Smart Tunnel Management

Advantech provides integrated computing and networking solutions designed specifically for tunnel management, ensuring reliable monitoring, proactive emergency responses, and optimal environmental control for safer, more efficient tunnel operations.

Advantages

Comprehensive Monitoring and Alert System

Our fanless roadside controllers and Ethernet remote I/O modules effectively acquire data from smoke, temperature, and air-quality sensors. These solutions trigger immediate alerts through sirens, lighting, and push-button alarms, enabling rapid emergency response and enhanced tunnel safety.

Integrated Surveillance and Environmental Control

Advantech's front-end processors, managed Ethernet switches, and PLCs deliver reliable video surveillance, vehicle detection, speed monitoring, and jet fan system control. These solutions optimize air circulation, traffic management, and security, significantly improving operational reliability and tunnel safety.

Recommend Products



HPC-8208

Fanless front end processors for ISCS



ITA-260

Fanless wayside & roadside controller

*EN 50121-4



ADAM-5000/TCP

PLC for jet fan system operation



EKI-8528

24G+4G combo port L2 managed switch



EKI-5708E-2FI

6FE + 2 x SFP port L2 managed Ethernet switch

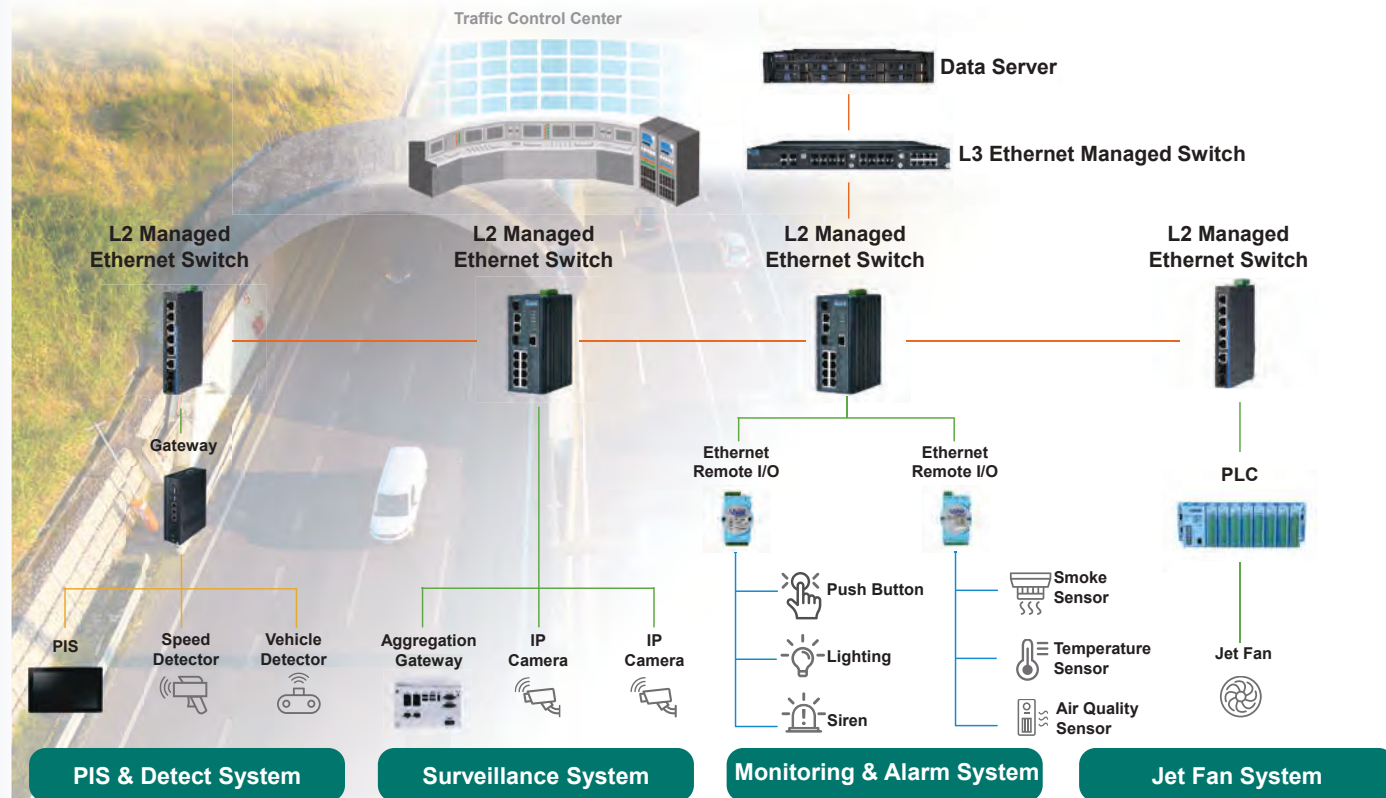


EKI-7710G-2CPI

8GE+2G Port Gigabit L2 managed redundant PoE Switch

*EN 50121-4

System Architecture



Intelligent Bus Solutions for New Energy Vehicles

Optimize bus routes, predict equipment failures, enhance operational efficiency, reduce traffic violations, and increase revenue through advertisement broadcasting.

