

COMPANY PROFILE

Edge AI Computing Solutions

*“Accelerating AI Transformation in
Embedded Markets”*



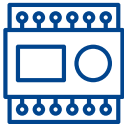
ADVANTECH Industrial IoT
Premier Partner

About EFOREL

Providing Solutions to Help *Digital Transformation*

PT. Eforel Citra Utama has been the leading industrial PC and automation devices distributor in Indonesia since 1994. We offer a total solution that matches your business needs for a **seamless and successful digitalization project**

In an era where digital transformation is inevitable, we are here to support every industrial sector to grow, sustain and gain competitive advantages. Our commitment to providing the **smartest solutions for business owners in Indonesia**



1994 - 2012

Industrial Computer Product

We provide a range of Industrial PCs designed for maximum durability in the most challenging industrial environments and high quality



2012- 2018

Industrial Automation Product

As a distributor of industrial automation, we help you design and implement the perfect automation system for your company's needs.



2018 - NOW

Industrial IoT Solution

We are committed to providing solutions that not only meet but exceed industry expectations with leading-edge technology and unparalleled support

Eforel Vision

To become a trusted distributor of industrial computers and automation equipment in Indonesia by continuing to expand market share & sales value sustainably

Our Misions

To build and maintain a good cooperation and partnership with customers, we :

01

Provide excellent quality technical supports and services

02

Continuously develop skills and knowledge

03

Keep good communications with customers



Project References

Focusing Business

Customers

Project Name

Solutions

Factory Automation and Manufacturing Automation

- Canned Tuna Factory
- Pharmaceutical Industry
- Cable Car Factory
- Feed Factory
- Zipper Factory

- OEE and EMS
- Water Treatment
- IPC Replacement
- SCADA PC Replacement
- OEE

- Web Base OEE and EMS with free Client
- RTU + Web Base SCADA
- Industrial Fan less PC
- Industrial PC Rack mount
- Web Base OEE connect existing PLC

Power and Energy Substation Automation

- PLN
- Schneider Electric
- PJB

- Substation SCADA Integration
- Substation SCADA Integration
- Water Treatment
- PC Replacement

- Industrial Gateway, RTU
- Industrial Gateway, Workstation IPC, Server IPC, HMI IPC.
- Web Base SCADA + RTU
- Replacement commercial PC to Industrial PC

Transportation Port Terminal

- Transjakarta
- KRL
- KAI
- Pelindo

- Gate ticketing and Server PC
- Vending Machine
- Signaling
- Fleet Management

- Industrial Fan less PC
- Industrial Fan less PC and Industrial touch panel monitor
- Industrial Fan less PC Server
- Industrial Tablet

Mining OIL and GAS

- KPP
- PERTAMINA

- Fleet Management
- CEMS

- Mobile Rugged PC
- Web Base SCADA + Remote IO

Our Customer



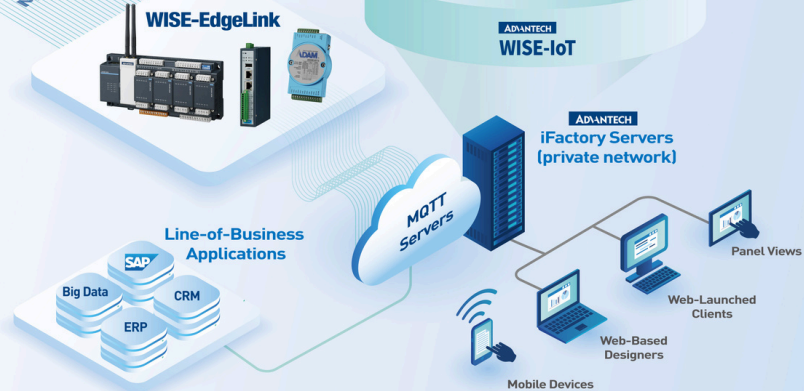
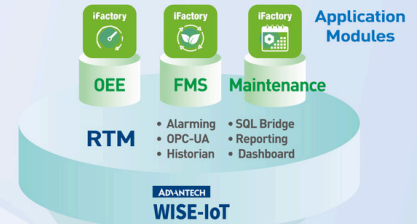
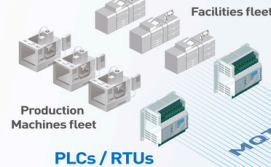
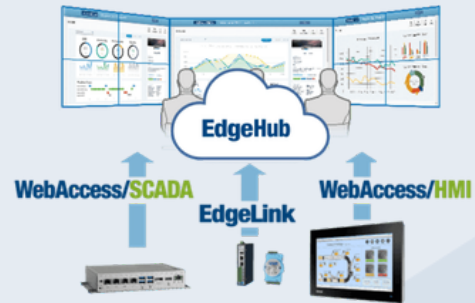
Start Your Digital Transformation

