Meet **Empowering Industrial & Autonomous Intelligence** with Ready-to-Use Applications WISE-OT

Agent-Driven Operations
 • Edge-Cloud Collaboration



Content

WISE-IoT Brand Narrative WISE-IoT Products

Success Stories

- 22 Zhen Ding Tech. Group Enhances Factory Safety Management and Environmental Sustainability via Smart Platforms
- 24 From Intelligent to Low-Carbon WISE-IoT Powers YAGEO's Manufacturing Transformation
- 26 Vishay Intertechnology Establishes an Asia-Pacific Energy Management Platform to Drive Sustainability
- 28 Empowering Manufacturers with Smart, Scalable Predictive Maintenance Solutions
- **30** Advantech's Linkou AloT Co-Creation Campus Drives Smart Innovation
- **32** Mirai Electronics, Develops Next-Generation Solar Photovoltaic Monitoring and Metering System
- 34 NOKE Enhances Mall Management with Smart Retail Solutions

Ecosystem Partnership

36

6

10

20





Published by Advantech Co., Ltd.

Publisher K.C. Liu

Address

No.1, Alley 20, Lane 26, Rueiguang Road, Neihu District, Taipei, Taiwan 11491 Tel +886-2-2792-7818 Website www.advantech.com

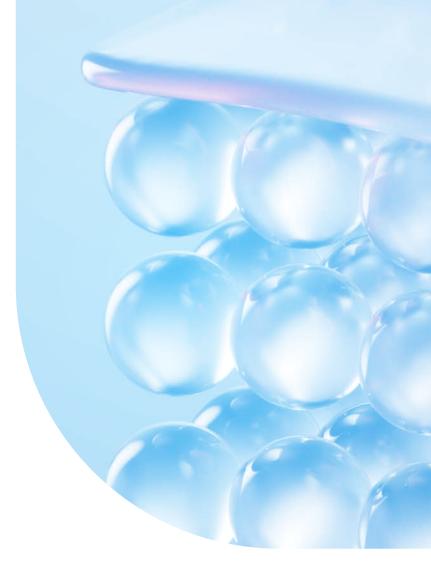
Editorial Supervisor

Brand Development & Public Relations, WISE-IoT Marketing

Edit Production Herdo Integrated Marketing Co., Ltd.

Initial Issue 2025 May 02 All rights reserved. Reproduction without permission is strictly prohibited. » Brand Narrative & Products

Solution Connected. Intelligence Enabled.





WISE-IoT: Empowering Agentic-Driven Operations for Industrial & Autonomous Intelligence

Unifying data, devices, and decisions for a smarter, future-ready industry.

WISE-IoT is Advantech's AIoT platform composed of applications and tools designed to unify data, devices, and decisions across industries. Emerging in response to the agentic AI trend, it enables seamless integration of IoT systems and AI technologies for autonomous operations. WISE-IoT includes vertical applications tailored to specific industry needs, empowering enterprises to break down data silos, optimize operations, and drive intelligent decision-making at scale. This lays a solid foundation for long-term digital transformation and sustainable growth.

The Three-Phase Evolution Path of WISE-IoT

In line with technological advancements and shifts in industry competition, WISE-IoT has undergone three evolutionary phases, continuously supporting industries in driving digital transformation.

Phase 1 2015-2020

Digital Enablement

Focused on the industry's digitalization needs, WISE-PaaS was developed as an industrial cloud platform to help industries break data silos and enable data-driven operational transformation.

Phase 2 2020-2024

Industrial Applicationization

Combining Advantech's hardware expertise and over 40 years of industrial experience, a series of Industrial Apps (I.Apps) was introduced, providing ready-to-use solutions for data analysis and operational optimization. During this phase, WISE-PaaS was rebranded as WISE-IoT.

Phase 3 2024–Present

AI-Readiness

Leveraging advanced technologies such as Edge Computing and Generative/Agent-based AI, WISE-IoT is evolving from data insights to autonomous decision-making, paving the way for AI-driven operations.

Features of WISE-IoT

WISE-IoT integrates devices, data, and applications into a cohesive solution for AloT needs. It provides a comprehensive toolset for enterprises to quickly deploy, manage, and scale IoT solutions. WISE-IoT already helps businesses drive digital transformation, improve operational efficiency, and reduce costs.

The following outlines its five key features:

Low-Code Development

Unlike traditional development, which requires complex programming, WISE-IoT offers an intuitive interface that allows users to quickly configure, establish devices, and set data points—reducing development costs.

Pre-built Smart Applications

System Integrators (SIs) and Independent Software Vendors (ISVs) can flexibly deploy a variety of plug-and-play intelligent application solutions based on specific site requirements, enabling rapid AIoT implementation.

Al-Ready Data

Enhances data standardization and structuring, seamlessly integrating IT and OT while providing AI-ready data to support data-driven decision-making.

High Flexibility & Scalability

Provides a comprehensive toolkit across three levels—devices, data, and applications—WISE-IoT offers diverse deployment options, allowing users to swiftly start small and flexibly scale up based on future needs.

High Integration of Hardware and Software

Seamlessly integrates with Advantech's wide range of industrial equipment and edge devices to ensure native system compatibility, enhance performance, and simplify deployment processes.













Comprehensive Integrated Offerings

Diverse Products

To accelerate the global implementation of industrial IoT applications, WISE-IoT offers ready-to-use I.Apps, including iEMS, iVisionSuite, FMCS & EHS, iMachine, and more. These applications cover the AIoT needs of various industries and can be easily integrated into the field with plug-and-play functionality. Additionally, tools for secondary development are provided based on specific requirements, including IoTSuite, AgentBuilder, and others. This enables SIs and ISVs to create more complete software services tailored to the needs of different industries and enterprises.

Comprehensive Services

During the implementation process, Advantech provides comprehensive services, including consulting, technical support, system integration, and personnel training, helping customers rapidly deploy AIoT solutions and accelerate their transition toward smart operations.

Co-Creation with Partners

By substantially integrating Advantech's global network of SI, ISV, and channel partners, we accelerate the promotion of WISE-IoT to create a positive feedback loop within the ecosystem. This partnership fosters the integration of Edge Computing and AI, leading to the launch of more plug-and-play solutions and building a stronger AIoT ecosystem.

IoTSuite

Scalable AloT Platform for Smarter Operations and Real-Time Intelligence

Pain Points

Industrial IoT and AI application development are often hindered by fragmented tools, siloed data, and repeated integration work. These challenges delay project timelines and limit the scalability of smart solutions—including AI agents for industrial environments.

- Disconnected Tools and Data Silos: Isolated IT and OT systems restrict seamless data flow and interoperability, making it difficult to enable intelligent, automated workflows.
- High Development Effort and Limited Flexibility: System integrators (SIs) and software vendors (ISVs) repeatedly rebuild core components due to the lack of reusable, modular frameworks.
- Device Compatibility Challenges: Without a standardized integration approach, connecting edge devices and systems remains time-consuming and inconsistent.

Solution Positioning

IoTSuite is a powerful Industrial IoT platform that simplifies device connectivity, data management, and operational efficiency. It enables real-time monitoring of energy usage, workplace safety, and equipment performance while optimizing assets, production, and supply chains. With AI-powered tools, no-code dashboards, digital twins for visualization, and seamless integration across cloud, edge, and on-site systems, IoTSuite empowers AI agents and users alike to drive smarter decisions and enhance productivity—all built on a secure, open architecture that meets industry standards.



Created Benefits

- Rapid & Scalable Deployment: Unified platform with broad protocol support ensures seamless OT-IT integration and AloT scalability.
- Al-Ready Data Management: Aggregates and processes IT-OT data into actionable insights, empowering Al-driven analytics and decision-making.
- Real-Time Intelligence & Edge Integration: Empowers AI agents with real-time monitoring, edge analytics, and intuitive IoT tool interoperability.



Solution Features



VisualSuite: A zero/low-code real-time visualization toolset for creating 2D/3D dashboards with drag-and-drop ease, plus ChatBI for conversational analytics, enabling seamless cross-device communication.