Advantages

- **Enhancing Public Transportation Safety with AI & Real-Time Data**
TREK in-vehicle computers offer a variety of AI modules, cameras, and IoT sensors to monitor and detect the behavior of drivers, passengers, and pedestrians.
- **Seamless & Smart Passenger Experience**
Aligned with ITxPT standards for frictionless integration, AIOV integration delivers real-time updates, seamless ticketing, enhanced safety measures, and Wi-Fi hotspot services to passengers, ensuring a more informed, connected, and secure travel experience.

Recommend Products



- Dual-system: Intel® & NVIDIA® Jetson Orin™
- 12V/24V E-Mark, ISO-7637-2, dual CANbus, ITxPT

TREK-60/60N
AI Fleet Management



- AI-based object detects passenger and vehicles
- Compliant with BSIS, UNECE R151, R158, R159

TREK-15X series
ADAS Camera



- Sunlight readable: 800 nits
- Wide viewing angle

DSD-5038
38" Signage Display

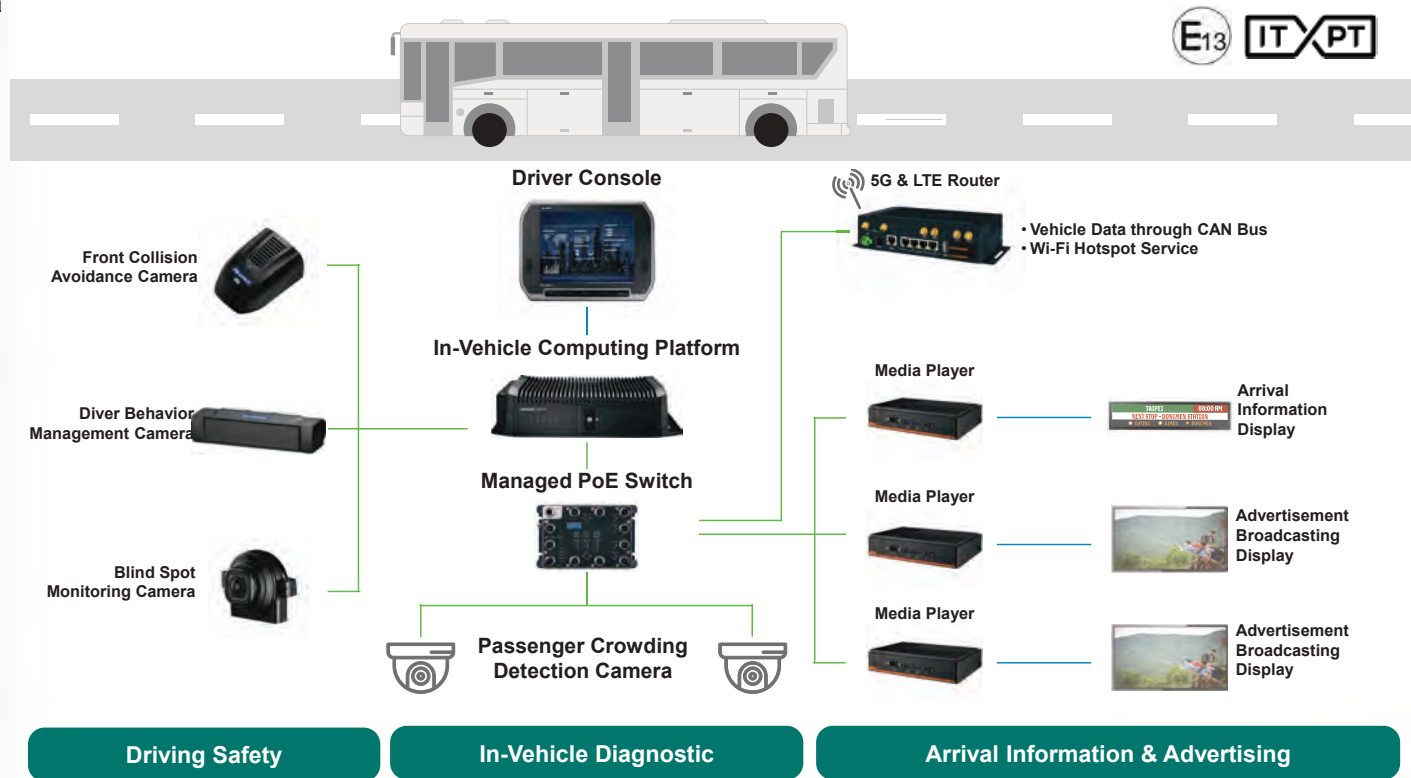


- 8GE PoE + 2GE managed switch
- IP67 / M12
- E-Mark / ITxPT

EKI-9510G-ST
Managed PoE Switch



System Architecture



Connected Airports & Sustainable Aviation

Airports now focus on enhancing the passenger experience by offering seamless intermodal connectivity, real-time data sharing, biometric systems, and automated processes.

Advantages

Streamlining Passenger Flow & Enhancing Security

Airports are increasingly adopting biometric systems for check-in, security, and boarding processes. Automated systems and advanced security measures improve operational efficiency, enhance safety, and boost overall passenger satisfaction.

Autonomous Solutions Boost Baggage Handling Efficiency

Airports are implementing autonomous vehicles for luggage transport and robotics for tasks such as cleaning and maintenance. These innovations enhance operational efficiency, reduce costs, and improve safety—creating a smoother, smarter baggage-handling process.

Recommend Products



- Modularized kiosk system
- Incorporates UTC series with 15"-42" display sizes

UTK Series
Self-Service Kiosk



- NUC-sized edge computer powered by Intel® Core™ Ultra 7
- Hailo-8 M.2 AI module

UBX-330
E-Gate HMI