Manufacturing in the past has focused on lean and just-in-time production processes, emphasizing cost reduction, waste elimination, and increased efficiency of the entire organization through customer demand-pulling processes. Nowadays, digital technology provides fundamental value that presents commercial value through the immediacy and accuracy of information driving rapid responses and decision-making. Many manufacturers who have progressed through Industry 2.0 (automation) and Industry 3.0 (informatization) are now preparing to move toward Industry 4.0 (intelligentization)

<p>Focused Sectors</p>	 <p>iFactory</p>	 <p>Industrial Equipment Manufacturing</p>	 <p>Energy & Utilities</p>	 <p>Transportation</p>	 <p>EdgeSync 360</p> <ul style="list-style-type: none">  EdgeHub  DeviceOn  WebAccess/SCADA  WebAccess/CNC  EdgeLink <p>XNavi</p> <ul style="list-style-type: none"> AINavi VisionNavi HMINavi DAQNavi MotionNavi 		
<p>Edge computing</p>	 <p>Servers and IPCs</p>	 <p>AI Inference Solutions</p>	 <p>Industrial HMI</p>	 <p>Fanless Embedded PCs</p>		 <p>Automation Controllers</p>	 <p>Domain-focused IPCs</p>
<p>Industrial communication</p>	 <p>Industrial Ethernet Switches</p>	 <p>Intelligent Protocol Gateways</p>	 <p>Industrial Media Converters</p>	 <p>Serial / USB Communications</p>		 <p>Cellular Routers & IoT Gateways</p>	 <p>Wireless APs/Clients</p>
<p>Edge Sensing</p>	 <p>Wireless I/O and Sensors</p>	 <p>Remote I/O</p>	 <p>DAQ & Signal Conditioner</p>	 <p>EtherCAT I/O Systems</p>			

WebAccess/SCADA Software

WebAccess/SCADA is a 100% web-based SCADA system which not only acquires and stores data, but visualizes it with a HTML5-based intelligent dashboard.



Main Feature:

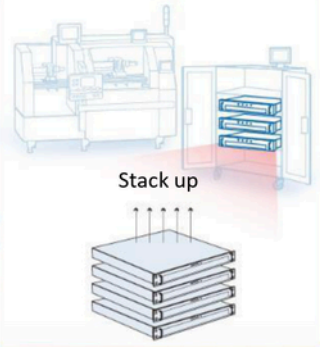
- Enables 100% web-based remote engineering, monitoring, and control
- Driver support for major PLCs, PACs, I/O modules, CNCs, network switches, and computer platforms
- Supports standard protocols including Modbus, OPC UA, OPC DA, Ethernet/IP, DNP3, SNMP, and BACnet
- Easily integrated with third-party software (e.g., MES and ERP) via open interface web services (RESTful API and SignalR)
- In-place restore mode for automatic data access with improved query speeds
- Soft license online authentication

Industrial Computer Series

Rack Mount (2U)



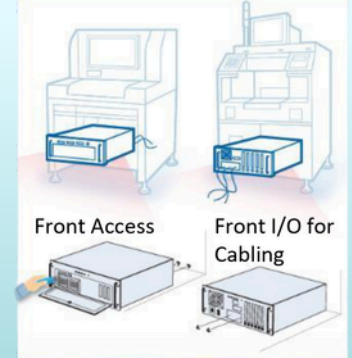
3 Slots



Rack Mount (4U)



