

# WISE-IoT Application Stories





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» Advantech WISE-IoT

# Application Stories

# Smart Manufacturing

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# Minimizing Production Downtime in Food & Beverage Manufacturing

## Challenges & Requirements

- **Downtime Impact on Productivity and Profitability:** Downtime in food and beverage manufacturing, whether planned or unplanned, is a major challenge. It accounts for productivity losses of 5%-20% and can cost thousands of pounds daily.
- **Manual Systems and Their Limitations:** Traditional manual tracking methods are error-prone and fail to provide real-time insights, making it difficult for manufacturers to identify and address downtime causes efficiently.
- **IIoT Solutions for Downtime Optimization:** Leveraging Industrial IoT (IIoT) technologies, such as IoTSuite, enables manufacturers to capture real-time machine data, automate root cause analysis, and enhance Overall Equipment Effectiveness (OEE).

## Benefits

- **Improved Efficiency:** Real-time monitoring and automated tracking minimize production delays and enhance Overall Equipment Effectiveness (OEE).
- **Accurate Data Collection:** Digital systems eliminate human errors, providing reliable insights for better downtime management.
- **Optimized Operations:** Advanced tools streamline changeovers and planned maintenance, reducing production interruptions and maintaining hygiene standards.

**100%**  
Downtime Tracking

**+4~8%**  
Availability Increase



## Feature Products

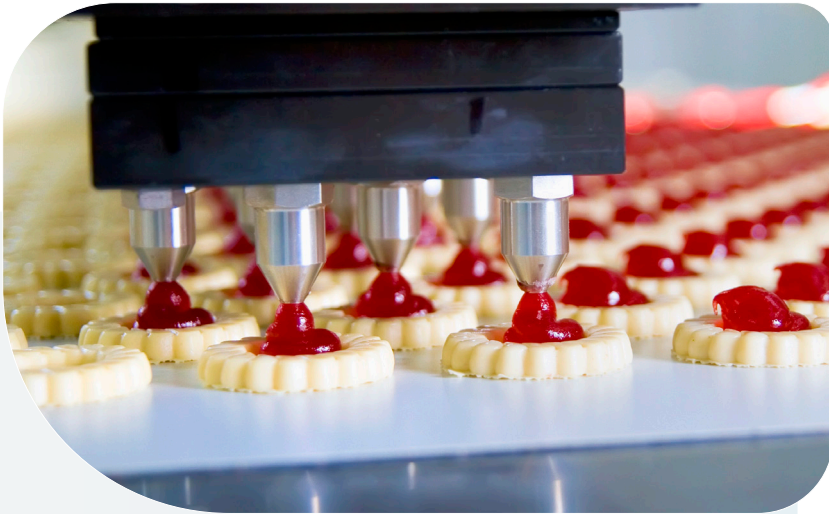
**IoTSuite**, a cloud-native and low-code IoT tool platform, can assist various industries with data collection, IT/OT integration, analysis, and management.

**OEE** Overall Equipment Efficiency I.App.

**FMS** Facility Management Sustainability I.App.

**ECU-1051** Ethernet protocol gateway with **EdgeLink**.





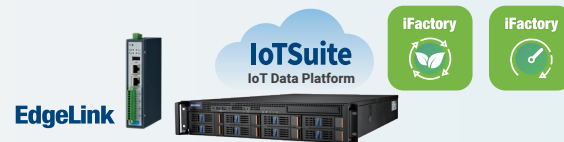
### Feature Products

**IoT Suite**, a cloud-native and low-code IoT tool platform, can assist various industries with data collection, IT/OT integration, analysis, and management.

**OEE** Overall Equipment Efficiency I.App.

**FMS** Facility Management Sustainability I.App.

**ECU-1251** Ethernet protocol gateway with **EdgeLink**.



# IoT-Powered Production Visibility and Efficiency in Baking Operations

## Challenges & Requirements

- **Lack of Unified Monitoring System:** The biscuit production workshop currently lacks a centralized platform for monitoring the baking process, making it difficult to track real-time parameters and ensure safety.
- **Personnel Safety Risks:** The absence of systems to monitor gas leaks and employee health metrics poses risks to personnel safety.
- **Product Quality Assurance:** Without real-time monitoring and alert systems, it is challenging to maintain consistent product quality and quickly address anomalies in the production process.

## Benefits

- **Enhanced Safety Management:** Real-time gas detection and employee health monitoring ensure a safer working environment and reduce risks of accidents.
- **Improved Operational Efficiency:** Centralized monitoring of equipment status and process parameters enables better oversight, faster anomaly detection, and smoother operations.
- **Scalability and Customization:** Advantech's low-code IoT platform allows for easy customization and future expansion to meet evolving management needs across other workshops.

# Leading Asian Food & Beverage Group Achieves ESG Sustainability with **iEMS, WISE-IoT Energy Management** Solution

## Challenges & Requirements

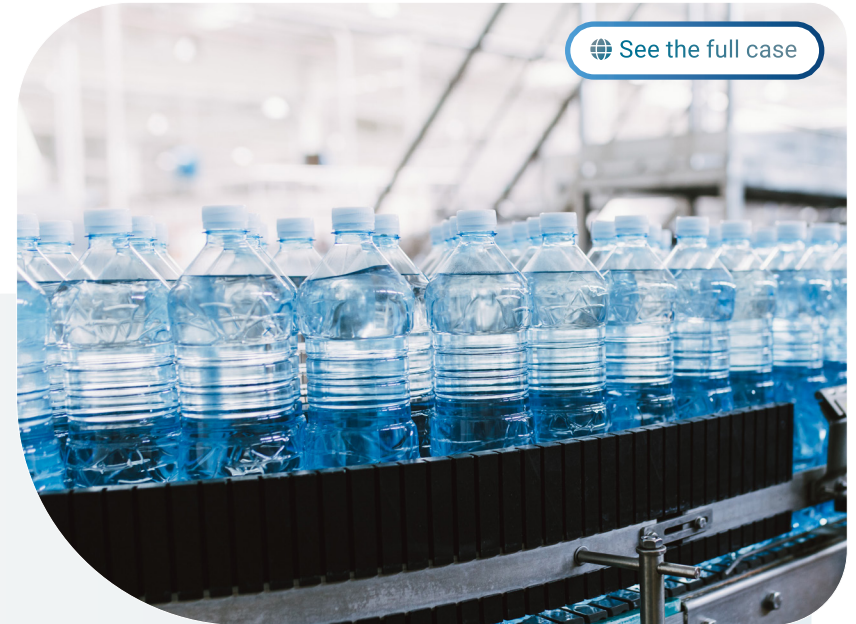
- **Industry Challenges:** The food and beverage industry faces rising raw material and energy costs, tightening profit margins, and increasing competition.
- **Manual Management Issues:** The group's reliance on manual data recording led to inefficiencies, limited accuracy, and difficulty in comparing energy usage across factories.
- **Goal-Driven Energy Management Solution:** The group implemented Advantech's WISE-IoT Intelligent Energy Management Solution (iEMS) across 35 factories to automate processes, centralize energy management, and enhance efficiency.