- 16:9 widescreen display (15"-42")
- Front panel IP65-rated water resistance

UTC Series
Passenger Information System



- 7" all-in-one rugged vehicle HMI
- AI accelerator: Intel®, Coral by Google, or Hailo

TREK-773
Fleet Management System

Application



Self-Service Check-in & Automated Baggage Handling

- Self-check-in kiosks integrate displays, printers, scanners, payment systems, and multiple identification methods into a single system.
- Robotic systems, powered by NVIDIA vision technology, automate luggage sorting and transportation, reducing errors and delays.



Biometric E-Gate Immigration Clearance

- Edge devices use AI for facial recognition, fingerprint scanning, and iris scanning, cross-referencing central security databases to ensure passenger safety.
- Automated gates with clear HMI instructions allow passengers to complete the process independently, minimizing the need for staff intervention.



Autonomous Vehicles at Airports

- Self-driving shuttles and carts transport passengers—especially those with reduced mobility—between terminals and gates.
- Autonomous jet bridges use sensors and cameras to dock with aircraft doors without human operators.
- AGVs (Automated Guided Vehicles) perform cleaning tasks in terminals and conduct maintenance checks on equipment, ensuring a clean and safe environment.



Intelligent Mining

Intelligent mining automation enhances safety, boosts efficiency, reduces costs, and minimizes environmental impact by optimizing resource use and reducing waste.

Advantages

Enhancing Mine Site Safety & Ensuring Regulatory Compliance

Advantech's vision monitoring solution integrates LiDAR, radar, cameras, and IoT environmental sensors. These technologies enhance safety measures, help prevent accidents, and safeguard the lives of miners.

24/7 Mining Operations for Efficiency & Productivity

TREK AI computers help enable autonomous mining operations by streamlining processes and improving equipment utilization. Additionally, by monitoring machinery and equipment conditions through sensors, Advantech's IoT solution can predict potential failures before they occur.

