Advantech WISE-IoT

Driving Digital Transformation with Modular Edge-to-Cloud AIoT Software
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About Advantech

Co-Creating the Future of the IoT World

Founded in 1983, Advantech is a leading global provider of intelligent IoT systems and embedded platforms. Embracing the recent trends of IoT, big data, and artificial intelligence, Advantech develops IoT hardware and software solutions based on its WISE-IoT cloud platform to assist partners and customers with integrating industry chains. Advantech also works with partners to co-create business ecosystems that facilitate intelligent industry and realize its corporate goal of “Enabling an Intelligent Planet”.

Advantech’s Good-to-Great 3-Circle Principle

The Advantech 3-Circle Principle is based on the book Good to Great by Jim Collins. According to the book, a company looking for long-term success should clearly address these three fundamental principles, and commit to their continuing, solid execution. Advantech is fully committed to this approach and has defined the Advantech “Good to Great 3-Circle Principle” as a means of adhering to it.

Honors & Awards

- No.1 in Industrial PCs Worldwide Market Share
- No.18 in Top 50 Global Automation Vendors
- No.5 in Best Taiwan Global Brands
- Red Dot Product Design Award
- No.9 in Top 100 Industrial IoT Companies
- iF Product Design Award
- Be the Global Leader of Embedded & Automation Solution Platforms for IoT System Integrators
Enabling an Intelligent and Sustainable Planet

Advantech’s Environmental, Social, and Governance (ESG) Vision Declaration emphasizes environmental, social, and corporate governance topics that include altruism and co-enrichment, while aiming to enable an intelligent and sustainable planet. Based upon our corporate vision of “Enabling an intelligent planet,” our ESG vision aligns with our core competitiveness, key developments, and response strategies to the United Nations Sustainable Development Goals (SDGs).

Leveraging our Artificial Intelligence of Things (AIoT) core competencies and smart solutions, we aim to realize SDG 7 (Affordable and Clean Energy) and SDG 13 (Climate Action), focusing on improving energy efficiency, energy-saving in buildings and manufacturing, and reducing carbon emissions in logistics and retail. Through our open and innovative environmental and educational initiatives aimed at promoting Internet of Things (IoT) platforms and solutions, we strive to provide exceptional education (SDG 4) and foster global partnerships (SDG 17).

Our diverse range of hardware, software, Industrial Applications (I.Apps), and integration solutions target specific applications such as energy, flood and disaster prevention, sewage treatment, remote education, public safety, public health, telemedicine, smart agriculture, information security, and cloud computing.

In 2023, our worldwide revenue for the sale of products used for sustainable purposes accounted for 39.9% of our total revenue (The result was calculated by EU taxonomy for sustainable activities).

Looking ahead, we aim to integrate sustainability concepts into our strategy blueprint for developing new products across various industries. We remain committed to developing smart solutions that contribute to a cleaner, safer, healthier, and more convenient world, ultimately enabling an intelligent and sustainable planet.

Community Enrichment
- Implementing employee care and social benefit using the ABLE Club platform
- Diversified channels and global learning platform for talent cultivation
- Human Capital Management building for talent visualization
- Support the sustainable education and innovation

AIoT Popularization
- AIoT Academy
- AIoT InnoWorks industry-university co-creation
- IoT ecosystem partner co-creation
2025 goal: 50 universities worldwide to participate in the co-creation of InnoWorks with 500 system integration partners

Green Operations
- Climate change strategy and energy management
- Green design and sustainable products
- Sustainable intelligent solutions

2021 Science Based Targets initiative (SBTi) approved
2022 Task Force on Climate-Related Financial Disclosure (TCFD) report released
2023 Dow Jones Sustainability Index (DJSI) listed corporate
2025 Carbon Disclosure Project, (CDP) A Level
2030 RE 50 (Scope: Taiwan and Kunshan)
2040 RE100 in a group level
2050 Net zero carbon
Advantech WISE-IoT E
Seamless AIoT Integration from Edge Software,