## Benefits

- **Improved Data Efficiency:** Automated data collection and summarization greatly reduced manual processing time, enhancing operational efficiency.
- **Enhanced Energy Utilization:** Transformed energy data into actionable insights, improving energy efficiency and reducing waste.
- **Transparent and Accurate Management:** Enabled precise energy allocation to products and equipment, supporting optimization and further energy savings.

[See the full case](#)



## Feature Products

**iEMS solution** is a one-stop solution that equips enterprises with effective tools for carbon asset emission management, energy management, and key equipment energy consumption management.

**ECOWatch** a core product within the iEMS solution, tracks energy and renewable energy performance KPIs, conducts multi-dimensional analysis of energy data to reduce costs, manages energy conservation projects, and ensures ISO 50001 compliance.





### Feature Products

**OEE** Overall Equipment Efficiency I.App.

**MIC-770 V2** Compact Fanless System with 10th Gen Intel® Xeon® / Core™ i CPU Socket.

**ECU-1251** Ethernet protocol gateway with **EdgeLink**.

**ADAM-6051** Digital I/O Modbus TCP Module.

**WOP-210K-NAE** 10.1" WSVGA Operator Panel Installed with HMINavi Software.

# Driving Digital Transformation in Thailand's Agro-Food Sector with Smart Manufacturing Solutions

## Challenges & Requirements

- **Addressing Industry Challenges:** Tackling issues like food supply, security, and waste through smart manufacturing technologies.
- **Current Limitations:** Thailand's agro-food sector operates at low OEE levels (40%-60%), below the world-class benchmark of 85%.
- **Collaborative Efforts:** Partnerships like iRev and Advantech drive digital transformation by bridging IT and OT gaps.

## Benefits

- **Improved Data Accuracy:** Transitioning to digital data collection eliminates errors and provides real-time insights.
- **Optimized Productivity:** Smart solutions enhance OEE and overall efficiency.
- **Sustainability Goals:** Digital transformation lays the groundwork for energy efficiency and long-term sustainability.

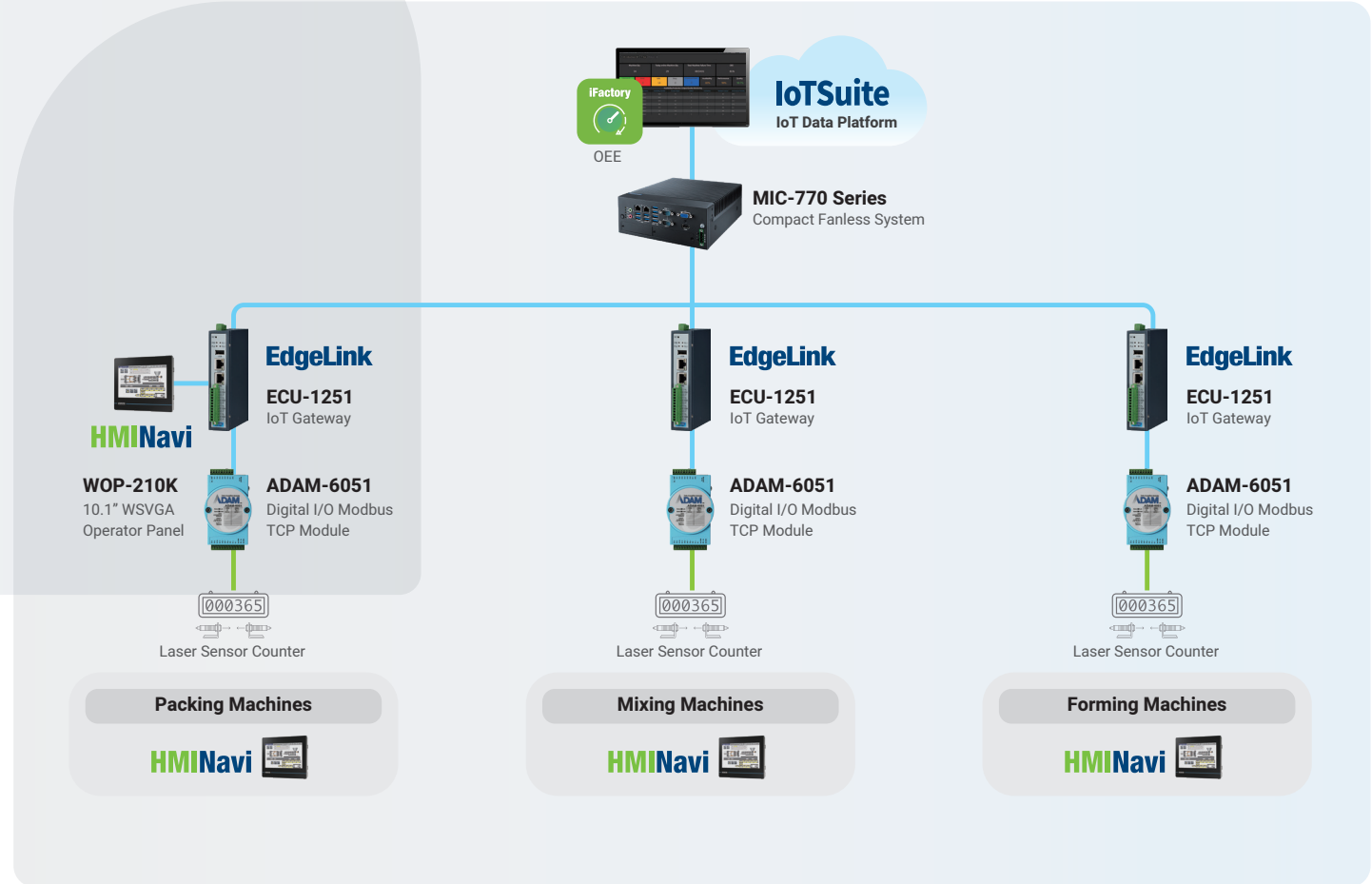


## Driving Digital Transformation in Thailand's Agro-Food Sector with Smart Manufacturing Solutions

The customer adopted Advantech's **MIC-770** fanless edge IPC to enable real-time production data processing, intuitive dashboards, and advanced data visualization.

**ECU-1251** IoT gateways connected to PLC-equipped machines, while **ADAM-6051** I/O modules were used on non-PLC machines like thermo-packers and stuffers—both integrating seamlessly with the **OEE** system.

iRev also provided **WOP-210K-NAE** HMI tablets with a simple UI, allowing shop floor staff to monitor production and input defect data—streamlining data collection and reducing errors.