DataInsight: A data integration platform unifying IT & OT data for Al-driven analysis, breaking silos and enabling smarter, informed decisions.



IOT Edge: A lightweight edge computing solution for real-time data processing at the source, enabling AI agents to seamlessly interact with devices while enhancing performance, security, and cloud-edge collaboration



Pain Points

- Data and System Fragmentation: Dispersed knowledge, siloed IT/OT systems, and unstructured data hinder real-time responsiveness and intelligent decision-making.
- High Al Adoption Barriers: Lack of modular development tools and integrated environments increases the complexity and cost of deploying industrial Al solutions.
- Scalability and Execution Challenges: Latency issues and limited deployment efficiency make it difficult for Al applications to scale and operate reliably in production environments.

AgentBuilder

AI Agent Development Platform for Enterprise Automation & Intelligence

Solution Positioning

AgentBuilder is an enterprise-grade Agentic AI platform that builds an AI-ready foundation by orchestrating edge computing and integrating data and knowledge from OT, IT, and enterprise knowledge. It offers a variety of prebuilt agents for rapid deployment, accelerating Agentic AI adoption for smarter decisions and automated workflows. It also supports integration and compatibility with Advantech hardware, ensuring stable agent operations across environments while enhancing deployment efficiency, system reliability, and data security.

Created Benefits

- Fast Deployment: Pre-built agents deploy efficiently with Advantech hardware to ensure stable operations.
- Informed Actions: Convert knowledge and data into timely suggestions for faster frontline response.
- Operational Optimization: Streamline workflows and systems for cross-site automation and efficiency.

Solution Features



Al Agent Development: Combines Already data, workflow orchestration, and domain toolkits into a unified development environment.

Pre-built Scenario Agents: Includes ready-to-use agents for diagnostics, energy optimization, and safety monitoring to accelerate deployment.

Edge-to-Cloud Deployment: Supports seamless integration with Advantech hardware for stable operations across edge and enterprise systems.





iEMS

Intelligent Energy Management Solution

Driving Low-Carbon & Digital Transformation for a Sustainable Future

Pain Points

- **Rising Costs:** Increasing energy and raw material expenses impact profitability.
- Labor Shortages: Insufficient workforce affects operational efficiency and energy management.
- **Regulatory Complexity:** Navigating ESG, RE100, ISO 50001, Net Zero, CBAM, and CCA compliance is challenging.
- Inefficient Energy Usage: Lack of real-time monitoring leads to waste and high operational costs.
- Sustainability Pressure: Growing demand for carbon reduction and green initiatives from investors and stakeholders.

Solution Positioning

iEMS provides a total solution for carbon, energy, critical energy-consuming equipment and manufacturing process equipment and environmental management by integrating smart monitoring, AI-driven optimization, and predictive maintenance. By leveraging real-time data and advanced analytics, iEMS enhances energy efficiency, reduces carbon emissions, and ensures compliance with sustainability regulations. Its one-stop management approach covers carbon, energy, equipment, and production processes, enabling businesses to streamline operations, lower costs, and progress toward net-zero goals. With AI energy-saving control and predictive health monitoring, iEMS empowers organizations to make data-driven decisions and accelerate low-carbon digital transformation.

Created Benefits

- Maximizes ROI by enhancing carbon reduction and energy efficiency
- Automates energy management, reducing labor and operational costs
- Ensures compliance with ESG, RE100, and carbon regulations
- Optimizes resource allocation with real-time data insights

Solution Features



ECOWatch

- Tracks energy performance KPIs.
- Conducts multi-dimensional analysis for cost reduction.
- Manages energy conservation projects.
- Ensures ISO 50001 compliance.



Monitors HVAC system & AI control to achieve management efficiency improvement and overall energy cost reduction.



3

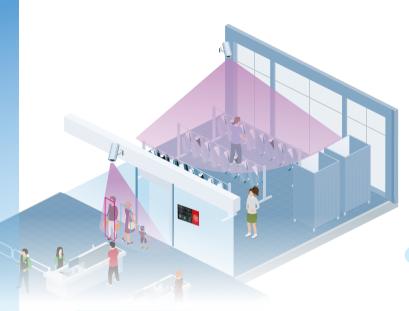
- Analyzes enterprise carbon emissions and product carbon footprint with digital carbon inventory system.
- Ensures ISO 14064 / 14067 compliance.



Optimizes management efficiency and reduces energy costs of compressors by combining centralized control, information processing, energy-saving control, and predictive maintenance.

iVisionSuite

Display and Video AI Platform



Created Benefits

- Optimized operations and security: Enhances staff allocation and service flow while using real-time vision AI analysis to prevent security threats.
- Data-Driven Insights: Provides customer behavior including foot traffic patterns, dwell times, and demographics analysis for better business decision-making.
- Easy Integration : Low-code platform enables seamless third-party service integration.

Solution Features



SignageCMS: An intuitive content manager for interactive signage design, real-time updates, and advanced IoT and vision AI integration.

iVisio	onSuite
Į	2

VisionSense: Al-powered computer vision solution for facial, people, and objects, enabling the deployment of tailored AI models for video analysis.



FaceMatch: Facial recognition solution that enables users to identify facial profiles, applicable to access control, attendance taking and authentication.





Pain Points

- Labor shortage: The service industry often struggles with staffing shortages and rising labor costs, which affect customer service quality and operational efficiency.
- **Operation Inefficiency:** Ineffective staff allocation and workflow lead to wait times, service delays and customer dissatisfaction.
- Lack of actionable customer insights: No accurate data on customer behavior and foot traffic, making it difficult to improve customer experience and business performance.

Solution Positioning

iVisionSuite is a display and video AI platform designed to enhance operational efficiency and customer experience. It includes the interactive digital signage platform SignageCMS, a diverse range of AI video analytics services with VisionSense, and advanced facial recognition management with FaceMatch to deliver real-time insights and automate processes. Installed on an AI edge computer for quick on-site deployment, iVisionSuite integrates easily with third-party services through a lowcode platform, empowering businesses to make smarter, data-driven decisions.

Pain Points

- Lack of Integration: Facilities are scattered, and systems are fragmented, leading to inefficiencies in unified management and delayed information acquisition.
- **Complex Risk Management:** Overseeing safety, environmental protection, and risk management is challenging due to the wide range of issues involved.
- Traditional Management Methods: Reliance on traditional paper-based forms, manual meter readings, and outdated data analysis methods, which hinder efficiency and accuracy.

FMCS & EHS

Smart IoT Solution for Facility Control and Proactive Safety Management

Solution Positioning

Advantech's WISE-IoT FMCS & EHS Management solution is an IoT-powered solution that transforms enterprise risk management. By integrating advanced technologies across facility monitoring, safety systems, and sustainability management, the platform provides real-time insights for proactive decision-making. It enables organizations to minimize operational risks, optimize resource utilization, reduce downtime, and drive continuous improvement through intelligent anomaly detection and comprehensive data analytics.

Created Benefits

- **Comprehensive Integration:** IoT connects facility systems, breaking information barriers and unifying operational insights.
- **Proactive Risk Prevention:** Real-time sensing of system/environment data, pinpointing risks, eliminating hazards, cutting accident rates.
- Digital Transformation: Smart sensors replace manual methods, enabling sustainable management through closed-loop analytics.

Solution Features

iFactory

FMCS & EHS: Enables real-time facility and safety monitoring, risk control, and ESG-driven operations through data integration, digital twin visualization, and smart analytics.







Andon: Enables real-time anomaly detection, visual alerts, and efficient control of production line maintenance to improve responsiveness and minimize downtime.



iMachine

Equipment Optimization for Operational Excellence and Predictive Reliability

Pain Points

- Unplanned Downtime & High Maintenance Costs: Unexpected equipment failures and reactive maintenance lead to costly downtime, disrupting production and increasing operational expenses.
- Inefficient Equipment Management: Decentralized data and manual processes hinder optimization, creating inefficiencies and increasing operational risks.
- Labor & Compliance Challenges: Workforce shortages and complex regulations demand data-driven strategies to enhance operational stability and ensure regulatory compliance.