7 - 18 Slots

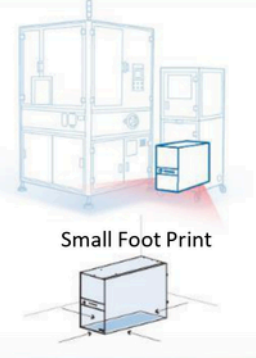


Tower

IPC-7130



4 or 7 Slots

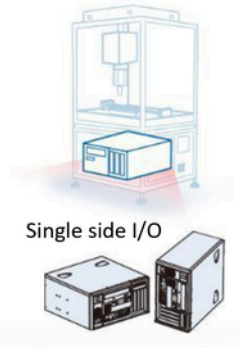


Wallmount/Desktop

IPC-5120



5 or 7 Slots



Industrial Motherboard

Ranging from UTX motherboards, Mini-ITX motherboard and Micro ATX motherboard are ideal for customers who are used to using commercial off-the-shelf products but require expansion and industrial features such as longevity and reliability.



Industrial HMI and Monitors



Machine Builder



Packaging



Automotive



Food & Beverage



Pharmaceutical



Oil & Gas



Machine Monitor Control



Energy Control Cabinet



Production Line Visualization



Central Control Visualization

WebAccess/SCADA

HMINavi

EdgeSync 360

CODESYS

THINMANAGER

3rd Party Software



Advanced Industrial Monitors
FPM-200/700 Series



Rugged Industrial Monitor
FPM-3000 Series



Computing Box Modues
TPC-B300/B500/B600 Series



Panel Modues
FPM-D Series CE/HE



PPC-600 Series / PPC-MB Series

Industrial Monitors

Modular HMI & Monitors

Configurable Panel PC & MotherBoard



RISC Based
PPC-100 Series



ARM-Based
TPC-100W/100WX Series



General-Purpose Analog I/O
TPC-300 Series/ PPC-300 Series

All-in-One HMI



High Brightness
TPC-100WX Series



Explosion-Proof
TPC-318WH



All-Around Water-Proofed
SPC-Series

Domain-Focused HMI

Advantech HMI and Panel PC series contains Modular HMI, All-in-One HMI, Configurable Panel PCs, Domain-Focused HMI, and Industrial Monitors tailored for smart factory applications.