Recommend Products



- 13th Gen Intel® Core™
- V2X communication
- IP65 / 5M3

TREK-60 V2X

Autonomous Vehicle Server



- 10" & 12" PCT 4:3 display
- Windows 11 / Android 12
- IP66 / IK08 / 5M3

DLT-V73 HD

Fleet Dispatch System



- NVIDIA® Jetson Orin™ NX
- 4-ch PoE (optional 4-ch GMSL2)
- IP67 / 5M3

TREK-50N

Rugged Vehicle Control System

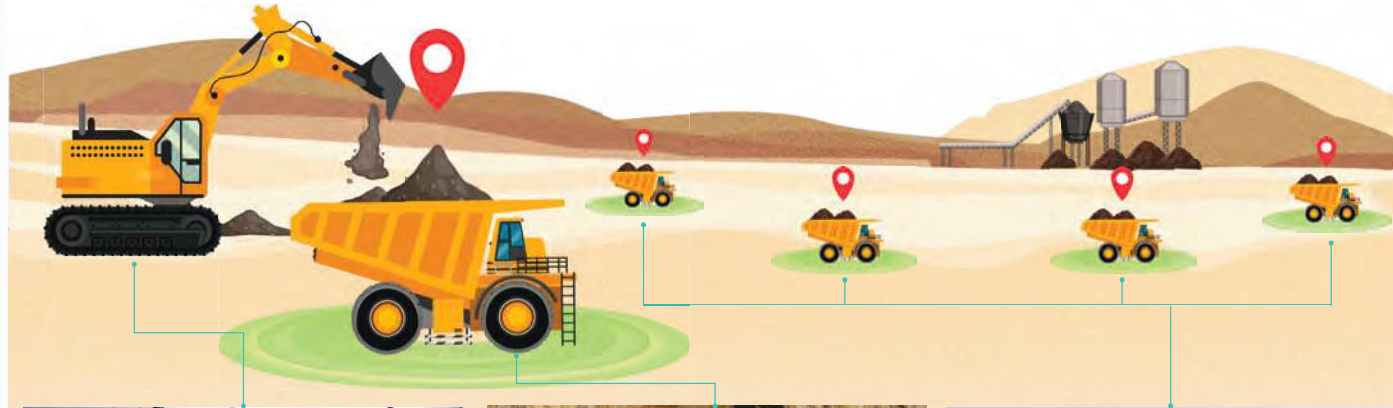


- 8GE PoE + 2GE unmanaged switch
- Wide voltage / Wide temperature
- IP67 / M12 / E-Mark

EKI-9510G

Network Communication

System Architecture



Remote Control /
Autonomous Hauling System



Loading Control



Fleet Dispatch Management

Application Cases & Product Matrix

- Advantech Successful Cases
- EN 50155 / E-Mark Compliant Systems
- Industrial IoT Solution & Offerings

**ADVANTECH**

Highly Accurate and Robust Smart Surveillance System Stops Illegal Fares

Case Study 2



Location:
South Korea



Company:
VISIONIN

Interview with:
Dr. Hak Nam Kim,
the head of research institute,
VISIONIN

Overview

Public transportation can put a great strain on public finances and fare evasion is a real headache for authorities. Fare evasion includes illegal use of discount cards, fare-dodging, and ticket forgery. Cities in South Korea, have implemented methods to minimize, deter, and manage fare evasion.

Challenges / Requirements:

- Public transportation can be a great strain on public finances and fare evasion is a real headache for authorities causing revenue loss.
- You need a reliable, robust, scalable and high computing solution that can run accurate and quantifiable data analysis.

Solution:

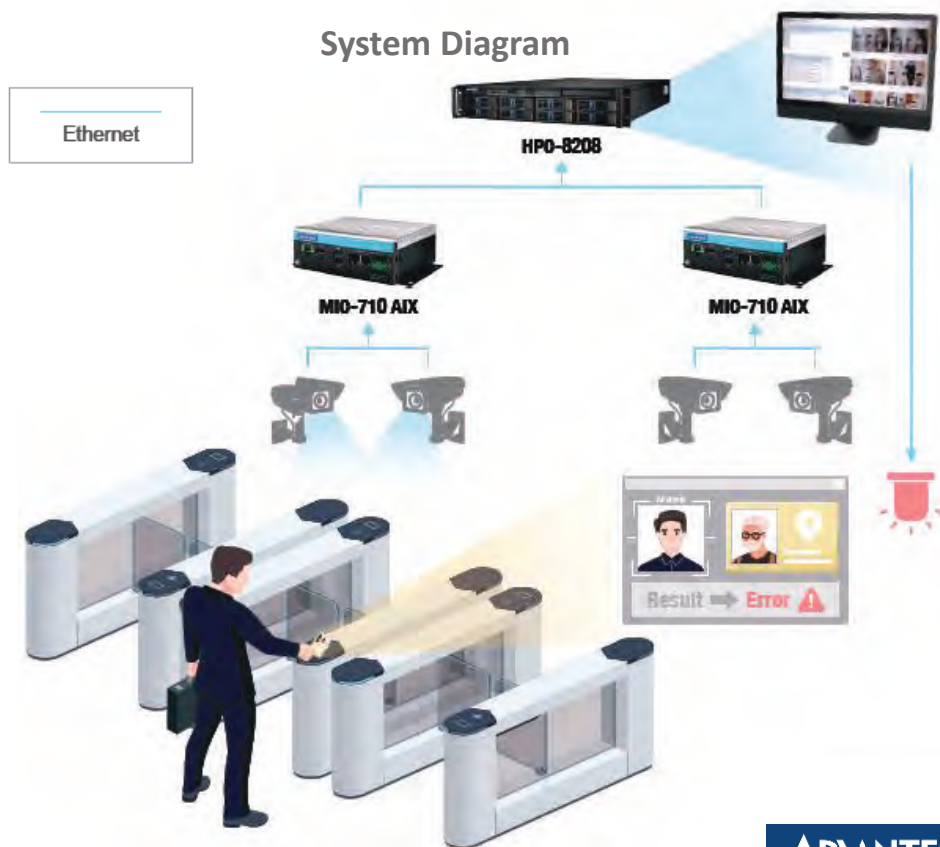
- MIC-710AIX, MIC-720AI, and HPC-8208 Edge Inference
- CCTV, automatic alarms
- Age Inference and pose profile estimation