# Vishay Leverages iEMS Solution for Energy Management across Asia-Pacific

“  
Advantech and Vishay share a common commitment to sustainability goals for our planet, and both companies are actively involved in promoting ESG.  
”  
- Mr. Hai Tsai Asia-Pacific Senior Director of iEHS, Vishay Intertechnology

## Challenges & Requirements

- **Data Integration Gap:** Energy data scattered across factories, lacking centralized oversight and cross-site performance comparison.
- **Operational Inefficiency:** HVAC and other key systems relied on manual checks and adjustments, limiting responsiveness and driving up costs.
- **Sustainability Mandate:** Vishay aimed to build a measurable, ISO 50001-compliant framework to improve energy efficiency and support long-term ESG goals.

## Benefits

- **Centralized Efficiency Gains:** Unified monitoring across 10+ Asia-Pacific factories enabled faster decisions and consistent management strategies.
- **Proven Energy Savings:** AI HVAC optimization cut energy use by 15% and improved maintenance efficiency by 20%, lowering operational costs.
- **ESG Compliance & Impact:** Delivered transparent reporting, reduced carbon emissions, and aligned operations with global sustainability commitments.

**+15%**

Equipment Energy  
Efficiency Improve

**+20%**

Maintenance  
Efficiency Increase



[See the full case](#)

## Feature Products

**iEMS solution** is a one-stop solution that equips enterprises with effective tools for carbon asset emission management, energy management, and key equipment energy consumption management.

**ECOWatch**, a core product within the iEMS solution, enables energy and renewable KPI tracking, cost-saving analytics, conservation project management, and ISO 50001 compliance.

**HVAC**, another application within the iEMS solution, applies AI control to optimize HVAC system performance, enhance operational efficiency, and reduce energy costs.



## Central Management

iEMS



High Performance Server

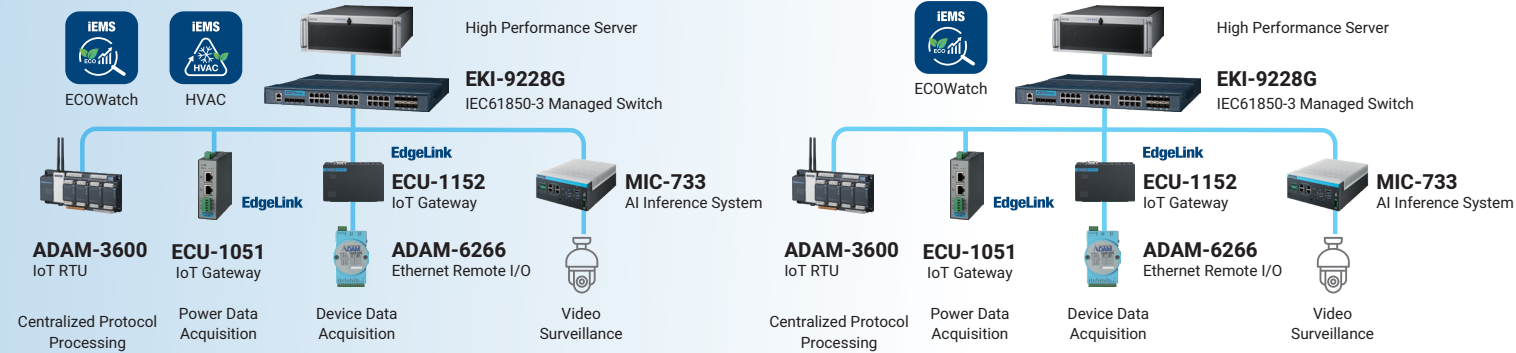


## Edge Site

### Plant 1

### Plant 2

### Plant 3



## Equipment

Facility Utility Systems

Meters & Instrumentation

Vishay Leverages iEMS Solution for **Energy Management** across Asia-Pacific

Advantech's WISE-IoT **iEMS** is a flexible low-code platform that Vishay leverages for intelligent equipment and energy management. By integrating **Advantech's edge devices** with iEMS's **ECOWatch** and **HVAC** systems, the solution enables real-time monitoring, data analytics, and AI-driven control. It provides insights into energy use, carbon emissions, and performance KPIs, helping optimize HVAC operations, improve efficiency, and reduce overall energy costs.





### Feature Products

**MachineUnite** is an end-to-cloud solution for smart equipment connectivity and management.

**ECOWatch** tracks energy and renewable energy performance KPIs, conducts multi-dimensional analysis of energy data to reduce costs, manages energy conservation projects, and ensures ISO 50001 compliance.

**IoTSuite**, a cloud-native and low-code IoT tool platform, can assist various industries with data collection, IT/OT integration, analysis, and management.



# From Intelligent to Low-Carbon — WISE-IoT Powers YAGEO's Manufacturing Transformation

“YAGEO's continued deep collaboration with Advantech is fuelled not only by Advantech's own experience in smart factory transformation but also by the high product quality and stability, as well as the professionalism and efficiency of its services.”  
- Mr. Chen Director of Nanzih Plant, YAGEO

### Challenges & Requirements

- **Need for Accurate, Real-Time Data:** Manual data recording couldn't meet growing demands for quality control, traceability, and audits. A digital system was needed to improve accuracy and timeliness.
- **Limited Visibility and Responsiveness:** Without real-time monitoring, YAGEO couldn't quickly detect equipment issues or bottlenecks, impacting production efficiency and delivery timelines.
- **Drive for Low-Carbon, Data-Driven Management:** To support sustainability goals, YAGEO needed better energy data collection and analysis to identify savings and enable carbon reduction strategies.