RS-485 I/O

RS-485/USB I/O

Ethernet I/O

OPC UA I/O

Modular I/O

Robust & EMC Level 4

Daisy Chain



ADAM-4000



ADAM-4100



ADAM-6000



ADAM-6200



ADAM-6300



ADAM-5000 4/8 Slots
Modular I/O

Modbus RTU

Modbus TCP

OPC UA

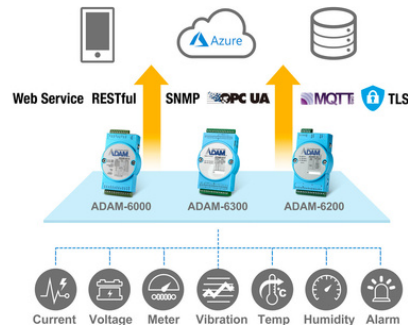
Modbus RTU / TCP

Feature Remote I/O Module

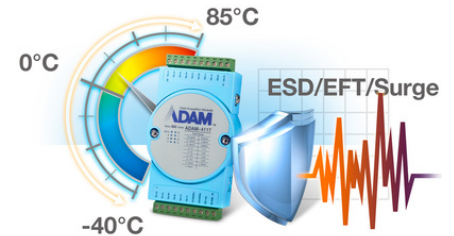
Web Service RESTful API MQTT SNMP



Wide Range of Remote I/O
Modules to Meet Diverse Needs

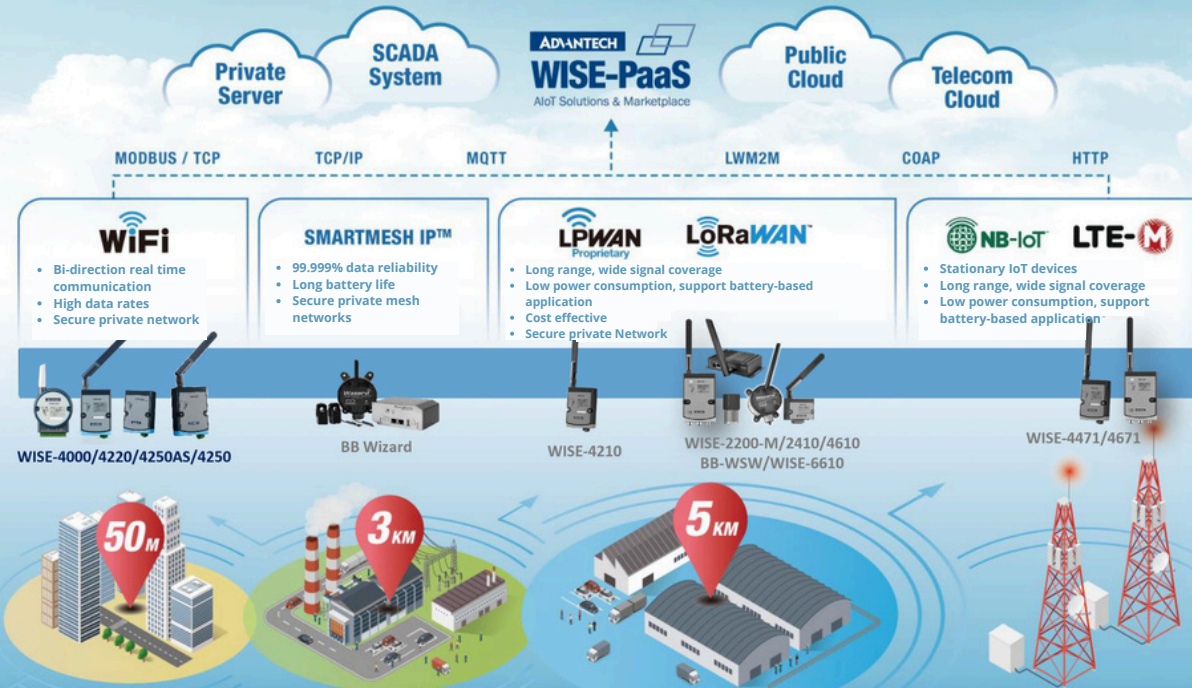


IoT Protocols Ready for Cloud
Services and IoT APPs



Robust and Secured Design for
Wide Industrial IoT Applications

Industrial Wireless Solutions



Gateway, Controller and AP

Proprietary LPWAN (SUB-G) Access Point LoRaWAN Gateway RFID Gateway

Wireless I/O Module

WiFi 2.4GHz/5GHz I/O Module Proprietary LPWAN (SUB-G) I/O Module LoRaWAN I/O Module

NB-IoT/LTE-M I/O Module Wireless Sensor Nodes & Kits

IoT Intelligent Sensor

LoRaWAN Smart Condition Monitoring Sensor Stack Light Monitoring Sensor

With developments in wireless and cloud technologies, more and more remote monitoring applications have adopted cloud services for wide area management systems. To shorten the gap between the field site data and the cloud, Advantech provides wireless I/O and sensor modules that can get and pass data directly to the cloud by utilizing wireless communication technology, such as Wi-Fi, 4G, LoRaWAN, NB-IoT/LTE-M, and proprietary LPWAN (Sub-G) through IoT protocols.

Industrial Ethernet Switches

Advantech's industrial Ethernet switch solutions provide an abundance of options, including Gigabit Ethernet switches.