Benefits:

- The solutions delivered high accuracy, and minimized the risk of false recognition.
- This hardware solution provided high processing capabilities, which ensured functionalities during rush hour.

"VISIONIN aims to provide services throughout the world. Our focus was not only on the equipment performance, but also on A/S and certifications".

Dr. Hak Nam Kim, head of research institute, VISIONIN





Location:

Taiwan

Company:

IronYun USA Inc



Overview

A railway operator sought to enhance safety at level crossings by implementing an automated monitoring system capable of real-time object, pedestrian, and vehicle motion detection, aiming for 99.9% accuracy without human intervention.

Challenges / Requirements:

The railway crossing solution needed reliable performance across varied weather conditions and terrains, integrating edge computing, AI analytics, and 5G for accurate real-time monitoring and hazard alerts.

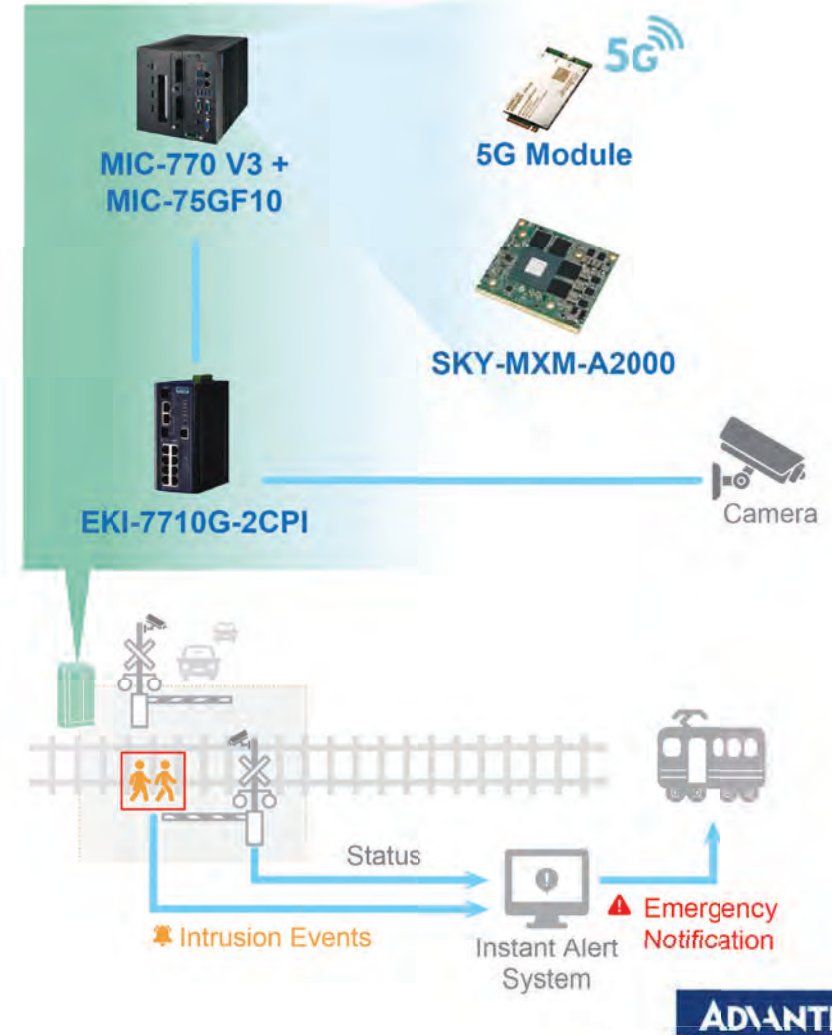
Solution:

Advantech collaborated with IronYun USA, leveraging their VAIDIO AI Vision platform alongside Advantech's industrial-grade edge AI platforms. This integration facilitated swift identification of objects, people, and vehicle movements, achieving continuous, automated monitoring of railway crossings with high accuracy.