Smart Factory
- FactoryOEE
- OEE Pro
- Andon
- EHS
- FMS
- Patrol Inspection

Intelligent Retail
- SignageCMS
- PeopleCount
- FaceMatch
- Inspection
- IoT Sensing

IoT Suite
- AIoT Development

EdgeLink
Edge Connectivity Service

DeviceOn
Device Management Service
Edge-to-Cloud Solutions
Cloud Platform to Diversified Domain Applications

Experience
Expand

WISE-Marketplace

Energy Management
- ECOWatch
- CarbonR
- PHM
- MachineUnite
- HVAC
- Compressor

Intelligent Healthcare
- iOutpatient
- iTeleMed
- iVideOR
- iWard
- RTLS

WISE-STACK
On-Premises

sync 360

WebAccess
SCADA and HMI Visualization

EdgeHub
Edge Intelligence Enabler

Computers
IPC/Servers
Intelligent Service and Logistics
Medical Computers
Unlock efficiency with WISE-Marketplace, your one-stop place for IoT excellence. Streamline operations with tailored solutions and robust applications, backed by dynamic support for all business partners. Experience the ease of flexible solutions and a wealth of resources designed to elevate your enterprise to the next level.

**What we Offer on WISE-Marketplace**

- **60+ Industrial Application**
- **20+ Domain-focused Solutions**

  - Smart manufacturing
  - Intelligent energy management
  - Intelligent city services & retail
  - Intelligent healthcare

**News & Events**

- Industrial news and success stories
- Case studies and white papers
- Workshops and webinars
**Benefits for Customers**

- **Simple Purchasing Process** to ensure ultimate convenience.
- **Dedicated Technical Support** to address your needs comprehensively.
- **Tiered Membership Program** to enhance the value of every purchase with us.

**Benefits for Partners**

- **Co-marketing Resources** to amplify brand visibility and eco-system.
- **Exclusive Partner Pricing** to increase profitability and competitiveness.
- **Leads Sharing** to accelerate business growth.
- **Tenant Service** to simplify client operations for system integrators.

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**Tenant Management**

- Licensed distribution
- Usage management (object, user, tag, parameter, connection, etc.)
- Permission management

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**Diverse Charging Model**

- Perpetual purchase
- Subscription model
- Application widget extensions

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**Flexible Deployment & Application Activation**

- Public cloud
- Private cloud
- Hybrid cloud
- On-premises

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**Abundant Support Resources**

- Technical documentation
- Training courses
- User manuals

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Know more about WISE-Marketplace
EdgeSync 360

Edge as a Service for IoT Device and Data Orchestration

EdgeSync 360 is Advantech’s Edge as a Service, featuring a comprehensive suite of software products tailored to revolutionize device and data management across various industrial applications. At its core, EdgeSync 360 is powered by a robust set of software and centralized services, including EdgeLink, DeviceOn, WebAccess, and EdgeHub.

1,200+ IoT device monitoring and management

200,000+ Object parameters data processing

50% Reduction of labor expenses

Components of EdgeSync 360

**EdgeHub**

Centralized Service

One Single Platform Managing All Advantech Devices

- Connectivity management
- Centralized device management
- Unified data management

**WebAccess**

Field Management Service

Real-Time Operation and Visualization

- 2D/3D visualization
- Graphic control and reporting
- Time series database for trend analysis
**Feature Highlights**

- **Seamless IoT Integration**
  Embrace unparalleled edge-to-cloud connectivity capabilities for IoT communication.

- **Remote Monitoring and Control**
  Gain real-time management power, crucial for system integrators to minimize downtime and boost efficiency.

- **Advanced Visualization**
  Stay ahead with our data visualization tools for proactive device management and maintenance.

- **Enhanced IoT Security**
  Safeguard data integrity and transform data protection with robust security functions in industrial environments.