Feature Highlights



Highly Versatile Switch Products



Rugged Communication Solutions



Plug-and-Play



Reliable Layer 2
Managed Switches

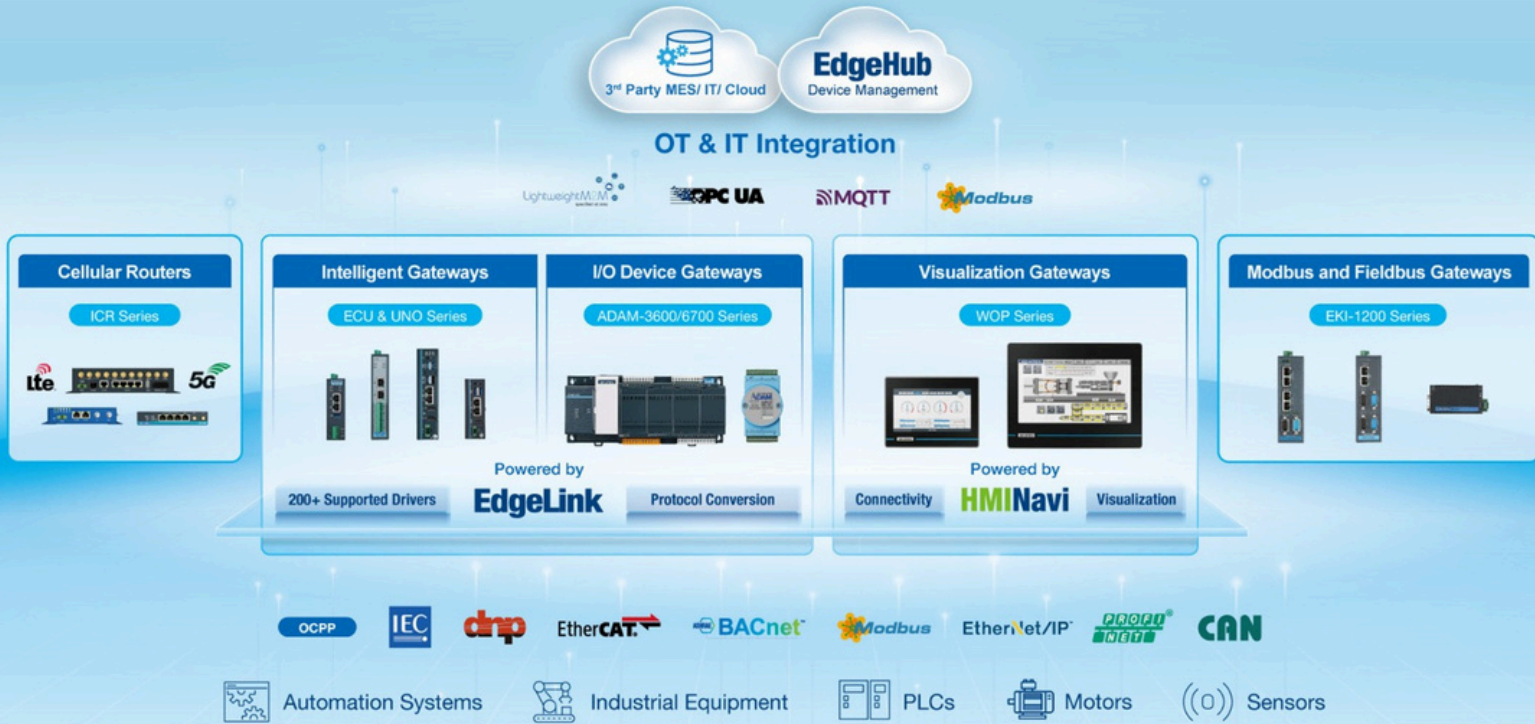


Supports PoE
(Power over Ethernet)



Fiber Connectivity for Long
Transmission Distance

Industrial Gateways



Advantech provides different types of industrial gateways with data monitoring software to meet your needs for data management. These devices, serving as gates between multiple networks, bridge the gap from the field to cloud. Their flexible communication protocols support diverse applications in a wide range of industries. Advantech industrial gateways can be classified into five categories