Benefits:

- **Enhanced Safety:** Real-time monitoring and AI analytics address driver blind spots at railway crossings, rapidly identifying hazards and providing instant alerts to prevent accidents.
- **Operational Efficiency:** Reliable edge computing quickly processes camera feeds and sensor data, improving response times, reducing manual intervention, and increasing overall crossing management efficiency.

System Diagram



Developing Cost-Effective Smart Solutions for the Transportation Industry

Case Study 4



Location:
Thailand



Company:
IronYun USA Inc

Interview with:
Mr. Yongyuth Areerat, Managing Director,
Sam Technology Support Co.,Ltd

"Advantech provides diversified products and solutions that are resilient and adaptable to apply in various projects."

Mr. Yongyuth Areerat, Managing Director, Sam Technology

Overview

Thailand's Ministry of Transportation needed a smart toll transportation solution with surveillance and classification of vehicles, to help improve traffic flow and face management challenges effectively.

Challenges / Requirements:

- The smart toll stations need industrial-grade computers to be resistant to climate conditions, easy to maintain, durable, cost-effective, and adaptable.
- It was important that industrial-grade technology continues to support legacy technologies such as ISA cards and various other options.

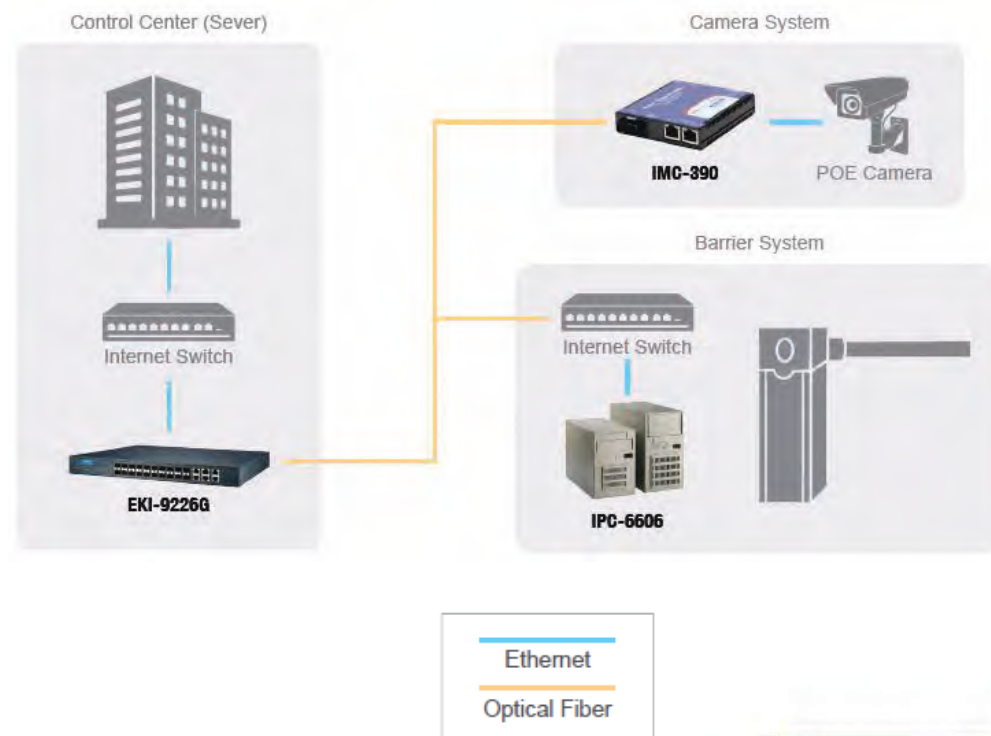
Solution:

- Advantech IPC-6606 wallmount chassis with ISA cards were installed at the toll stations to control the barriers and sensor systems of toll points.
- IMC-390 transmits and receives images via optical fiber in real-time by getting signals at the toll point through the EKI-9226G port.

Benefits:

- The simple-to-maintain solution was compatible with existing technologies and the solution increased operating efficiency by 50%, leading to cost savings of 20% and a 30% improvement overall.

System Diagram



ADVANTECH



Overview

To support Vietnam’s transition to greener urban transportation, a leading public transportation operator partnered with Advantech to implement an intelligent electric bus management system. The goal was to improve operational efficiency, reduce carbon emissions, and provide a safer, smarter commuting experience across major Vietnamese cities.