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**DeviceOn**

**Edge Management Service**

Bringing Intelligence to Computing Platforms

- Secure device onboarding
- Out-of-band management
- Update management

**EdgeLink**

**Edge Connectivity Service**

Connecting 200+ OT Devices from the Edge to Cloud

- Protocol conversion
- Secure connection
- OT data integration

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Know more about EdgeSync 360
IoT Suite

AIoT Development Toolset for Data Application & Solution Integration

IoT Suite, a cloud-native and comprehensive development toolkit, enables robust, data-driven app development and drives enterprise digital transformation through a unified cloud-edge-end engine. With an open architecture, IoT Suite enhances connectivity, streamlines development processes, accelerates delivery, and fortifies business resilience.

Solution Portfolio

- **EdgeSync 360**
  - **IoT Device Management**
  - Reliable data communications between devices, user applications, and cloud services.

- **InsightAPM**
  - **Asset Performance Management**
  - Utilize digital twinning to quickly develop and enhance operational efficiency in various AIoT applications.

- **Visual Data Vis**
  - **Unleash the true potential of data with compelling 2D/3D visualizations.**

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**Equipment Networking**

**Real-Time Monitoring**
**Users and Benefits**

- **System Integrators (SI)**
  Explore low-code and customizable solutions like IoTSuite for efficient project and system integration.

- **Independent Software Vendors (ISVs)**
  Innovate and customize IoT applications with IoTSuite as comprehensive toolset.

- **Hardware Manufacturers**
  Develop hardware applications compatible with IoTSuite, enhancing value as an add-on service.

- **End Users**
  Integrate IoTSuite as a user-friendly data platform for efficient in-house maintenance and long-term resource optimization.

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**IoTSuite**

- **Data Visualization**
  Visualize data with compelling visualizations.

- **DataInsight**
  **Data Integration and Management**
  Incorporate diverse data types and enhance scalability to provide reliable, user-friendly analytics.

- **Chatbot**
  **AI Assistant**
  Enhance decision-making accuracy by utilizing a conversational generative AI tool integrated with a centralized data lake.

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**Business Intelligence**

- **3**

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**AI-Empowered Decision Making**

- **4**

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**Know more about IoTSuite**

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Smart Factory

Intelligent Factory Solutions (iFactory Suite)

iFactory Suite’s digital solutions enhance operational excellence by elevating maintenance, energy sustainability, smart AI, and proactive insight, transforming manufacturing through the use of a low-code/no-code IoT cloud platform. These solutions enhance equipment effectiveness (FactoryOEE) and ensure environmental, health, and safety excellence (EHS) for streamlined operations. iFactory Suite facilitates data-driven decisions, fostering increased productivity through agile manufacturing and cross-domain solution integration (I.App).

Scenario & Solution Portfolio

Effective Total Production Maintenance

FactoryOEE monitors the real-time status of equipment through data capture and dashboards to present only the most important information.

- The digitalization service, integrated with OpenAI, optimizes OEE, yield, performance, quality, and reduces carbon emissions and power consumption.
- Including industrial apps: OEE Pro, Andon, Maintenance, etc.
EHS continuously optimizes energy consumption, achieves optimal energy usage efficiency, and enables people to understand power consumption more deeply.

- Rapidly resolve anomaly events
- Control energy consumption
- Augment employee capabilities
- Reduce production time wastage
- Increase production capacity and quality

Energy Sustainability & Work Safety

EHS

- Comprehensive system that prioritizes workplace safety, environmental sustainability, and employee well-being.
- Including industrial apps: FMS, Utility Manager, Patrol Inspection, etc.
Solution Architecture

Effective Total Production Maintenance

- **OEE Pro**
  A tool to efficiently oversee the performance and energy efficiency of your machinery and equipment.

- **Andon**
  Instantly capture anomalies and analyze maintenance and repair data.

- **Maintenance**
  Get real-time machine insights, minimizing downtime and equipment issues.

Energy Sustainability & Work Safety

- **Facility Management & Sustainability**
  Optimize facility energy consumption for optimal energy usage efficiency.

- **Utility Manager**
  Rapid anomaly alerts of irregularities with advanced analytics to reduce downtime.