Prognostics and Health Management Solutions

Smart Sensor Vibration & Temperature Monitoring



Details

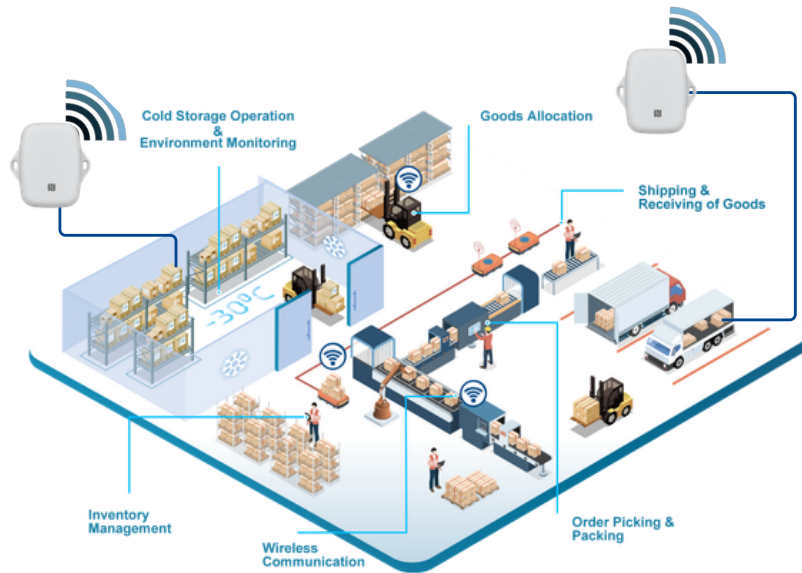
The WISE-2410 sensor captures and transmits vibration data wirelessly via LoRaWAN to the WISE-6610 gateway. This gateway forwards the processed data to the MIC-770 server in the control room, allowing operators to visualize and monitor asset health in real-time.

Conclusion

PHM is executed by WISE-2410 sensor, which continuously calculates vibration eigenvalues to accurately diagnose machine fatigue. This allows for predictive maintenance identifying potential mechanical failures early

Environmental Sensing Solutions

Ensuring Food and Pharmaceutical Safety



Details

LEO-S552TH and WISE-6610 are Advantech solutions for real-time cold storage and logistics monitoring. In the control room, the MIC-7000 Series industrial PC centralizes and processes sensor data, enabling stable 24/7 operation and seamless SCADA/HMI integration.

Conclusion

The implementation of LoRa sensors and centralized gateways delivers continuous, long-range, and low-power monitoring of temperature and asset conditions across cold storage and warehouse areas.



High Performance Embedded Box IPC (MIC-7000)

The compact modular PC support i-module expansion to satisfy diverse application requirements. Modular computer reduces lead time for CTOS due to easy configuration and can be widely deployed for factory and machine automation.



Edge Computing



Flex I/O



Ruggedized Design

Product Offering



MIC-770 V2



MIC-770 V3



MIC-780



Memory

SODIMM DDR4

SODIMM DDR5 5600

SODIMM DDR5 6400

Display

VGA and HDMI output

VGA and HDMI output

3 x displays – 2 x HDMI/1 x DP

Supported OS

Windows 10/11 Pro, 10/11 IoT Enterprise LTSC, Linux OS

Features

- Rugged design & high performance for edge AI computing system
- Supports built-in AI-driven applications for various vertical markets
- Collaboration with NVIDIA to provide embedded GPU solution with over 5-year longevity

Applications



AGV / AMR



Machine Vision / AOI



Weighing System



Vibration & Noise Testing



Harsh Environment



Outdoor Equipment

Advantech i-Module Series

i-Module series comprise optional expansion modules that are compatible with industrial modular PCs such as MIC-7000 series systems.



Product Offering



MIC-75M10

- 1x PCIe x16
- Dimension with system (WxHxD): 97*x192x230 mm



MIC-75M20-00B1

- 1x PCIe x16, 1x PCIe x4
- Dimension with system (WxHxD): 123*x192x230 mm



MIC-75M20-01A1E

- 2x PCIe x8
- Dimension with system (WxHxD): 123*x192x230 mm



MIC-75M11

- 1x PCIe x16, 1x PCI
- Dimension with system (WxHxD): 123*x192x230 mm



MIC-75M40

- 1x PCIe x8, 3x PCIe x4
- Dimension with system (WxHxD): 163*x192x230 mm



MIC-75M13

- 1x PCIe x16, 3x PCI
- Dimension with system (WxHxD): 163*x192x230 mm



MIC-75S20

- 1x PCIe x16, 1x PCIe x4
- 2x removable storage bays
- Dimension with system (WxHxD): 163*x192x230 mm



MIC-75G20

- 1x PCIe x16, 1x PCIe x4
- 1x NVIDIA 250W double deck, double-fan GPU
- 2x removable storage bays
- Dimension with system (WxHxD): 187x192x350 mm



MIC-75G30

- 2x PCIe x16 (Signal is x8)
- 1x PCIe x4
- 2x NVIDIA 250W 2.75 deck, triple-fan GPU
- 2x removable storage bays
- Dimension with system (WxHxD): 280x192x385 mm

Features

- Compatible with a wide range of NVIDIA GPU cards, including high-end models requiring a 350W power supply.
- Enabling optimized thermal management with a powerful PWM system fan and supporting operating temperatures from -10~60°C.