Solution Positioning

iMachineSuite enables real-time equipment monitoring, predictive maintenance, and automated management, minimizing downtime and optimizing production efficiency. By leveraging Al-driven analytics and centralized data management, factories can maximize equipment utilization, reduce maintenance costs, and ensure compliance with sustainability regulations, achieving smarter operations and long-term competitiveness.

Created Benefits

- Analyzes correlation between machine failure causes and integrates historical data for insights and recommendations.
- Enhances machine performance through health analysis and proactive failure warnings.
- Provides real-time monitoring of machine status.

Solution Features



MachineUnite: Connects all public facility equipment onto a single platform to manage lifecycles, and automates repair and maintenance assignments.



PHM: Identifies abnormalities or deterioration, understands equipment status, enhances efficiency, extends equipment lifespan and reduces lifecycle operating costs.



Permote Deployment Secure Tunnel EdgeHub

Auto Provisioning

EdgeHub

Device Management for Advantech Edges

Diffect IVO) & OTA

IoT Device Management to **Empower Secure Connectivity**

Pain Points

- · Inefficient operation: Technical complexity requiring specialized expertise creates significant barriers to deployment and management of IoT devices across distributed locations.
- Vulnerable Infrastructure: Organizations struggle to implement comprehensive security protocols that protect vulnerable IoT devices without compromising operational accessibility or performance.
- · Fragmented Systems: Incompatibility between diverse systems and proprietary protocols forces expensive custom development work and creates maintenance burdens that limit scalability.

Solution Positioning

IoT devices, like industrial equipment, need proactive care to ensure peak performance. EdgeHub serves as Advantech hardware's built-in maintenance system, delivering the following benefits:

- · Streamlined Device Updates: Simplifies updates and modifications at scale.
- · Enhanced Security: Regular security patches and firmware updates.
- · Reduced Maintenance Costs: Remote troubleshooting minimizes site visits.
- · Centralized Management: Easy monitoring and control from a single dashboard.

Created Benefits

- Remote O&M: Secure and simplified access to IoT devices for easy monitoring and control
- · Cybersecurity: Multi-layer protection with encryption and RBAC
- Flexible Integration: API for custom connectivity across platforms and applications

Solution Features



- Device Management: Features direct I/O control, firmware OTA, monitoring device health, troubleshooting remotely and deploying software images and containers.
- · Device Provisioning: Supports zero-touch provisioning for largescale deployments, compatible with Advantech's edge tools (e.g., EdgeLink Studio and I/O Module Utility).
- · Secure Tunnel: Enables simple enrollment in the EdgeHub private network and secure access to COM port and Ethernet port terminals.



WebAccess

Automating Data Acquisition and Visualization

Pain Points

- No real-time monitoring: Delayed fault detection increases downtime and risks.
- Data silos & poor integration: Manual data collection slows decision-making.
- **High maintenance costs:** On-site troubleshooting and legacy system upgrades are expensive.

Solution Positioning

WebAccess/SCADA addresses these challenges by delivering real-time industrial control, unified OT/IT integration, and scalable cloud-ready architecture. With 450+ drivers, redundancy, and cross-platform visualization, it ensures efficient monitoring, secure data flow, and rapid ROI for smart factories and infrastructure.

Created Benefits

- Minimize Downtime: Real-time alerts and redundancy cut equipment failure losses.
- Unify Data Visibility: Centralized dashboards integrate all facility operations.
- Future-Proof Scalability: 450+ drivers and cloudready architecture adapt to growth.

BACnet

WebAccess/SCADA

Solution Features

WebAccess SCADA

- Real-Time Industrial Monitoring: Provides millisecond-level data collection and instant alerts for proactive equipment management.
- Universal Connectivity: Supports 450+ OT drivers for seamless integration with PLCs, CNCs and IoT devices.
- Supervisory Control: Supports real-time data visualization, customizable animations, and cross-platform compatibility.



MMQTT



EdgeLink

Synergistic Portals

Completing Ecosystem Journey from Development, Deployment to Resell

Advantech presents four integrated online portals-WISE-IoT Official Site, Marketplace, Developer Portal, and Container Catalog-designed for different user roles yet working together as a unified, open ecosystem. From development and procurement to deployment and application, these platforms empower every stakeholder to co-create the future of industrial intelligence.

WISE-IoT Global Site

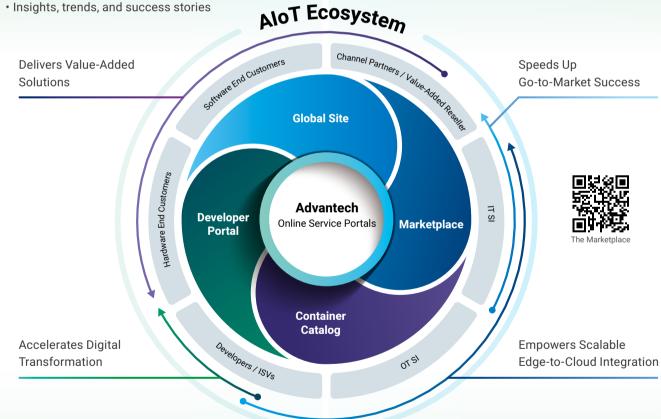
Discover domain-specific AIoT solutions, device and data management tools, and insights-tailored to your industry's needs.

- Extensive AloT products
- · Solutions tailored to industry needs
- Insights, trends, and success stories

WISE-Marketplace

Find, try, and deploy trusted AIoT solutions-ready to power your industrial operations.

- Abundant Industry-ready apps
- · Flexible trial / licensing options
- · Seamless deployment to cloud & edge



Developer Portal

Quickly build and deploy Edge AI and AIoT solutions with developer resources for edge-to-cloud integration.

- Full API & SDK access
 Hardware selection guide
- · Containerized microservices development workflow

Container Catalog

A centralized catalog for discovering, deploying, and managing edge-ready containers at scale.

- Curated container access
 Simplified multi-site rollout
- · Faster edge deployment

» Success Stories

Impact Connected. Transformation Enabled.



Zhen Ding Tech. Group Enhances Factory Safety Management and Environmental Sustainability via Smart Platforms



As a leading global manufacturer of printed circuit boards (PCBs), Zhen Ding Tech. Group has always regarded safety and environmental protection as the foundation of its development. In 2022, the company has implemented the Environmental Health and Safety (EHS), IoTSuite, and iEMS of Advantech's WISE-IoT Solution, aiming to accelerate the realization of the company's core principle of green and sustainable business operations through intelligentization.

Real-Time Status Monitoring Enhances Factory Safety

Peng Zhou, Advantech's head of key accounts in South China, highlighted that Zhen Ding has established over 20 service centers and 6 major production bases worldwide. For its new factory at the Shenzhen production base in China, Zhen Ding chose Advantech's solutions, recognizing Advantech as a leader in industrial IoT solutions. This decision was also influenced by Advantech's long-term assistance in automating Zhen Ding's factory equipment systems.

For safety monitoring, Zhen Ding Tech. Group employed EHS to create a comprehensive safety supervision platform for its factories. Peng Zhou explained that Zhen

Company Profile





Established	2006
Industry	Printed circuit board (PCB)
Headquarters	Taiwan
Operations	Design, R&D, and manufacturing
	of various types of printed circuit
	board products
Company size	Multinational corporation

Ding's EHS integrates safety signals from more than ten isolated subsystems, including fire protection, electromechanical systems, environmental engineering, and manufacturing. This data is consolidated onto a single platform, enabling real-time monitoring of all factory operations. If a hazardous situation or abnormality is detected, the system automatically notifies the relevant personnel immediately. Even when administrators are not on-site, they can still access information about where, when, and what type of abnormal situation has occurred and can remotely manage safety incidents in real-time from the control room.

Advantech's solution architect, Qi-Wei Yan, explained that if a fire occurs in a building within the factory, the Zhen Ding EHS platform connects with the fire protection, CCTV, and OA systems to display the specific alarm location and details of on-duty personnel information on a map, notifying staff to respond immediately. Additionally, the system incorporates AI to offer appropriate contingency measures for different types of safety incidents, such as fires, environmental changes, and equipment-related injuries. This allows personnel to follow protocols effectively, preventing incidents from escalating further.