### Benefits

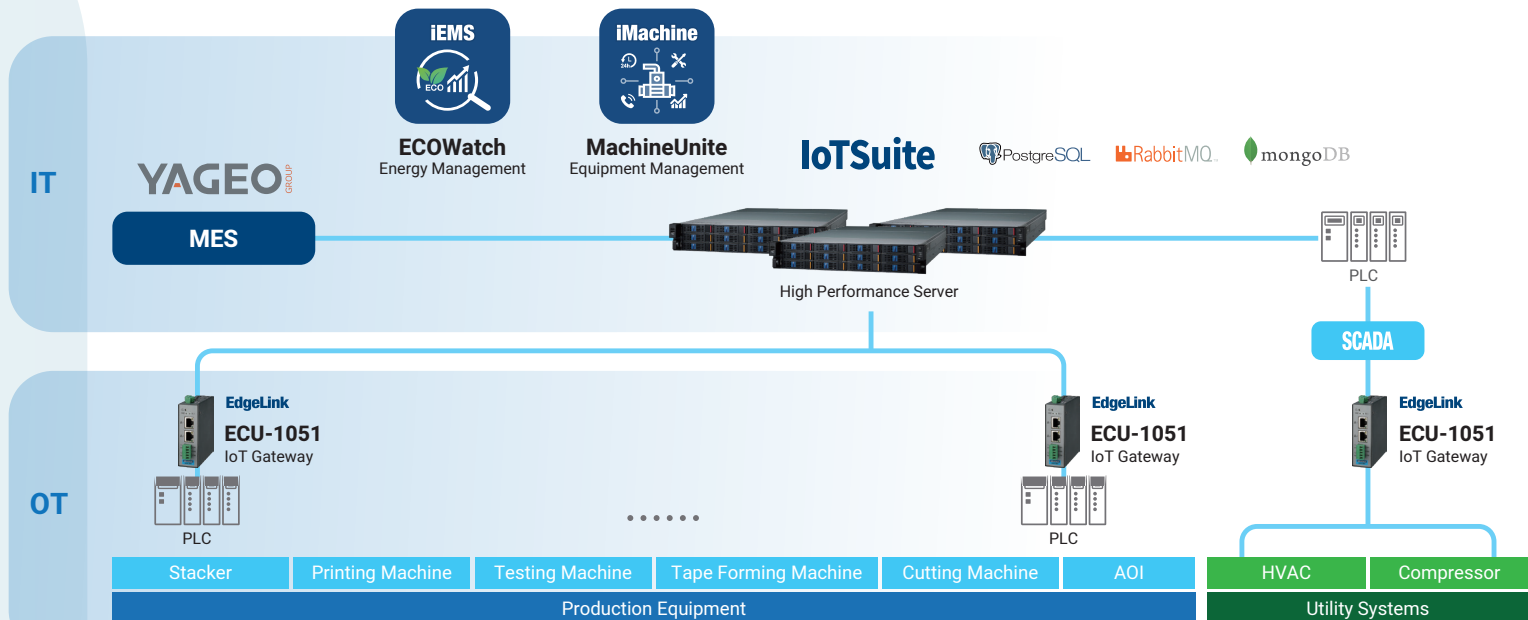
**+10%** Utilization Rate

- **Boosted Process Efficiency:** Improved utilization rates—for example, ST process rose from 78% to 88.5%.
- **24/7 Equipment Monitoring:** Enabled early issue detection to prevent unexpected downtime.
- **Data-Driven Decisions:** Used OEE analysis and reports to fix bottlenecks and support smart management.

## From Intelligent to Low-Carbon — WISE-IoT Powers YAGEO's Manufacturing Transformation

At YAGEO's Nanzih plant, real-time visibility across production lines enables immediate response to abnormal drops in equipment utilization. With the deployment of **MachineUnite**, **ECOWatch** on IoTSuite platform, the factory shifted from reactive to proactive management.

This resulted in a 10% increase in utilization, reduced unplanned downtime, and enhanced overall equipment efficiency (OEE). The system continuously monitors key machines—such as stackers, printers, testers, tape forming, and cutting machines—via EdgeLink IoT gateways and PLCs. Data flows into centralized platforms like **IoTSuite**, fostering data-driven decision-making and empowering floor managers with actionable insights to optimize performance.



# Global PCB Leader Zhen Ding Tech. Group Enhances **Factory Safety Management and Environmental Sustainability** through Smart Platforms

## Challenges & Requirements

- **Commitment to Sustainability:** As a leading PCB manufacturer, Zhen Ding prioritizes safety, energy conservation, and sustainability as its core values, implementing advanced IoT solutions to achieve green operations.
- **Collaboration with Advantech:** Zhen Ding partnered with Advantech, adopting the WISE-IoT EHS and Compressor I.App solutions for intelligent factory management, enhancing safety and energy efficiency.
- **Global Operations Upgrade:** With 6 production bases and over 20 service centers worldwide, Zhen Ding utilizes intelligent solutions to improve operational efficiency and sustainability across its facilities.

## Benefits

- **Enhanced Safety Management:** Real-time monitoring of factory safety incidents enables rapid response and remote management, reducing risks and ensuring uninterrupted operations.
- **Significant Energy Savings:** AI-driven control of air compressors reduced energy waste, saving NT\$3 million annually per site, with projected savings of up to NT\$20 million across all plants.
- **Intelligent Transformation:** Integrated IoT systems streamline operations, reduce manual workloads, and support Zhen Ding's ESG and sustainability goals.



## Feature Products

**IoT Suite**, a cloud-native and low-code IoT tool platform, can assist various industries with data collection, IT/OT integration, analysis, and management.

**FMS** Facility Management Sustainability I.App.

**iEMS solution** is a one-stop solution that equips enterprises with effective tools for carbon asset emission management, energy management, and key equipment energy consumption management.

**ECU-1051** Ethernet protocol gateway with **EdgeLink**.



# Ensuring **24/7 Operations and Safety** for a Leading Semiconductor Foundry with WISE-IoT

## Challenges & Requirements

- **Challenges in Semiconductor Foundries:** Semiconductor foundries face the pressure of maintaining continuous operations while ensuring security and adhering to strict EHS standards.
- **Need for Real-Time Monitoring:** Disruptions in operations, such as security breaches or hazardous chemical handling issues, can result in significant losses.
- **Advantech's IoT Solution:** Advantech offers a comprehensive IoT platform providing real-time monitoring, proactive event management, and seamless integration of safety protocols to tackle these challenges.

## Benefits

- **Improved Operational Efficiency:** Real-time monitoring and data analysis optimize operations and enhance overall productivity.
- **Enhanced Safety and Compliance:** Proactively manages risks and ensures compliance with stringent safety regulations, particularly in hazardous environments.
- **Reduced Downtime:** Quick identification and resolution of anomalies minimize disruptions, keeping production running smoothly.



🌐 See the full case

## Feature Products

**IoTSuite**, a cloud-native and low-code IoT tool platform, can assist various industries with data collection, IT/OT integration, analysis, and management.