Wireless Vibration Monitoring Solution for Paper Mills

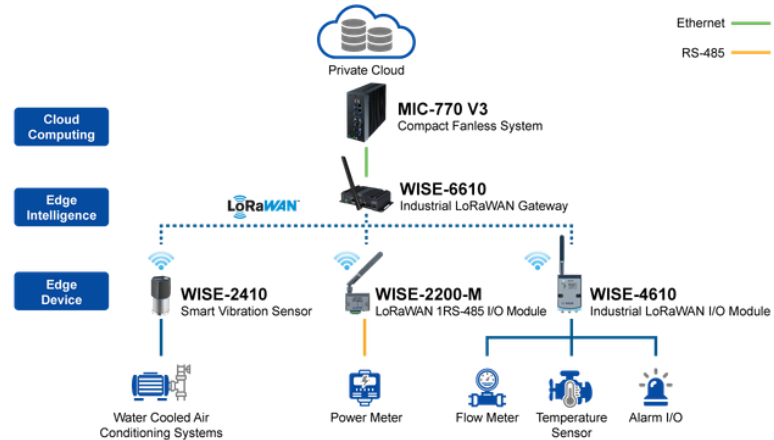


Conclusion

WISE-2410 and WISE-6610 are Advantech product solutions based on the LoRaWAN long-distance, high-penetration, and low-power consumption wireless technologies that are highly integrated with industrial control applications.

This solution achieves remote device monitoring and preventive diagnosis through the acquisition of equipment vibration data. The solution greatly reduces equipment downtimes that cause production losses and industrial accidents.

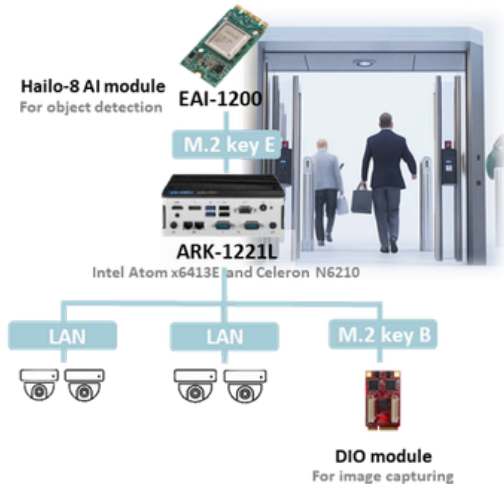
LoRaWAN Facility Monitoring Enhances Hospital Operational Efficiency



Conclusion

The LPWAN technology and plug-and-play product design ensure the stability and quick and easy deployment of the facility monitoring system. In addition, the WISE-2410 and WISE-4610 are battery-powered and support industrial control protocols, enabling high-performance operation in areas where power supply is not feasible, and supporting a wide range of application requirements, including RTU RS-485 and TCP support for SCADA systems.

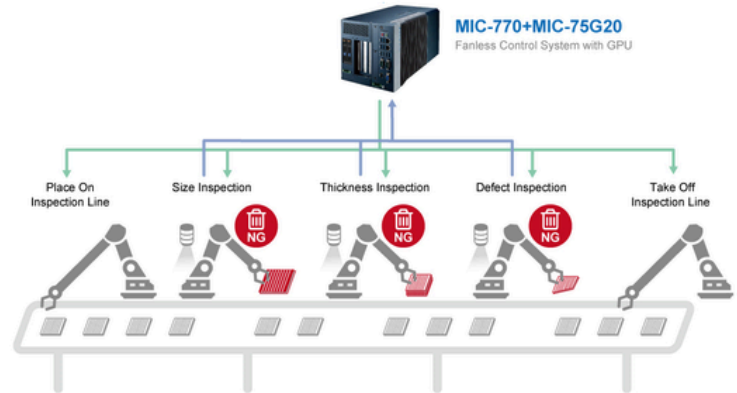
Harnessing AI for Security Screening in Public Venues