Upgrades in Energy Management Helped Save Nearly NT\$20 Million Annually

Regarding energy conservation, Zhen Ding has achieved significant savings through the digital management and intelligent control of air compressors using the Compressor I.App of iEMS, aligning with China's environmental policies and the green supply chain requirements of international clients. Advantech's Smart Energy Solutions Architect, Yong-Sheng Zhao, explained that the Compressor I.App is equipped with an Al-driven energy-saving algorithm that enables the intelligent control of air compressors. This system balances supply and demand by adjusting the air compressors based on production and usage conditions, thus avoiding unnecessary energy waste. For example, it can automatically adjust the compressor's pressure settings based on changes in air demand, replacing manual adjustments, reducing energy consumption, and lightening personnel workloads.

Yong-Sheng Zhao emphasized that with the intelligent control implemented in just two air compressor stations at the Huai'an campus, Zhen Ding saves NT\$3 million in electricity bills annually. If this system is fully implemented across all six production sites in China, it is projected to save up to NT\$20 million in electricity bills annually, significantly contributing to Zhen Ding's ESG sustainability goals.

Advantech's Professional Team Provides Profound Services

Unlike other projects where Advantech systems were implemented in existing facilities, this project involved the construction of a new factory for Zhen Ding. Advantech participated in the planning stage of the building's construction, offering professional advice on key aspects such as setting up subsystems in addition to categorizing and collecting data. For example, Advantech recommended that Zhen Ding adopt an open system, which would streamline the integration and data collection of multiple subsystems after they became operational.

Building on its success, Zhen Ding has launched a project at its Kaohsiung plant in Taiwan to implement the ECOWatch energy management solution of iEMS, and also plans to expand this success to its Thailand factory, driving the group's intelligent transformation.

Case Benefits

- Real-time monitoring and emergency handling of various safety incidents such as fires.
- Intelligent monitoring and adjustment of air compressor settings, reducing energy waste through AI energy-saving algorithms.
- Expected annual savings of over NT\$3 million in electricity bills.

Advantech WISE-IoT Solutions

- EHS: Assists manufacturers in enhancing environmental safety, analyzing their environmental carbon footprint, and ensuring uninterrupted facility operations across all areas.
- Compressor of iEMS: Provides intelligent control of factory air compressors, achieving consistent air pressure, sufficient air supply, and unmanned management, all of which significantly reduce unit energy consumption, labor management, and equipment maintenance costs.

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



Due to the trend of digital transformation, leading passive component manufacturer YAGEO Corporation has adopted a comprehensive suite of Advantech's WISE-IoT solutions at its Kaohsiung Nanzih plant, which includes the iVisionSuite SignageCMS app for facility-wide digital signage, MachineUnite from iMachine for intelligent processing and equipment management, and ECOWatch from iEMS for smart energy management. By integrating these solutions, YAGEO is not only digitizing its factory management but also advancing toward a low-carbon, sustainable model. Gradually, the Nanzih plant is becoming a benchmark for next-generation smart manufacturing.

Linkou Campus Inspires a Blueprint for Smart Manufacturing

In pursuit of new technological applications, YAGEO aims to initiate a comprehensive transformation at its Nanzih plant to achieve visualized, data-driven factory management. The implementation of Advantech's MachineUnite in 2019 marked the first step in bringing the blueprint of digital transformation to life." As customer demand for quality, lead time, and product traceability continues to grow, the old practice of manually recording equipment and production line data could no longer meet audit requirements. MachineUnite enables real-time data collection and logging, which not only eliminates human error but also significantly improves the timeliness, accuracy, and traceability of production data. Additionally, by integrating MachineUnite with SignageCMS, key production line information—



such as job progress, task assignments, machine and material status, and work instructions—can be displayed on digital signage. This enables more agile production scheduling and real-time adjustments, while also allowing for data-driven optimization of overall efficiency. As a result, unexpected disruptions on the production line can be minimized, reducing their impact on product quality and delivery timelines.

MachineUnite Enables Visual Management and Delivers Four Key Benefits

With the visualized interface of MachineUnite, YAGEO can monitor the status of each floor and production line in real time. When an abnormal drop in utilization occurs, they can quickly trace it to the source, identify the root cause, and take corrective action. This shift from reactive to proactive management allows the plant to optimize production performance more efficiently.

More specifically, the implementation of MachineUnite has delivered four major benefits to the Nanzih plant:

- First, it has improved OEE and utilization rates. For example, in the ST process, the utilization rate in Q1 of 2024 was 78%. Following the deployment of Machine-Unite, the average utilization rate increased to 88.5% from Q2 to Q4–a gain of roughly 10 percentage points.
- Second, it has reduced the occurrence of equipment failures. With 24/7 monitoring of equipment status, MachineUnite immediately alerts relevant personnel in the event of an unexpected shutdown. This enables timely intervention, lowering the frequency of breakdowns and minimizing the risk of extended or unplanned downtime.
- Third, it has increased production efficiency. Machine-Unite continuously monitors and analyzes trends in Overall Equipment Effectiveness (OEE), enabling plant managers to quickly identify production bottlenecks and make necessary optimizations.
- Fourth, it has fostered a data-driven management culture. Whereas performance evaluations previously relied largely on intuition and experience, managers can now assess employees using objective metrics, such as the utilization rates of the machines they operate.

The First Step in Green Transformation Starts with Energy Data Collection via ECOWatch

YAGEO is also aligning with the global push toward net-zero carbon emissions by deploying ECOWatch at its Nanzih plant to boost energy efficiency. Chen expects that by collecting and analyzing energy data through ECOWatch, the facility can identify key energy-consuming equipment and uncover opportunities for energy savings. These insights will enable the plant to establish effective and realistic carbon reduction measures and performance indicators—transforming environmental sustainability into a source of competitive advantage.

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. Most importantly, Advantech's pragmatic and dedicated service spirit allows Machine-Unite to better align with YAGEO's operational context, maximizing the benefits of its implementation and enhancing YAGEO's overall productivity and competitive edge.

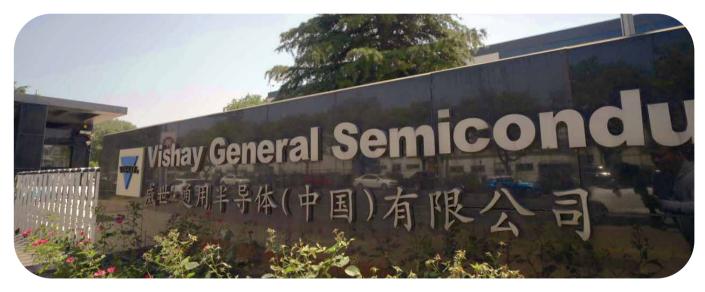
Case Benefits

- Effectively improved the utilization rate across various processes; for example, the utilization rate of the ST process increased from 78% to 88.5%.
- Implemented 24-hour monitoring of equipment status to promptly identify and address potential issues, reducing the risk of long-term or unexpected downtime.
- Monitored and analyzed OEE indicators to effectively identify and resolve production process bottlenecks.
- Generated data reports that enhanced decision-making accuracy, thereby fostering a data-driven management culture.

Advantech WISE-IoT Solutions

- MachineUnite is a lifecycle management solution for industrial equipment, conveying equipment, and machinery. It helps manufacturers and multi-type production facilities upgrade their intelligent operations and maintenance capabilities.
- ECOWatch Energy Management monitors the consumption of water, electricity, gas, steam, and renewable energy, integrating all data for analysis. It helps companies save energy and achieve their carbon reduction goals.

Vishay Intertechnology Establishes an Asia-Pacific **Energy Management Platform** to Drive Sustainability



For a semiconductor factory operating 24/7, 365 days a year without interruption, continuous energy consumption monitoring and real-time anomaly detection are critical for minimizing energy waste and production costs. To achieve this, Vishay Semiconductor, the world's largest manufacturer of discrete semiconductors and passive electronic components, plans to implement Advantech's WISE-IoT Intelligent Energy Management Solution (iEMS) across 15 of its plants in the Asia-Pacific region. This solution will centralize equipment monitoring, energy management, and maintenance within a unified platform while integrating energy-related data from all regional sites to maximize energy-saving benefits through centralized oversight.