- **Patrol Inspection**
  Enable users to safeguard, view, and carry out patrol tasks assigned with our app.

Cloud Platform

- **IT & OT Integration**
- **Low-Code / No-Code**
- **Open Architecture**
- **Safe & Reliable**
- **Faster Delivery**
- **Efficient Data Processing**

Edge Intelligence

- **Sensing Devices**
- **Gateway & Controller**
- **Edge Computers**
- **IPC/ Servers**
- **Human Interface & Mobile Devices**
Tier-1 EV Thermal Manufacturer Improves OEE and Energy Consumption Using Unified IIoT Platform

“We’ve empowered operators with enhanced insights, enabling swift analysis of production issues and optimized bottlenecks. Freed from paperwork and lengthy communication, they focus on efficiency based on dashboard data. Projections show a 5% quality rate increase and 15% production efficiency rise. Energy monitoring systems have led to 5% energy savings and carbon reduction in 2023, affirming Amulaire Thermal Tech as a Tier-1 supplier with advanced capabilities.”

- Production Site Manager, Amulaire Thermal Tech.

Accelerate Decision-Making Through Generative AI in the EMS Plant

Manufacturing managers at Advantech’s SMT plant has been utilizing generative AI for a month, with plans to expand its usage next month. “Factory GenAI proves to be a time-saver for managers, swiftly pinpointing and rectifying inefficiencies in production lines, equipment, and work orders, thus optimizing workflow. The AI-powered chatbot assistant offers real-time alerts and data-driven insights for prompt decision-making, with the goal of enhancing productivity by over 25%, reducing downtime by 30%, and increasing utilization rates by 36%.”

iFactory Suite Offerings

Cloud Solution

FactoryOEE & EHS with IoTSuite RTM
- Includes 1 license of FactoryOEE & EHS for yearly subscription and renewal
- Includes 30 parameters for monitoring OT data (PLC, sensors, etc.)

On-Premises Solution

FactoryOEE & EHS with IoTSuite RTM
- Works with any Advantech IPC hardware, perpetual license
- Min. requirements: Intel® Celeron® / 8GB RAM / Windows 10 or Linux
- Starting with 1 license for FactoryOEE & EHS and 30 parameters
Energy Management

Intelligent Energy Management Solutions (iEMS Suite)

Advantech's iEMS Suite technology is a cutting-edge solution for corporations striving towards carbon neutrality. This smart energy system aligns with ISO 14064/ISO 14067 and ISO 50001 standards, embedded with Generative AI expert service, focusing on carbon asset and energy management. It addresses the pressing need to reduce greenhouse gas emissions, enhancing HVAC, compressed air, and motor efficiency. Ideal for businesses committed to sustainability, iEMS Suite is your partner in achieving environmental goals and contributing to a healthier planet.

Scenario & Solution Portfolio

**HQ ESG Office**
- Carbon management
- Sustainability index management

**HQ Building**
- Energy management
- Corporate ENPI management

**Carbon Management**

- **CarbonR**
  Analyze enterprise carbon emissions and product carbon footprint with digital carbon inventory system to achieve carbon neutrality and ISO 14064 / 14067 compliance.

- **ECOEnterprise Add-on**
  A CarbonR add-on module designed to assess the sustainability KPIs of global enterprises, covering energy performance, SBTi, RE100 progress, and energy-saving outcomes.

**Energy Management**

- **ECOWatch**

- **Bulletin Add-on**
  An add-on module of ECOWatch for public audiences to quickly understand corporate energy performance.
• One-stop smart energy management anchored on low carbon
• ISO-compliant energy & carbon stewardship
• Streamlined, user-centric solutions
• Real-time energy & carbon metrics visualization
• Generative AI expert consultation & interaction

Generative AI Expert

• Energy saving decision making assistant
• Facility management supporter
• Self-service knowledge center and analysis tool.

Manufacturing Department

• HVAC equipment energy efficiency
• Compressor equipment energy efficiency
• Rolling pump equipment management
• Public facility equipment management

Critical Equipment Management

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

Compressor
Optimize management efficiency and reduce energy costs across the entire compressed air system by combining centralized control, information processing, energy-saving control, and predictive maintenance.