**WISE-2410** LoRaWAN wireless sensor.

**WISE-6610 V2** Industrial LoRaWAN gateway.





### Feature Products

**IoT Suite** A low-code IoT platform for multi-site data integration, analysis, and visualization.

**OEE** Overall Equipment Efficiency I.App.

**Andon** I.App for real-time anomaly alerts and maintenance data analysis.

**MIC-770 V2** Compact Fanless System with 10th Gen Intel® Xeon®/Core™ i CPU Socket.

**ECU-1251** Ethernet protocol gateway with **EdgeLink**.

**ADAM-6051** Digital I/O Modbus TCP Module.

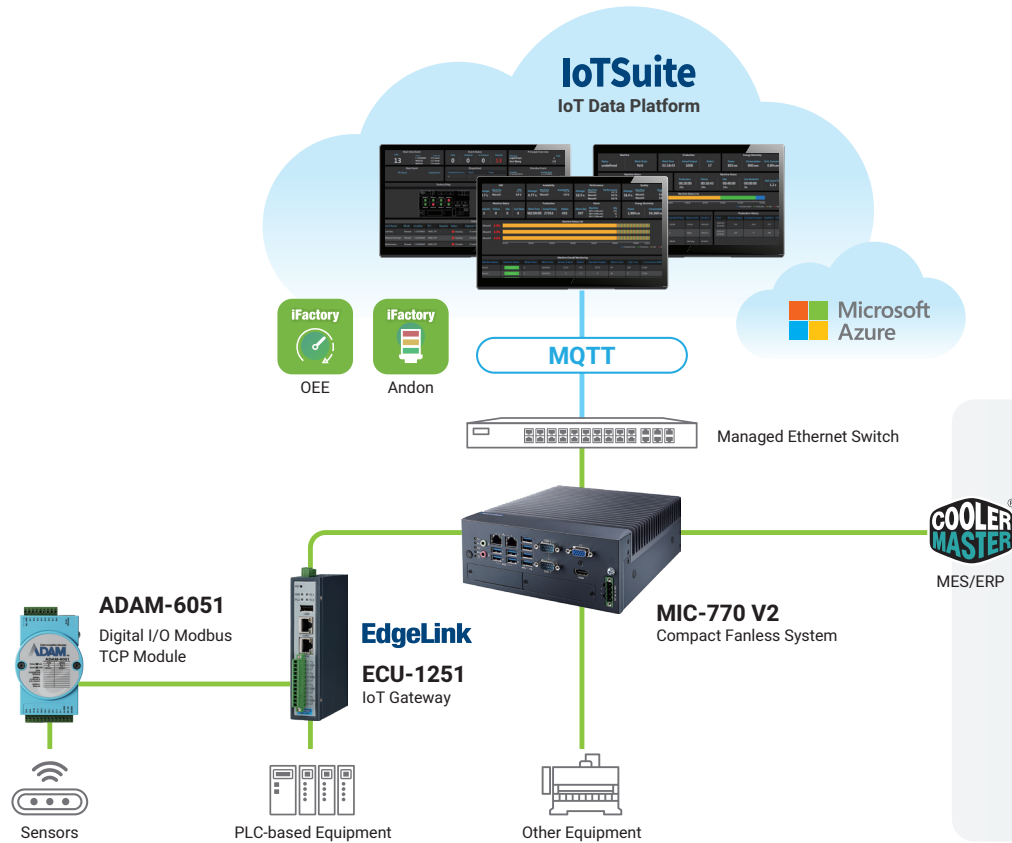
# Optimizing Quality and Performance with Real-Time Manufacturing Insights

## Challenges & Requirements

- **Ensuring Compliance and Quality:** Demonstrate adherence to standards with detailed records of production, maintenance, and inspections.
- **Optimizing Productivity:** Enhance asset utilization, reduce machine breakdowns, and decrease the handling time of anomalies to drive operational efficiency.
- **Preparing for the Future with Digitalization:** Transition to paperless tracking of production and logs, with direct data extraction from machines to databases for streamlined operations.

## Benefits

- **Enhanced Efficiency and Utilization:** Real-time IoT data and equipment health tracking improve machine and manual work efficiency, boosting equipment capacity and OEE.
- **Quick Anomaly Detection and Response:** Real-time SPC analytics and instant alerts enable fast identification and resolution of issues, with solutions to prevent reoccurrence.
- **Global Access and Data Visualization:** Access live data globally via mobile, with easy-to-use dashboards and instant notifications through email and Microsoft Teams.



## Optimizing Quality and Performance with Real-Time Manufacturing Insights

The WISE-IoT Smart Factory Solution based on industrial IoT platform **IoT Suite** is designed to optimize factory production efficiency, improve equipment management, and create a safe, sustainable environment. This case was implemented on **OEE**, **Andon**, Maintenance, and SPC systems to drive digital transformation and advance smart manufacturing.



# Empowering Manufacturers with Smart and Scalable Predictive Maintenance Solutions

## Challenges & Requirements

- **High Energy Costs & Digital Transformation Gap:** Rising energy prices push manufacturers to adopt smart solutions, but SMEs struggle due to limited budgets and expertise.
- **Harsh Industrial Environment & Infrastructure Constraints:** Extreme heat, metal interference, and costly wiring made implementing predictive maintenance challenging.
- **Ensuring Seamless Integration & AI Adaptability:** The compressor's variable speed required AI adjustments for accurate predictive maintenance.

## Benefits

- **Preventing Downtime & Reducing Costs:** Predictive maintenance reduces breakdowns and lowers maintenance expenses.
- **Improved AI Adaptability for Rotating Equipment:** Optimized AI improves monitoring for various rotating machines.
- **A Benchmark for Future Smart Manufacturing:** A proven model for future smart manufacturing solutions.



## Feature Products

**IoT Suite**, a cloud-native and low-code IoT tool platform, can assist various industries with data collection, IT/OT integration, analysis, and management.

**PHM** provides machine health monitoring and failure risk forecasting to enable proactive machine management.

**WISE-2410** LoRaWAN wireless sensor.

**WISE-6610 V2** Industrial LoRaWAN gateway.

**ICR-2031** Industrial LoRaWAN gateway, Entry-Level 4G router.

**EdgeLink**, a middleware allows data to be rapidly integrated and transmitted to multiple cloud platforms and third-party systems.



# Optimizing Factory Dashboards for Metal Processing

## Manufacturing to **Drive Growth through Data-Driven Insights**

### Challenges & Requirements

- **Inefficiency in Collecting Production Data:** Daily paper work to collect production data and duplicate efforts to post the inputs to ERP.
- **Digitalizing the Operation:** Transition to paperless operation by collecting production data directly from machines and by automatically posting to ERP.
- **Optimizing Productivity:** Enhance asset utilization, reduce machine breakdowns, and decrease the handling time of anomalies to drive operational efficiency.

### Benefits

- **Minimizing Paper Works:** By digitalizing the operation, the company successfully decreases over 1,000 hours of paper work per year.
- **Quick Anomaly Detection and Response:** Real time IoT data enable fast identification and resolution of issues.
- **Change of Thinking with Shared Information:** Shared information leads the operators to help each other and to change the company culture efficiently.

**+1,000**  
Hours Saved



### Feature Products

**IoT Suite**, a cloud-native and low-code IoT tool platform, can assist various industries with data collection, IT/OT integration, analysis, and management.

**KonektiEX** Nippon RAD's smart factory dashboard based on IoT Suite.

**ECU-1051** Ethernet protocol gateway with **EdgeLink**.

**ADAM-6051** Digital I/O Modbus TCP module.

# Enhancing **Visibility and Asset Management** with Equipment Upgrades in Automotive Manufacturing

## Challenges & Requirements

- **Manufacturing Challenges:** Sunrise Group faced issues managing factory equipment, including scattered data, inefficient maintenance, and high energy consumption.
- **Solution Implementation:** To address these challenges, they adopted Advantech's WISE-IoT Smart Equipment Management Solution (iMachine) for better asset and maintenance management.
- **Upgrade to Intelligent Factories:** The solution enhances equipment efficiency and improves operational oversight, ensuring stable production and reduced costs.

## Benefits

- **Improved Equipment Management:** Real-time tracking and asset identification streamline maintenance and inventory management.
- **Enhanced Production Efficiency:** Monitoring Overall Equipment Effectiveness (OEE) helps identify inefficiencies and improve performance.
- **Energy Conservation:** Real-time energy monitoring reduces waste by alerting staff to abnormal consumption, optimizing resource usage.



[See the full case](#)

## Feature Products

**IoT Suite**, a cloud-native and low-code IoT tool platform, can assist various industries with data collection, IT/OT integration, analysis, and management.