Hai Tasi, Vishay's Global Senior Director of iEHS, stated that the initial phase of implementation has been progressively completed at three plants in China and one plant in Taiwan. Notably, one of the plants in Xi'an has already realized measurable benefits following the official rollout of the iEMS solution.

Intelligentization delivers two increases and four reductions in management benefits

Vishay's Xi'an plant specializes in packaging and manufacturing Schottky diodes, fast recovery diodes, thyristors, MOSFETs, and other components. Given the scale of its operations, managing equipment and energy consumption is a complex and resource-intensive task. By implementing Advantech's ECOWatch for energy man-



agement and FMCS for facility monitoring and control, the plant has achieved improvements in three key areas:

First, ECOWatch enhances energy management efficiency by providing real-time visibility into equipment power consumption, tracking carbon emissions, and calculating key indicators (KPIs) for energy management. Hai Tsai emphasized that as ECOWatch is progressively deployed across the group's plants, comparative analysis between facilitates will enable the identification of opportunities for optimizing energy consumption.

Second, by leveraging FMCS to monitor the operating status of electromechanical equipment in real time, administrators can assess equipment performance and identify signs of deterioration. This enables proactive maintenance and timely updates, preventing unnecessary energy waste caused by aging equipment while significantly enhancing the efficiency of equipment management.

WISE-IEMS	ECOWMIC:					2 3 6 0 MIL Part
fearly KPI	Ares	491 int - Ke	manufact Barriel Co.	time includes include	a man	
Dengy Analysis		Tatal amongs analysis		10000	1	- 地址注意设计
Unit Commemption	+ Indones duck	and Designed				
Energy Dearsteen	-Qia fang Enut				11.1	Level 1
Iteen Sommary	Citizet Halt Courts	- 111				
Committee	- Tangle-Loant					
Demand	A Manufacture Carlo	- 111			11111	
Cast Canter	Channelation				11111	
	Module Incomp	-				
Beargy Ranking	Public yest			1111111	TITIT	
Comparison	CR05 Series					
Energy Flow	Typeren harmy			and also also		
Lees Analysis	Roadfalting	1.00	menetria mapie (were input	100 1 10 m 1	1
large Beachin	Office building - Naming Turk	1.00	100.00	2.001080	-40-0	24438
aporting	- Namenta Line Talk	1.100	Luise.	(84.0)	6000	. Local
who used	- Name and Address of State	100	1400-00	101.00	1000	100.4
Neter Reading	Collection.	1.000	Liber	10.107	where it	110.00
Mange Amount		1.66	\$1.40 m	10.4	1000	(contract)
		42.00	1.199-00	100.00	Links	in the second se
Auto Report						

Third, the solution has improved work efficiency while reducing labor time and costs. Tsai explained that previously, the plant had to manually compile data and prepare charts from monthly or annual financial statements to meet customer audit requirements. With the implementation of the iEMS system, the plant can now not only demonstrate its energy consumption management status to customers but also automate data collection and report generation, significantly reducing the time and human resources required for audit compliance.

Overall, following the implementation of the iEMS system, the Xi'an plant has realized the distinct benefits of "two increases and four reductions." The two increases refer to significant improvements in equipment efficiency and resource utilization. The four reductions encompass lower production costs, reduced equipment maintenance expenses, decreased failure rates, and minimized labor requirements.

Why Vishay chose Advantech as its strategic sustainability partner

Among the various energy management solutions available on the market, Vishay selected Advantech for two key reasons: First, Advantech's system architecture integrates both local deployment and cloud integration. Tsai noted that, unlike energy management solutions that lack local deployment options, Advantech's solution allows for on-premises implementation via the IoTSuite data platform while utilizing a private cloud architecture for centralized data management. This approach aligns with Vishay's requirement to keep data off the public cloud.

Second, Advantech WISE-IoT's low-code design offers flexible and customizable development capabilities. Tsai emphasized that Vishay's energy management model must be continuously adjusted based on operational conditions, external factors, and the group's energy-saving objectives. Additionally, certain systems within the Vishay Group differ from those of conventional companies, requiring ongoing modifications to its energy management system. In this regard, Advantech's local engineering team provides proactive and responsive support, swiftly resolving challenges during system implementation. This ensures that Vishay's specific requirements are met while advancing its commitments to sustainable corporate operations and environmental responsibility.

Case Benefits

- Improved equipment efficiency and resource utilization.
- Reduced production costs and human resources.
- Decreased equipment maintenance costs and failure rates.

Advantech WISE-IoT Solutions

The ECOWatch energy management system of iEMS monitors the consumption of water, electricity, gas, steam, and renewable energy, enabling enterprises to enhance energy conservation and reduce emissions. Combined with FMCS, it further optimizes energy and resource utilization.

Empowering Manufacturers with Smart, Scalable Predictive Maintenance Solutions



The European manufacturing sector faces mounting challenges due to high energy costs, particularly in energy-intensive industries. With some of the highest electricity and gas rates, manufacturers must enhance efficiency and reduce operational expenses to competitive.

Larger corporations are accelerating digital transformation by leveraging advanced technologies to optimize energy use. However, small- and medium-sized enterprises (SMEs) often lack financial resources, technical expertise, and in-house capabilities, making the adoption of smart manufacturing difficult.

Enhancing Manufacturing Efficiency with Predictive Maintenance

Recognizing this gap, French industrial computing distributor Integral System partnered with Advantech WISE-IoT and TCT (Tores Composants Technologies) to develop pre-integrated predictive maintenance and real-time production monitoring solutions. These scalable and flexible technologies enable both large enterprises and SMEs to improve efficiency without complex system integration. By offering an affordable and accessible pathway to smart manufacturing, Integral System helps businesses enhance productivity, reduce costs, and adapt to the evolving industrial landscape.

Recently, Integral System's partner, TCT, a leading magnetic core manufacturer, installed a new air compressor at their production site. To reduce unexpected downtime and maintenance costs—critical for machines like mold-

Company	Profile		
Z	tct		Website
Established	1970		
Industry	Magnetic core	manufacturi	ng
Headquarters	France		
Operations	Develop, man	ufacture ar	id sale of
	magnetic cores	and IoT sen	isors
Company size	Medium-sized	enterprise	

ing and winding machines that rely on the compressor-TCT adopted Integral System's predictive maintenance and energy monitoring solutions. Implementation challenges included a large manufacturing site, extreme heat from multiple furnaces, and the need for reliable wireless communication due to the difficulty and cost of wiring sensor nodes. Additionally, the facility's large metal structures required non-invasive, industrial-grade sensors that were easy to install and could withstand harsh conditions.

IoT-Driven Predictive Maintenance for Smart Operations

To address these challenges, Integral System proposed Advantech's WISE-IoT PHM (Prognostics and Health Management) based on IoTSuite along with real-time monitoring and management functions, incorporating the ICR-2031 Industrial 4G Router and TCT's Current Transformer Sensor. The PHM solution included the WISE-2410 LoRaWAN® Smart Vibration Sensor and the WISE-6610 V2 Industrial LoRaWAN® Gateway, utilizing LoRaWAN[™] technology to ensure long-range, bi-directional, and stable wireless communication across metal-intensive environments.

The WISE-2410 sensor, rated IP66 for hazardous environments, was mounted on the compressor to track operational status by cross-referencing RMS speeds and eigenvalues with ISO 10816-3 vibration standards. The WISE-6610 V2 gateway supported Modbus/TCP, MQTT, BacNet, and OPCUA protocols and featured built-in Node-Red, a LoRaWAN® network server, and EdgeLink software to push collected data directly to the cloud. The TCT Current Transformer Sensor, a self-sufficient device requiring no external power, measured current intensity to monitor operation time and power consumption.

During implementation, Integral System identified that the compressor did not operate at a constant speed. Collaborating with Advantech's R&D team, they refined PHM's AI algorithm, enhancing its adaptability for various types of rotating equipment.