Challenges / Requirements:

- Analyze and record driver behavior and blind spot detection for better fleet management
- Overcome harsh conditions such as strong vibrations, high temperatures, and ensure voltage protection
- Integrate in-vehicle devices and transmit real-time data to support vehicle management

Solution:

Advantech’s TREK-60 serves as a rugged in-vehicle hub that supports real-time GPS tracking, driver behavior analysis, and AI-powered ADAS integration using onboard cameras. Engineered for harsh conditions, it features wide-temperature operation, anti-vibration design, automotive power protection (ISO 7637-2 compliant), and IP-rated I/O ports. Its robust connectivity via 4G and Wi-Fi ensures seamless data transmission for effective fleet monitoring and vehicle management.

Benefits:

- Enhanced fleet efficiency through real-time tracking and centralized data management
- Improved driver safety with AI-based ADAS alerts and behavior monitoring
- Increased system durability thanks to automotive-grade rugged design
- Reduced maintenance and operational costs through predictive insights and remote diagnostics

System Diagram





Overview

Komatsu, a global leader in construction and mining, is advancing digital transformation through AIoT and autonomous technologies. Partnering with Advantech, the company integrated rugged edge computing and AI analytics into its equipment to enhance autonomy, boost operational efficiency, and improve safety—paving the way for smarter, more automated job sites.

Challenges / Requirements:

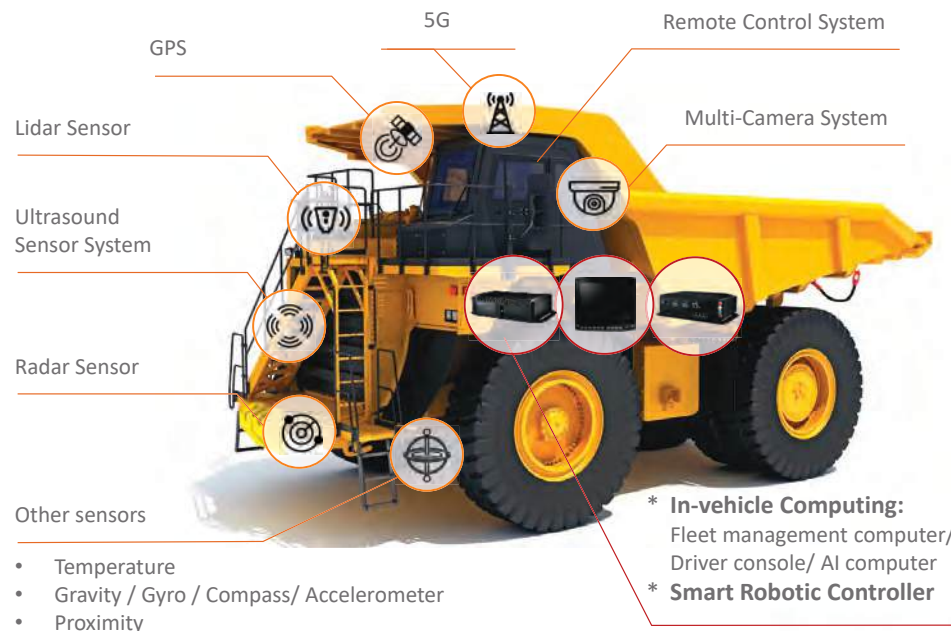
- Process large volumes of sensor and video data in real time
- Maintain stable system performance in harsh environments (dust, vibration, wide temperatures)
- Enable autonomous and remote operation of machinery
- Ensure compatibility across different vehicle models and systems
- Support long-term, reliable operation in remote areas

Solution:

Advantech provided a rugged TREK in-vehicle platform for Komatsu's semi-automated construction equipment to realize features such as 3D modeling manipulation and graphical user interfaces. Advantech also provided ultra-rugged DLT computers to Modular Mining, a Komatsu subsidiary providing operation optimization systems for the mining industry, and to Komatsu's Autonomous Haulage System, the world's first autonomous driving system for large mining dump trucks. Advantech's application-oriented middleware and software also enhances Komatsu's productivity. With the assistance of semi-automated equipment, management has been able to lower the investment criteria for operators.