**MachineUnite** is an end-to-cloud solution for smart equipment connectivity and management.

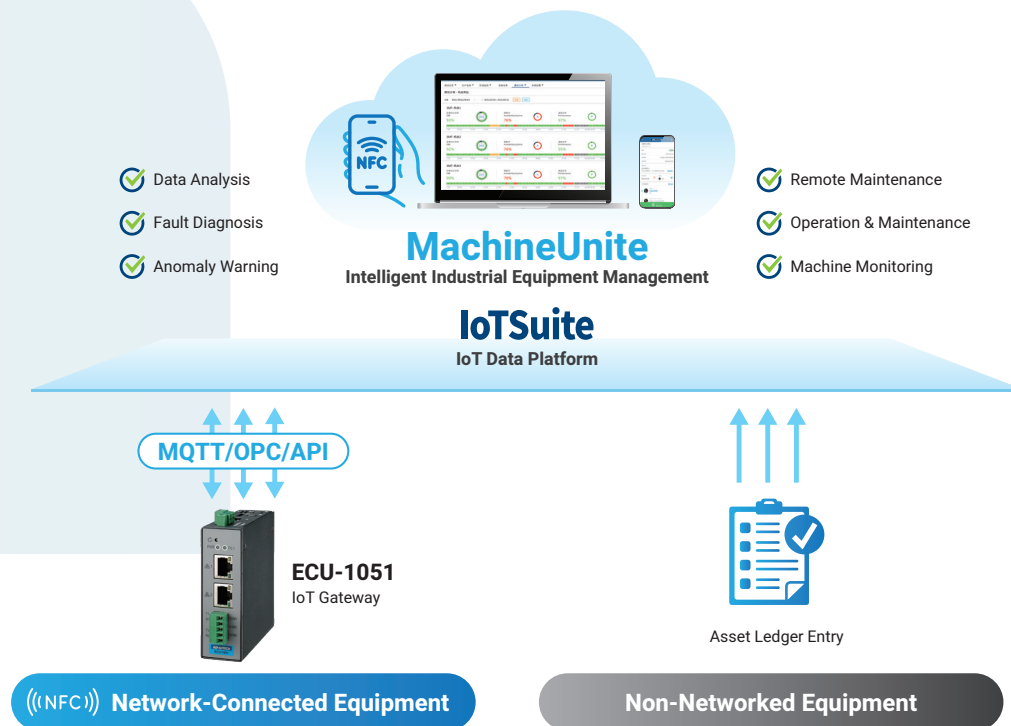
**ECU-1051** Ethernet protocol gateway with **EdgeLink**.



## Enhancing **Visibility and Asset Management** with Equipment Upgrades in Automotive Manufacturing

Sunrise Group implemented **MachineUnite**, a smart equipment management solution built on Advantech's **IoT Suite** low-code data platform.

Each piece of equipment is assigned a digital ID using QR codes and NFC tags, enabling precise tracking and asset control across the factory. By integrating with Advantech's **ECU industrial gateways**, MachineUnite enables real-time data collection from production and utility equipment. The solution establishes a complete equipment life-cycle management framework, improving both maintenance efficiency and asset value.







» Advantech WISE-IoT

# Application Stories Energy Sustainability

**Taiwan Steel Union** Zinc Oxide Recovery | Taiwan

**Mirai Electronics** Solar Energy | Singapore



# Driving **Operational Efficiency and Energy Optimization** with AI-Enhanced Digital Management at TSU

## Challenges & Requirements

- **Data Silos across Systems:** Existing production equipment and management systems lack effective data integration, leading to inefficiencies in decision-making.
- **Enhanced Product and Equipment Reliability:** Improves product purity and stability while optimizing maintenance across distributed equipment to minimize downtime and ensure consistent performance.
- **ESG Requirement:** The need to build the system in compliance with ISO 50001/ ISO 14064/ ISO14067 for energy and carbon management

## Benefits

- **Boosted Operational Efficiency and Quality:** Rapid issue resolution and real-time quality tracking ensure smoother operations and stable product output.
- **Reduced Downtime:** Regular maintenance minimizes unexpected equipment failures and improves overall production stability.
- **Saved Energy and Reduce Carbon Emission:** Quickly finds out the hotspot to solve the energy waste and formulate a strategy to reduce carbon emissions



## Feature Products

**IoT Suite** A low-code IoT platform for centralized data integration, analysis, and visualization.

- **DataInsight** Converts OT/IT data into real-time KPIs and dashboards.
- **VisualSuite** Visualizes factory metrics and energy trends.

**AgentBuilder** Toolset for building and managing industrial AI agents.

**MachineUnite** Connects heterogeneous equipment and standardizes data for unified monitoring.

**iEMS** An integrated energy management suite for optimizing energy use and reducing carbon emissions.

- **ECOWatch** Tracks consumption and detects abnormal energy use.
- **CarbonR** Monitors emissions and supports ESG compliance.

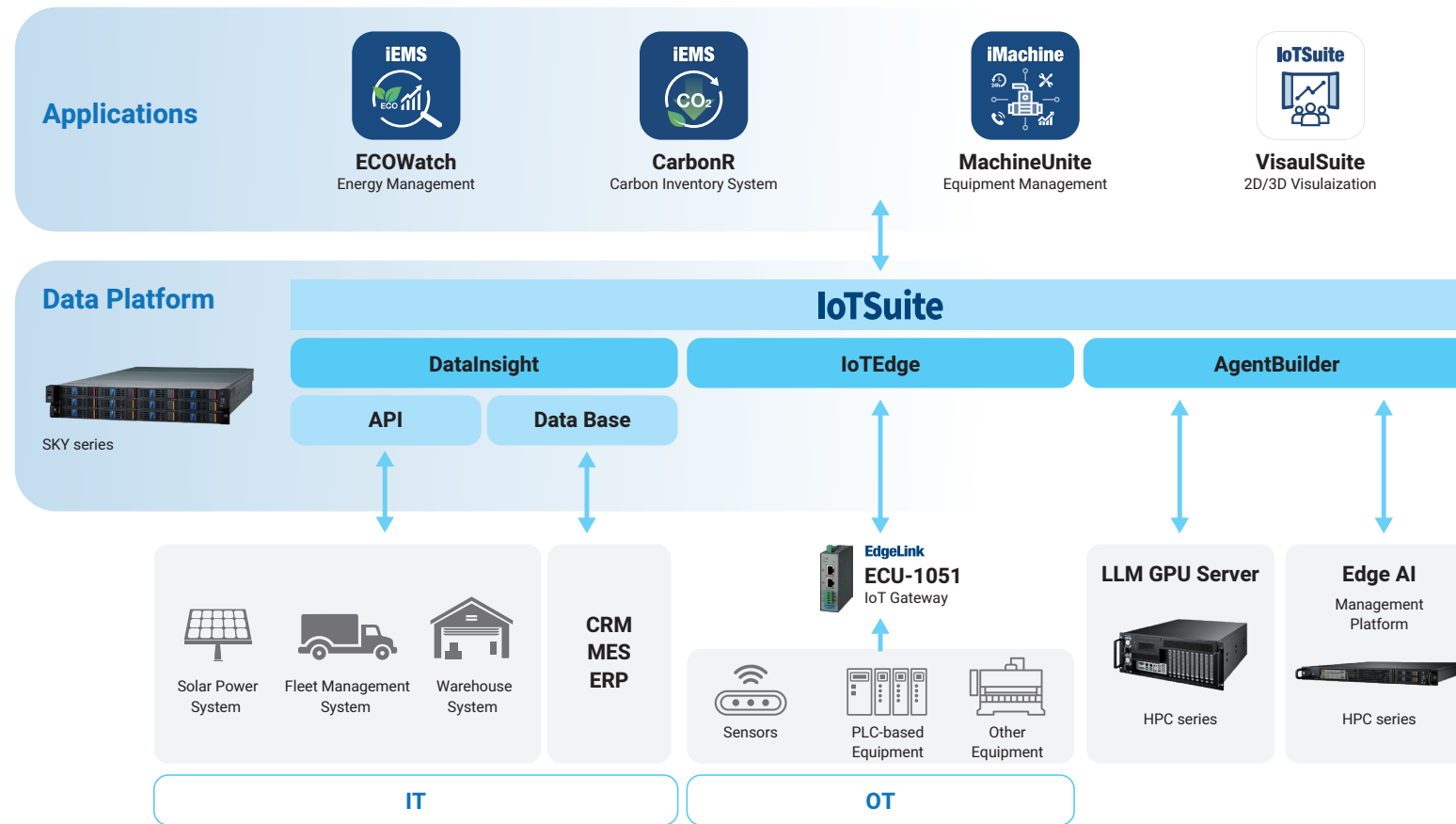
## Driving **Operational Efficiency and Energy Optimization** with AI-Enhanced Digital Management at TSU