Conclusion

Intelligent detection systems are essential for securing public venues such as schools, stadiums, shopping centers, and hospitals with large crowds. The global concealed weapons detection market, valued at \$1 billion in 2023, is projected to exceed \$2 billion by 2030. Traditional security measures, such as passive cameras and metal detectors, have limitations, including slow queues and reliance on post-incident evidence. Crowded environments and varied contraband further complicate inspections. To address these challenges, the customer adopted an AI-powered security screening solution to enhance efficiency, reduce wait times, and improve user experience.

Connector Manufacturer Improves Quality and Efficiency with AI System



Conclusion

the connector manufacturing company transformed its manual visual inspection process by integrating Spingence's AINavi AI visual defect detection software with Advantech hardware, specifically the fanless MIC-770 edge AI system and the SKY-6400/SKY-6420 industrial GPU servers, to automate defect detection, significantly improve product quality, reduce labor costs, and increase efficiency, enabling stronger client trust and scalable production growth.

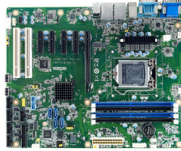
Industrial Server



HPC-8208

2U Rackmount Chassis for ATX/EATX Motherboard with 8 Hot-Swap HDD Trays

ATX Motherboard



AIMB-787

LGA1200 10th Generation Intel Core i9/i7/i5/i3 ATX with DP/DVI/VGA, DDR4, USB 3.2, M.2

Fanless Computer



UNO-2372G V2

Small-Size Modular Embedded Box PC with Intel Celeron J6412

Industrial Monitor



FPM-215

15" XGA Industrial Monitors with Resistive Touch Control, Direct HDMI, DP, and VGA Ports

Vehicle Mount PC



TREK-773

7" All-in-One Ultra Rugged Mobile Data Terminal

Rackmount IPC



Quiet 4U Rackmount Chassis with Dual Hot-Swap SATA HDD Trays

Server Boards



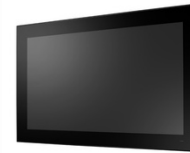
5th/4th Gen Intel Xeon Scalable ATX Server Board with 8x DDR5, 3x PCIe x16, 8x SATA, Dual 10GbE, and IPMI

Modular IPC



Compact Fanless System with 10th Gen Intel Xeon/Core i CPU Socket (LGA 1200)

Fanless Panel PC



21.5" Fanless Widescreen Panel PC with Intel 13th Gen Core i7/i5/i3 Processor

In-Vehicle AI PC



Rugged In-Vehicle Edge AI Platform with 8 Channel PoE for Harsh Environments

ACP-4320MB

ASMB-817

MIC-770 V2

PPC-421W

TREK-60

Industrial Gateway**Ethernet I/O****Unmanaged Switch****Serial I/O Module****Vibration Sensor****ECU-1051TL**

Cloud enabled Intelligent Communication Gateway for IIOT application

ADAM-6017

8-ch Isolated Analog Input Modbus TCP Module with 2-ch DO

EKI-2528

5-port Unmanaged Industrial Ethernet Switch

ADAM-4055

16-ch Isolated Digital I/O Module with Modbus

WISE-2410

LoRaWAN Wireless Condition Monitoring Sensor

Intelligent RTU**Remote I/O****Managed Switch****Intelligent Sensing****LoRaWAN Gateway****ADAM-3600**

8AI / 8DI / 4DO / 4-Slot Expansion Wireless Intelligent RTU

ADAM-6250

15-ch Isolated Digital I/O Modbus TCP Module

EKI-7706

4GE+2G SFP Port Gigabit Managed Redundant Industrial Switch

LEO-S552-TH

LoRaWAN Temperature/Humidity Sensor

WISE-6610 V2

Industrial LoRaWAN gateway with AS923 MHz and Edgelink

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