Benefits:

- Enabled real-time data and AI analysis to support autonomous operation and enhance productivity
- Improved operational visibility for faster, data-driven decisions
- Reduced equipment downtime through predictive maintenance
- Extended system uptime through rugged hardware design and intelligent power management software (voltage protection and controlled startup/shutdown etc.)
- Enhanced site safety with intelligent monitoring systems



EN 50155 / E-Mark Compliant Systems

EN 50155 Rolling Stock Systems



ITA-560
Edge AI Inference
Box Computer
(NVIDIA® Jetson™)



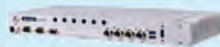
ITA-580
Edge Application
Box Computer
(Intel® Core™)



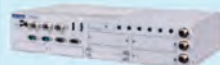
ITA-580G
Edge AI Inference
Box Computer
(Intel® Core™)



**CPCI-S CPU
Boards**
Intel® Core™ /
NVIDIA® Jetson™



ITA-510
Edge AI Inference
1U Rackmount
(NVIDIA® Jetson™)



ITA-520
Edge Application
2U Rackmount
(Intel® Core™)



ITA-520G
Edge AI Inference
2U Rackmount
(Intel® Core™)



MIC-330 V2
3U CPCI-Serial
19" System
(Intel® Core™)



ITA-8100
10.4" LCD Touch
Panel PC
(Intel® Atom™)



ITA-7220
22" LCD 400 nits
Brightness Panel PC
(Intel® Celeron™)



EKI-6333AC
IEEE 802.11
a/b/g/n/ac
Wi-Fi AP/Client



EKI-1652WT
IEEE 802.11
a/b/g/n/ac, M12
Wi-Fi/LTE Router



EKI-9512E
12-Port Ethernet Train
Backbone Router



EKI-9528
28-Port L2 Managed
(PoE) Switch



EKI-9520H
20-Port L2 Managed
(PoE) Switch w/10G



EKI-9510E/G
10-Port L2 Managed
(PoE) Switch

E-Mark In-Vehicle Systems



EKI-9508G-ST
8-Port L2 Managed
(PoE) Switch



TREK-60/60N
Modular Rugged AI System
(Intel® / NVIDIA® Jetson™
optional on 60N)



DLT-V73/V73A
10" / 12" Rugged Vehicle
Mount Computer
(Intel® / Qualcomm®)



AIM-75S/68S
8" / 10" Tablet with
Vehicle Docking
(Intel® / Qualcomm®)



EKI-2708G-PI
8 GE PoE Unmanaged
Switch



TREK-50N
Rugged AI Computer
(NVIDIA® Jetson™)



TREK-773
7" Rugged Compact
Computer
(Intel® Atom™)



TREK-20
Rugged Android
Computer
(Qualcomm®)

Comprehensive Industrial IoT Solution & Offerings

High Performance Computing



HPC-7420
Short-dept Rackmount
Server with ATX/ EATX/
EE-ATX Server Board



HPC-8208
Edge Storage Server
with ATX / EATX
Motherboard



ACP-4340
4U Rackmount IPC with
ATX / uATX
Motherboard



IPC-7130
Desktop/Wallmount
IPC with ATX / uATX
Motherboard

GPU Accelerator & Edge AI



SKY-640 V2
4U Rackmount
Scalable GPU Server
(Intel® Xeon®)



GPU Cards
Embedded GPUs
RTX GPUs
Data Center GPUs



MIC-733
Compact Fanless
Edge GenAI System
(NVIDIA® Jetson™)



MIC-717
AI NVR Solution with
NVIDIA Metropolis
Microservices

Edge Computing



ITA-178
Compact Controller
for Station Self-
Service



*EN 50121-4

ITA-260
Compact Controller for
Wayside & Roadside



UNO-148 V2
Ultra-Compact
DIN-rail PC-based
Control Edge



MIC-770 V3
Modular IPC with
Advantech i-Module
MIC-75G20

HMI Edge



PPC-315
Fanless All-in-One
Slim-Bezel
Panel PC



TPC-115W
Web-Browser Terminal with
Arm® SystemReady IR
Certificate



FPM-221
ErP Certified Rugged
Industrial Monitor



UTC Display
All-in-One Touch
Computers &
Kiosks

Connectivity



EKI-8528
19" Rackmount L3
Modular Managed
Switch



EKI-7428
24G+4G Combo
Port L2 Managed
Switch



*IEC-62443-4-1 / IEC-62443-4 -2 / EN 50121-4

EKI-7710G
8G+2G Combo Port
L2 Managed Switch



ICR-4461
5G & LTE Advanced
High Speed Router

I/O & Camera



AMAX-5580
Control IPC With
EtherCAT Slice IO
Expansion



ADAM-5000/TCP
PC-based
Programmable
Controller



ADAM-6217
Ethernet Remote I/O
with Cloud
Management



ICAM-540
High-End All-in-One
Industrial AI Camera

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Worldwide Offices

Asia Pacific

Taiwan

Toll Free 0800-777-111
Taipei 886-2-7732-3399
Taichung 886-4-2372-5055
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China

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Korea

Toll Free 080-363-9494/5
Korea HQ (Seoul) 080-363-9494/5

Singapore

Singapore 65-6442-1000

Malaysia

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Europe

Netherlands

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Germany

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