Built on the **IoT Suite** platform, the system integrates IT and OT data via **DataInsight**, while **VisualSuite** delivers real-time dashboards, 3D factory views, and BI analytics.

**MachineUnite** enables unified equipment monitoring and on-site inspection management.

To support ESG goals, **ECOWatch** handles energy tracking and anomaly detection, while **CarbonR** manages carbon assets and compliance.

Additionally, both generative AI and edge AI are applied to enhance process optimization and operational intelligence.





### Feature Products

**EdgeHub** Centralized device management across Advantech edge deployments.

**WebAccess/SCADA** Automating data acquisition and visualization

**EdgeLink** Enabling seamless data transmission to cloud and third-party systems.

**ECU-1051, ECU-1251** Ethernet protocol gateway with EdgeLink.

# Singapore's Leading Solar PV Manufacturer, Mirai Electronics, Builds Its **Next-Gen Remote Monitoring System with EdgeHub**

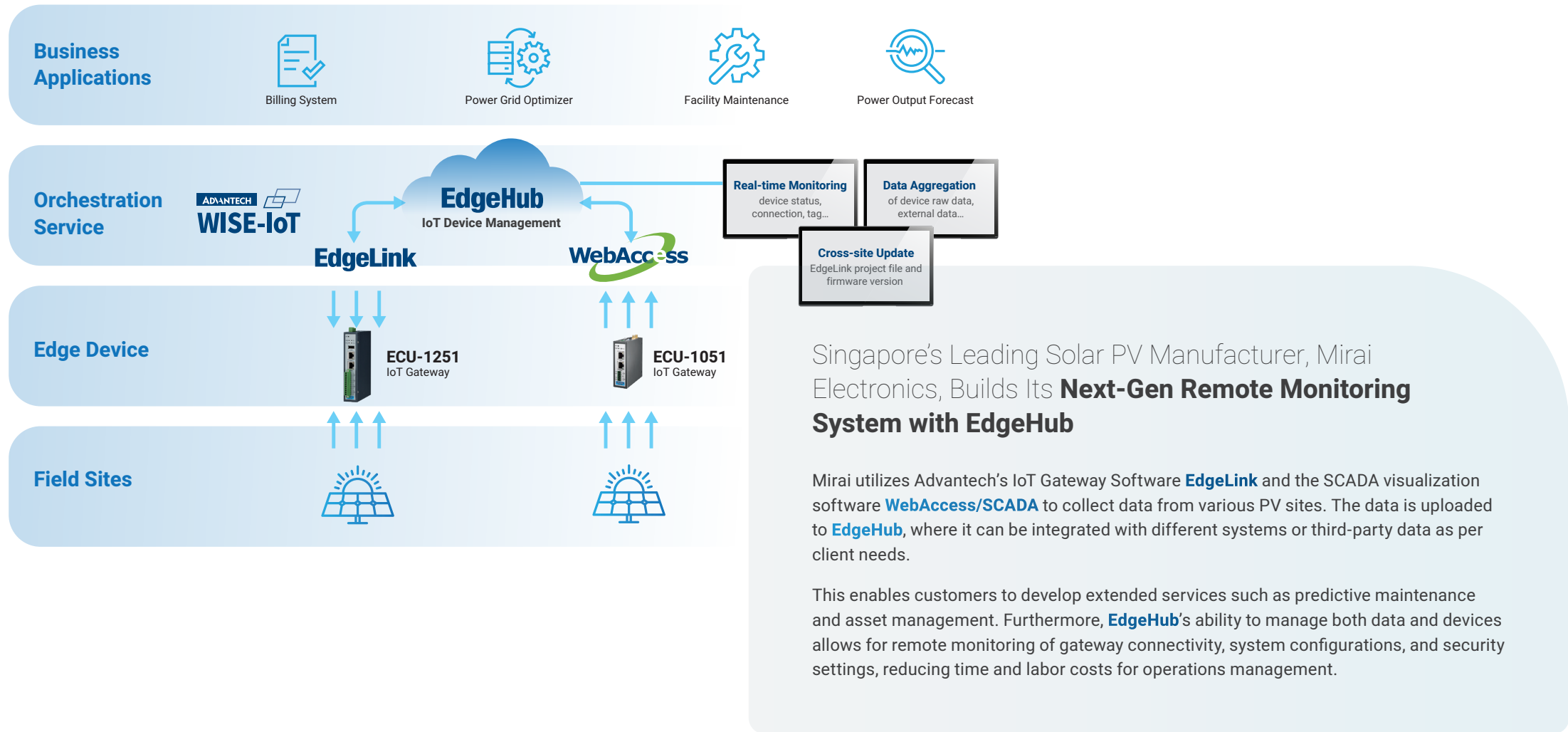
## Challenges & Requirements

- **Net-Zero Carbon Emissions and Renewable Energy:** Mirai Electronics uses Advantech's WISE-IoT solutions to support net-zero and ESG goals through efficient solar PV monitoring.
- **Leader in Solar Energy:** Managing over 400 solar plants, Mirai focuses on smart energy solutions to enhance efficiency and meet customer needs.
- **Smart Technology Integration:** Advantech's EdgeHub enables real-time data monitoring, remote management, and predictive maintenance.