By leveraging IoT, machine learning, and predictive analytics, Advantech's IoTSuite-powered solutions transformed TCT's operations. The system now delivers accurate predictive alerts, real-time machine health reports, KPI tracking, and energy consumption insights, notifying the maintenance team and administrative staff proactively. TCT now benefits from remote, real-time monitoring of compressors, pumps, and motors—even during nighttime hours. With Advantech's IoTSuite dashboards, they can centrally manage operations anytime, anywhere, while customizing machine health scores and receiving abnormality predictions up to seven days in advance.

Driving Innovation and Future-Ready Manufacturing

During the development of predictive maintenance and energy monitoring solutions, Integral System, TCT, and Advantech combined their expertise to maximize the potential of their industry know-how. This collaboration not only addressed TCT's immediate needs but also laid a strong foundation for future innovations. Looking ahead, TCT's project serves as a benchmark case, demonstrating how Integral System's solutions can help other manufacturers facing similar machine management challenges.

By continuously developing ready-to-use Industry 4.0 solutions for smart manufacturing and beyond, Integral System and Advantech position themselves at the forefront of industrial innovation. Their commitment to scalable, easy-to-implement technologies ensures they remain competitive in the evolving industrial automation landscape, equipping manufacturers with the tools to thrive in the marketplace of tomorrow.

Case Benefits

- Anticipate potential machine issues and prevent unexpected downtime.
- Enhance PHM's adaptability for various types of rotating equipment.
- Gain a benchmark case to demonstrate PHM and real-time monitoring.

Advantech WISE-IoT Solutions

The WISE-IoT IoTSuite is a cloud-native, low-code IoT platform that streamlines data management. In this case, PHM and real-time monitoring enable predictive maintenance, reduce downtime, and optimize equipment performance for maximum efficiency and operational value.



Advantech's Linkou AloT Co-Creation Campus **Drives Smart Innovation**

How to apply generative AI is a question that has been asked by many companies over the past two years. Advantech, a leader in driving smart transformation, has found its answer at the Linkou AIoT Co-Creation Campus.

By integrating software and hardware solutions with generative artificial intelligence (GAI) technology, the Linkou AloT Co-Creation Campus has developed Advantech WISE-IoT Solution's AgentBuilder to effectively enhance production line efficiency, boost employee productivity, and improve supply chain responsiveness.

Utilizing data as the basis to develop various GAI applications

Industrial PC manufacturing is characterized by smallbatch, highly diverse production. Most clients place recurring orders on fixed cycles, which often means production resumes months after the initial run. This irregular cycle makes it challenging to apply data effectively. Notes Song, Plant Application Manager at Advantech, noted that traditional methods like deep learning or machine learning were previously used to build AI models for data analysis, but their effectiveness was limited because they did not reflect the real production state of an assembly line. Today, GAI leverages extensive language models supported by vast data repositories. By integrating plant data with existing workflows and fine-tuning



these large models, even irregularly collected data can be effectively utilized.

Following this direction, Advantech has implemented AgentBuilder at its Linkou AloT Co-Creation Campus, with the initial development of various Generative Al (GAI) applications from data and upward. James Chang, Project Manager at Advantech, emphasized that after AgentBuilder creates an Al assistant, users can issue commands to it via chat, event sensing, and other methods. The Al assistant then executes actions throughout the project process, progressively completing all tasks.

Implementing AgentBuilder: User-Driven



Development of 12 Innovative Applications

Chang emphasized that the Linkou campus prioritized two key strategies when integrating GAI applications: first, analyzing workflows to ensure the applications align with real-world usage scenarios; and second, establishing expert-specific databases tailored to each application type to maximize the effectiveness of the GAI solutions.

"Building on this success, Advantech is now exploring how to accelerate the development of more GAI applications," added Song. A user-centric approach has been key to driving GAI adoption, leading to the establishment of an AI Academy at the Linkou AloT Co-Creation Campus. This initiative selects AI-enthusiastic employees from various departments as seed members. Leveraging Advantech's AgentBuilder solution, the team has developed 12 GAI application projects, including capacity analysis, test program generation, FQC checklist creation, production material control, material correlation analysis, PLM inquiries, and intelligent customer service.

Ashley Peng, Product Manager at Advantech, further elaborated that AgentBuilder is a low-code or even nocode Al platform. It integrates both structured and unstructured data and connects to various large language models (LLMs). This enables non-technical users to easily deploy GAI applications with simple drag-andclick actions, while IT personnel provide support by preparing data and assisting users with the AgentBuilder. This approach significantly accelerates GAI application development.

"The goal of AgentBuilder is to address the shortage of Al talent and enable manufacturers to leverage the low entry barriers of GAI for a faster path to digital transformation," stated Song. Traditional predictive AI, such as machine learning or deep learning, requires high implementation thresholds. Companies often need vast datasets to train AI models for accurate analysis, which deters many from adopting AI due to insufficient data. GAI, however, excels at reading and generating content from existing data, enabling rapid updates and feedback regardless of a factory's automation level or dataset size, thereby significantly enhancing employee productivity.

Looking ahead, Advantech will continue to utilize Agent-Builder to develop more Agentic AI applications and promote Linkou AloT Co-Creation Campus as a demonstration site for next-generation smart factories. Furthermore, the successful models validated at the Linkou AloT Co-Creation Campus will enable more factories to harness Agentic AI and build their competitive intelligence.

Case Benefits

- Significantly enhances employee productivity.
- Using GAI's low entry barriers for faster digital transformation.
- Addresses the shortage of AI talents.

Advantech WISE-IoT Solutions

AgentBuilder eliminates the need for extensive AI research and trial-and-error, allowing businesses to utilize data more efficiently. It offers multiple visual editing modes, enabling enterprises to choose the most suitable development approach based on specific scenarios. This helps accelerate the integration of AI technology into business operations.

Mirai Electronics, Develops Next-Generation Solar Photovoltaic Monitoring and Metering System



Promoting carbon reduction is a crucial step toward achieving net-zero emissions. In this effort, Singapore-based solar photovoltaic system integrator Mirai Electronics, with the support of Advantech's EdgeLink, EdgeHub, WebAccess, and VisualSuite, has developed a next-generation solar photovoltaic monitoring and metering system.

This system reduces the operational and maintenance burdens of managing solar power plants, aids the Singapore government and businesses in building renewable energy generation systems, increases the proportion of green energy usage, and helps achieve ESG sustainability goals.

Intelligentized and Centralized Management of Multiple Solar Sites

To seize the business opportunities of renewable energy, in 2019, Mirai targeted the solar photovoltaic sector and began offering one-stop services ranging from site planning and solar photovoltaic system installation to remote operations and maintenance. Since then, Mirai has established over 400 solar power stations in Singapore, solidifying its position as a leading player in the country's solar photovoltaic market.

However, as their operational scale expanded, the original on-premises monitoring system revealed manage-

Company Profile





Established	1998
Industry	Solar photovoltaic system installation
	and operations and maintenance
Headquarters	Singapore
Operations	Installation, operation, and maintenance
	of solar power generation systems
Company size	Foreign enterprise

ment bottlenecks. Mirai had to allocate more human resources and time to effectively manage the dispersed solar power stations, increasing the burden of operations and maintenance. Concurrently, customer demand for cloud-based management platforms grew, making it essential for Mirai to adopt more intelligent applications.

In response, Mirai implemented Advantech's diverse solutions, consolidating data from solar power equipment across various locations into the cloud. This allowed for remote management and monitoring of the operational status of all solar photovoltaic sites.

Hui-Ting Su as Product Manager explained that Advantech's solution designed to connect devices in addition to collecting and managing equipment data. It integrates EdgeHub, WebAccess, and VisualSuite, develops next-generation solar photovoltaic monitoring and metering system for Mirai.

Specifically, Mirai utilizes EdgeLink and WebAccess to gather data from various solar power stations, which is then uploaded to EdgeHub. Based on customer needs, the data can be integrated with different systems or third-party sources, allowing for data consolidation and visualization with VisualSuite. This enables customers to develop additional services such as predictive maintenance and asset management. Moreover, Mirai leverages EdgeHub's ability to manage both data and devices simultaneously, enabling remote monitoring of gateway connection status, system configurations, and security settings, thereby reducing the time and human resources required for operations and maintenance management.

Enhancing Efficiency, Controlling Costs, and Meeting Customer Needs

With Advantech solution, Mirai can easily meet diverse customer needs, delivering four key benefits:

1. Improved Remote Operations and Maintenance Efficiency: Previously, if a firmware update was needed for on-site gateways or system configurations needed adjusting to meet end-user demands, Mirai had to send personnel to handle it in person. Each technician could only service two sites per day. Now, with EdgeHub's remote operations and maintenance capabilities, engineers can complete firmware updates or system adjustments remotely, eliminating the need for on-site visits.

2. Increased Billing Efficiency and Accuracy: Before im-

plementing EdgeHub, Mirai manually calculated power generation to bill customers. Now, meter data is directly uploaded to the system, where it is automatically converted into invoices. This process not only saves time but also eliminates human errors, improving data accuracy and strengthening customer trust in Mirai.

3. Helping Customers Achieve ESG Goals: Mirai integrates data from the Singapore Meteorological Service via API, comparing it with power generation data from the sites to assess solar power equipment performance. Additionally, it calculates the carbon emission reductions achieved through solar power generation. This information is provided to customers for inclusion in their ESG reports.

4. Precise Control of Installation Costs: EdgeHub offers various deployment options, including cloud solutions, allowing Mirai to adjust resource usage based on the scale of each site. This flexibility enables more precise control over installation costs.

Since partnering with Mirai, Advantech has consistently supported Mirai with products, services, technology, and talent, ensuring customer needs are met. In the future, Advantech and Mirai will continue to strengthen ties to expand Singapore's solar market.

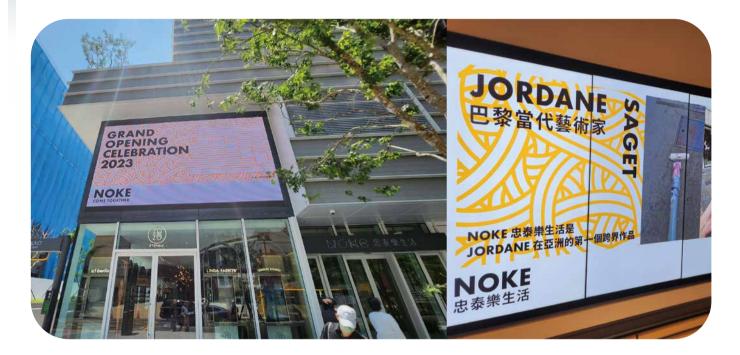
Case Benefits

- Remote monitoring and equipment operations and maintenance, improving O&M efficiency significantly.
- Enhanced efficiency and accuracy in electricity billing processes.
- Providing carbon reduction data to help customers achieve ESG goals.
- Cloud-based scalability for more precise control of installation costs.

Advantech WISE-IoT Solutions

EdgeHub can help companies quickly connect devices across different regions when implementing an industrial IoT system. It thoroughly collects information from all devices, performs real-time data analysis, and can be paired with VisualSuite for optimized equipment and data management.

NOKE Enhances Mall Management with **Smart Retail Solutions**



NOKE is an exciting new shopping mall in Taipei's Dazhi area that opened its doors to the public in 2023. The mall's unique offerings include curated products, diverse dining options, and even winter sports facilities, presenting a fresh and contemporary urban lifestyle experience.

The renowned German-based architect Michael Lin envisioned NOKE's architectural design, drawing inspiration from the bustling trade ships that once sailed along the Keelung River.

With seven floors above ground and three basement levels, encompassing approximately 21,490 square meters of commercial floor space and housing nearly one hundred brands, NOKE aims to transcend traditional tenant compositions. The mall embraces the concept of a large-scale product selection store with brands that possess flexible thinking and integration capabilities. This approach breaks the boundaries of traditional retail spaces, creating a rich and layered shopping experience. For such an atypical shopping mall, the utilization of digital technology is vital. Therefore, NOKE implemented the iVisionSuite's SignageCMS and VisionSense of Advantech's WISE-IoT Solution to create an immersive customer shopping experience and improve operational management.

Company	Profile	
) ₭〔	
Established	2023	
Industry	Department Store and Ret	ail
Headquarters	Taiwan	
Operations	Shopping Centers, Departr	nent Stores
Company size	Large Enterprise	



Creating an immersive shopping atmosphere with digital signage management

NOKE partnered with Harvatek to incorporate the latest LED displays, including outdoor waterproof displays and indoor small-pitch displays, as well as approximately 50 multimedia displays within the mall. In collaboration with MEGA Intelligence, Advantech's digital signage software was seamlessly integrated with the NOKE complex, establishing a completely digital mall signage system. The system allows the mall to easily manage vertical or horizontal displays of varying sizes and resolutions on a unified platform. With a digital signage management platform in place, NOKE Mall can efficiently distribute and deploy fresh content across multiple displays, ensuring guick updates to meet marketing and advertising requirements. The outcome is an intensified connection and improved communication between the mall and its customers, resulting in a more engaging and immersive shopping experience.

People counting statistics – key business analysis indicators

Recognizing the crucial role of people counting statistics in business analytics and backend security management, NOKE integrated these functions into its initial planning phase. With the implementation of iVisionSuite, the mall was able to proficiently monitor customer flow and occupancy information.

For people counting statistics, iVisionSuite provided a seamlessly integrated software and hardware solution. Cameras stationed at various entrances and exits calculate the number of people entering and exiting the mall, sending this data back to the mall's private cloud server. This process effectively records daily foot traffic through different access points, providing critical business analysis indicators. To comprehensively understand customer flow, NOKE implemented UCAM-130 people counting cameras at 12 access points, including main entrances, side doors, parking lots, and even the pedestrian bridge connecting to nearby malls. These advanced cameras accurately capture human images while filtering out carts or other objects, enabling accurate daily customer flow calculations.

Enhancing customer comfort through comprehensive occupancy analysis

At the same time, iVisionSuite also provides occupancy analysis services. The number of people inside the mall is continuously monitored, and data is integrated with other IoT sensor data, including temperature, humidity, and carbon dioxide concentrations. The combined data is displayed on digital signage at the first-floor entrance, serving as a reference for overall environmental safety monitoring.

In the changing landscape of retail and service industries, Advantech provided strong support, enabling retail managers to employ inventive applications that enhance customer interactions and boost operational efficiency through comprehensive management platforms.

Case Benefits

- Immersive shopping atmosphere through diverse digital signage.
- Data-driven business analysis and security management.
- Comprehensive people counting and occupancy management.

Advantech WISE-IoT Solutions

- iVisionSuite's SignageCMS can be applied to various sectors, including retail, healthcare, and catering.
- This project integrates the UCAM-130 People Counting Camera hardware and the VisionSense software to effectively enhance the management efficiency and safety of shopping malls.

» Ecosystem Partnership

Ecosystem Connected. Growth Enabled.



Empowering Innovation with WISE-IoT Global Support and Ecosystem Co-Creation

To help industrial sectors worldwide realize the intelligent era of AI-driven operations, Advantech WISE-IoT offers comprehensive support services—from technical enablement and regional services to online training and developer collaboration. Through global support and ecosystem co-creation, we empower integrators, developers, and enterprises to accelerate AIoT solution deployment and unlock innovations across industries.

Regional Service Center

Collaborating with SI and ISV partners in regions such as Europe, the Americas, and Asia to provide localized regional services.





Training & Certification

A free, one-stop learning platform provides online courses, hands-on labs, and certification programs.

Global Support Services

End-to-end technical support—from onboarding assistance, solution templates, enablement resources, and cloud maintenance—empowering integrators, developers, and enterprises to build and scale effectively.