## Benefits

- **Remote Maintenance and Cost Reduction:** Engineers can update firmware and adjust configurations remotely, saving time and reducing labor costs.
- **Automated Billing Accuracy:** Energy generation data is processed automatically for accurate invoicing, increasing efficiency and customer trust.
- **ESG Data and Carbon Impact Analysis:** The system calculates carbon reductions and provides data for ESG reporting, helping customers achieve sustainability goals.





» Advantech WISE-IoT

# Application Stories

# Smart Retail & City

**NOKE** Shopping Mall | Taiwan

**Asia Retail & Media Group** Smart Building | Taiwan

**Smart Urban Complex Developer** Shopping Mall | Taiwan



Smart Manufacturing

Energy Sustainability

Smart Retail & City

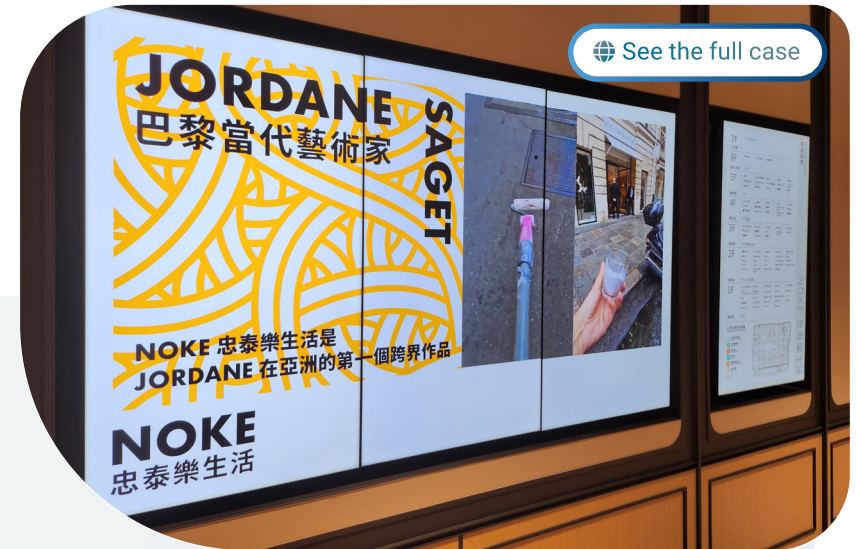
# NOKE Enhances Comprehensive Mall Management with Smart Retail Solutions

## Challenges & Requirements

- **Smart Operation Needs:** NOKE required tech-driven solutions from the start to replace traditional mall operations with immersive, efficient experiences.
- **Centralized Signage Control:** Managing 50+ displays of varying sizes demanded a unified system for real-time content updates.
- **Reliable People Counting:** Accurate footfall tracking across 12 entrances was essential for safety and business analytics.

## Benefits

- **Immersive Experiences:** Diverse digital signage captivates shoppers with flexible, high-quality displays and dynamic content updates.
- **Data-Driven Insights:** People counting cameras and smart analytics provide valuable customer flow and occupancy data for business strategies.
- **Enhanced Comfort and Safety:** Real-time air quality monitoring ensures a safe and pleasant shopping environment.



## Feature Products

**SignageCMS**, an intuitive & flexible content manager allows you to easily create, publish and manage your digital signage content.

**People Counting Camera (UCAM-130)**, a smart counting camera embeds data capturing, accurately capture human images while filtering out carts or other objects.

**VisionSense**, a vision AI platform to detect human and precisely count people entering and leaving the pre-defined area.







### Feature Products

**FaceMatch** is a facial recognition platform enables users with the ability to identify facial profiles.

**FaceMatch Tablet** is a facial recognition device that enables real-time identity verification for secure and efficient access control management.

**FaceMatch Manager** is a facial recognition management system that enables users to centrally monitor, configure, and manage facial profile data and access permissions.

# How a Leading Asian Retailer Strengthens HQ Security and Efficiency with AI Video Analysis

## Challenges & Requirements

- **Smarter Access Control:** Facial recognition was needed to replace manual badges and streamline secure entry and attendance.
- **Restricted Area Management:** Critical zones required real-time identification and restriction, ensuring only authorized personnel could enter sensitive spaces.
- **Automated Attendance Tracking:** A fast, fraud-proof system was needed to replace error-prone manual logs.

## Benefits

- **Streamlined Attendance Tracking:** Automates employee check-ins and check-outs via facial recognition, reducing manual errors and timecard fraud.
- **Optimized Resource Management:** Ensures conference rooms are used only by employees with valid reservations, enhancing workplace efficiency.
- **Heightened Security:** Authorizes access to restricted areas based on facial recognition, providing robust protection for critical zones like server rooms.



# Empowering Smart Operations and Customer Experience at a Leading Asian Shopping Complex

## Challenges & Requirements

- **Establishing a Smart Management Platform:** The shopping mall implemented Advantech's WISE-IoT solutions (IoTSuite, iEMS, and Patrol Inspection system) to integrate data and enable smart management.
- **Enhancing Customer Experience:** The system optimizes equipment operation, manages people and vehicle flow, reduces congestion, and improves both operational efficiency and shopping satisfaction.
- **Achieving Sustainability Goals:** By adopting an energy management solution, the mall centralized energy monitoring, reduced labor costs, and achieved energy conservation and carbon reduction.

## Benefits

- **Optimized Operations:** IoTSuite integrates data to streamline management, speed up decisions, and boost maintenance efficiency.
- **Enhanced Experience:** Patrol Inspection and flow analysis systems reduce congestion, ensure cleanliness, and inform marketing adjustments.
- **Energy Efficiency:** ECOWatch cuts energy use, lowers labor costs, improves accuracy, and reduces carbon emissions.



## Feature Products

**IoTSuite**, a cloud-native and low-code IoT tool platform, can assist various industries with data collection, IT/OT integration, analysis, and management.

**iEMS solution** is a one-stop solution that equips enterprises with effective tools for carbon asset emission management, energy management, and key equipment energy consumption management.

**ECU-1051** Ethernet protocol gateway with **EdgeLink**.



# Ecosystem Partnership



# Stay Connected, Stay WISE.

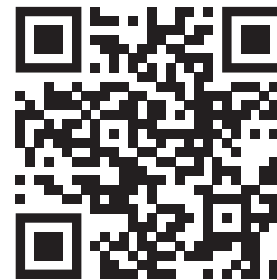
From edge to cloud, we stay connected.



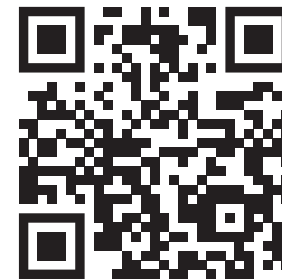
**WISE-IoT Website**



**Sales Support**



**LinkedIn Group**



**YouTube**