Developer Community

Cultivating a growing developer ecosystem by engaging global partners, fostering knowledge and best practices sharing, and encouraging co-creations across industrial applications. Established 1995 Headquarters Korea





Focus Industry Energy, Semiconductor, Automotive



VETEC partners with Advantech to enhance IoT solutions, merging expertise and resources to drive innovation, efficiency, and scalability in automation. "

VETEC is a leading provider of automation solutions, focusing on BOM (Bill of Materials) management, cloud integration, and IoT (Internet of Things) applications. The company serves a wide range of clients, including manufacturing firms, technology companies, and industrial enterprises. As Advantech's premier channel partner, VETEC also provides various hardware and software based on industrial IoT and embedded IoT, developing various solutions using Advantech products, and leveraging our extensive field experience to stay ahead in the industry.

Established 1995 Headquarters Japan

Network Corporation Inc.

Focus Industry **Building Automation**



"

NWC and Advantech collaborate to drive end-to-end digital transformation with smart monitoring solution, provide a wireless gateway solution for more effective real-time monitoring process and flexible data acquisition in the digital era. "



Network Corporation Inc. has established itself as a leader in Building Automation Systems (BAS), delivering solutions for skyscrapers, luxury hotels, universities, and theme parks for over 30 years. Recently, they expanded into DCIM (Data Center Infrastructure Management), optimizing data center operations with cutting-edge solutions. Partnering with Advantech, they combine robust hardware like ECU and AMAX with data connectivity software, including WebAccess/ SCADA and the IoTSuite data platform, enabling seamless IT/OT integration and scalable IoT applications tailored to diverse customer needs.



Established 2003 Headquarters France

Focus Industry Machine Builder, Factory and Machine Automation



Integral System utilized Advantech's IoTSuite to integrate edge devices, centralize management, and deliver real-time insights, providing a strong foundation for digital transformation. 77

Founded in 2003, Integral System is a leading French expert in industrial computing, automation, IoT, and intelligent systems. With 20+ years of experience, the company delivers high-performance, customized solutions to optimize operations and accelerate digital transformation. As an Advantech Premier Partner for Industrial IoT, Integral System provides cutting-edge technologies in predictive maintenance, data acquisition, AI analytics, and mobility. Its end-toend, scalable offerings span hardware, software, and system integration-with a strong focus on cybersecurity and AI automation. Integral System is committed to delivering intelligent, secure, and sustainable platforms that enhance efficiency, resilience, and competitiveness across connected industries.

Established 1990 Headquarters Germany

AMC – Analytik & Messtechnik GmbH

Focus Industry

Machine Builder, Factory and Machine Automation



As an Advantech Premier Partner, AMC remains committed to supporting all our customers with innovative solutions and unparalleled service. "



AMC - Analytik & Messtechnik GmbH Chemnitz is a leading system house for measurement, testing, control and automation technology, founded in 1990. Our extensive delivery program includes state-of-the-art products and system platforms. As a manufacturer-independent supplier, we provide tailored advice to help customers select the best products for their specific applications. AMC specializes in developing customer-specific system solutions that address unique and specific requirements, leveraging state-of-the-art technology to deliver results tailored precisely to each customer and application.

Established 1949 Headquarters France

Orange Business



Focus Industry

Manufacturing, Food and Beverage, Healthcare, Retail



Our partnership with Advantech reaffirms our dedication to industrial automation and digital transformation, driving a smarter, sustainable, and secure future. "

Orange Business, the enterprise division of the Orange Group, is a leading network and digital integrator, supporting customers to create positive impact and digital business. The combined strength of its next-generation connectivity, cloud, and cybersecurity expertise, platforms, and partners provides the foundation for enterprises around the world. With 30,000 employees across 65 countries, Orange Business enables its customers' transformations by orchestrating end-to-end secured digital infrastructure and focusing on the employee, customer, and operational experience. Orange Business brings expertise to IT and OT as a global digital integrator, communications operator, and service provider. which uniquely qualifies us to support our manufacturing clients on their digital transformation journey.

Established 2014 Headquarters Poland

Seargin Sp. z o.o.

Focus Industry IT Services & IT Consulting



Seargin boosts manufacturing with AI, IoT, and vision technologies from Advantech portfolio, offering smart solutions for energy management, predictive maintenance, and real-time operational insights. "



Seargin is a multinational tech consulting company operating in 50 countries. You'll find our solutions in the space industry, supporting scientists in the development of cancer drugs, and implementing innovative technological solutions for industrial clients worldwide. These are just some of the areas in which we operate. We deliver high-performing IT and engineering services. We specialize in technology services consulting - mainly in the area of SAP, ServiceNow, Workday and Salesforce, as well as in technologically advanced industrial solutions (High-Tech Industrial Solutions), such as Digital Twins, Machine Vision and Customized Inspection Systems, Application Managed Services, Cybersecurity, Artificial Intelligence and SAP Consulting.

Established 2016 Headquarters Thailand

Industrial Revolution Co., Ltd. (iRev)



Focus Industry Food & Beverage, Automotive, Packaging, Electronics



iRev partners with Advantech to drive end-to-end digital transformation with iFactory, empowering businesses in Thailand and ASEAN to operate smarter and more effectively in the digital era.

"

Powering Digital Transformation for Industrial Excellence

iRev is a leader in driving digital transformation across industries, helping businesses in Thailand and ASEAN to optimize operations and implement smarter, more efficient processes. We provide expert consulting, training, and system integration services, enabling companies to adopt cutting-edge technologies such as smart factories, energy management, and automation. With a proven track record of enhancing productivity and operational efficiency, iRev is dedicated to delivering innovative solutions that create lasting value and sustainable growth for our clients in the digital era.

Established 2009 Headquarters Vietnam

MECarbon

Focus Industry Environment and carbon inventory



"

We will continue to be a pioneer in the field of Greenhouse Gas to join hands with Advantech to bring Vietnam to Net Zero by 2050, and look forward to even more future collaborations with Advantech. "



MECIE CARBON CREDIT INVENTORY AND CONSULTING JOINT STOCK COMPANY (abbreviated MECARBON) was officially established and is a subsidiary of MECIE VIETNAM. MECARBON not only marks our expansion but also creates strong development in the field of greenhouse gas inventory and carbon credit project support. MECARBON combines high-quality economic knowledge and technical expertise to support customers in developing and managing carbon credit programs and projects under the Clean Development Mechanism (CDM), Verified Carbon Standard (VCS), and Gold Standard (GS) as well as new market mechanisms within the UNFCCC framework.



Supremesoft (M) Sdn Bhd is a premier technology solutions provider dedicated to empowering businesses with innovative software and services. It is also a pioneer in AI-driven smart manufacturing solutions, equipping industries with cutting-edge technology to optimize processes, enhance efficiency, and achieve sustainable growth. Specializing in Industry 4.0, we offer a comprehensive suite of solutions, including IoT systems, barcode technology, and ERP & MES systems, designed to streamline operations and boost productivity. Our expert team leverages cutting-edge technology to deliver customized solutions that drive growth and operational efficiency.

Established 2006 Headquarters Taiwan

eAl Technologies Inc.

Focus Industry

Textile/Footwear industry/Metal processing



Leveraging eAI Tech's expertise in implementation and Advantech's global marketing resources, we aim to accelerate the adoption of high-mix, low-volume IoT solutions.



eAl Tech has been a trusted provider of comprehensive information system integration services in Taiwan for over 40 years. We specialize in delivering enterprise resource planning (ERP) systems tailored for textile manufacturing processes, including spinning, weaving, dyeing, finishing, and garment production. Recently, we have been actively exploring the Southeast Asian market to provide comprehensive solutions for our customers. We deliver high-quality, domain-specific ERP solutions that bridge front-end financial and accounting systems with deep manufacturing site integration. Our vision is to establish solid smart manufacturing solutions that enhance process management, enterprise intelligence, Al operations, energy management, and IoT applications for factories.

Stay Connected, Stay WISE From edge to cloud, we stay connected.



www.advantech.com

Please verify specifications before ordering. This guide is intended for reference purposes only. All product specifications are subject to change without notice. No part of this publication may be reproduced in any form or by any means, electronic, photocopying, recording or otherwise, without the prior written permission of the publisher. without prior written permission of the publisher. All brand and product names are trademarks or registered trademarks of their respective companies. © Advantech Co., Ltd. 2025

8600000682