PHM
Identify abnormalities or deterioration, understand equipment status, enhance management and maintenance efficiency, extend equipment lifespan, and reduce life cycle operating costs of motor equipment.

MachineUnite
Connect all public facility equipment, including chillers, compressors, boilers, heat pumps, generators, etc., onto a single platform to manage their entire lifecycle. Automate repair and maintenance assignments to enhance availability, minimize downtime, and mitigate risks.
Solution Architecture

**Carbon Management**
- CarbonR
  - Organization carbon inventory
  - Carbon hot spot analysis
  - Data quality management
- ECOEnterprise

**Energy Management**
- ECOWatch
  - Energy consumption EUI
  - Demand management
  - Energy consumption analysis
  - Energy saving management
- Bulletin

**Equipment Management**
- HVAC
  - Equipment monitor & control management
  - Energy efficiency diagnosis & analysis
  - Evaluation on economic operations
  - Optimization of operational strategy
- Compressor
  - Equipment monitor & control management
  - Energy load analysis
  - Preventive maintenance
  - Optimal control over unit group
- PHM
  - Multiple vibration measuring points
  - Real-time management of vibration signals
  - Detection & prediction of equipment degradation
- MachineUnite&PI
  - Public facility status monitoring management
  - Equipment maintenance dispatch management
  - Equipment operation management

**IoT Suite**
AloT Development Toolset

**WISE-STACK**
On-Premises

**EdgeSync 360**
Device & Data Orchestration

**Data Acquisition**

**On-site Equipment**
- EdgeLink
  - Edge Smart Gateway ECU-1251
- EdgeLink
  - Intelligent RTU ADAM-3600
- WebAccess/SCADA
  - Embedded Fanless Industrial Computer UNO2464G
Success Stories

Semiconductor Industry

Vishay Leverages iEMS Suite for Energy Management Solutions across Asia-Pacific

“For a semiconductor factory that operates 24/7 all year round, the key to minimizing energy waste and carbon emissions while lowering production costs lies in tracking energy consumption and promptly identifying anomalies.”

- Hai Tsai, Asia-Pacific’s Senior Director of Vishay Group

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

Healthcare Industry

iEMS Suite Optimizes Mennonite Christian Hospital Management

“Dispersed across a large area, Mennonite Hospital’s campuses need a unified platform to transmit operational data for AI-assisted decision-making. This includes monitoring earthquake status and other vital corporate operations. Advantech, our chosen partner, was selected for being top in the field.”

- Lin Wen –Hsiu, Director of Engineering Management Department

Case Benefits
- Enables accurate planning and utilization of the solar power system
- Reduces carbon emissions and electricity costs
- Realizes the goals of energy conservation and consumption reduction

Chemical Manufacturing Industry

iEMS Suite Facilitates Energy Conservation and Carbon Reduction Goals for YC Group

“Implementing an energy management system not only enhances the benefits of energy conservation and carbon reduction but also optimizes the operational costs and increases YC Group’s competitiveness in the global market.”

- Bai-Xiang Cheng, General Coordinator of YC Group

Case Benefits
- Centralized management of energy status across various plants
- Optimization of the group’s operational costs
- Achieving the company’s mission of promoting environmental sustainability

Know more about iEMS Suite
Intelligent Retail

Intelligent City Services and Retail Solutions (iService Suite)

Advantech intelligent city services and retail solutions enable the digital transformation of field services and operations management with interactive digital signage, intelligent video analysis, and quality and safety management. Our standard solution is iService Suite, which utilizes vision AI for human detection, object recognition, and facial recognition. All the video source can be easily integrated with WISE-IoT solutions. iService Suite is based on a low code/ no code platform, enabling easy integration to meet diverse market demands.

Scenario & Solution Portfolio

Smart Building

- Facial recognition access control
- Video analysis & security management
- Vision AI and interactive signage integration

PeopleCount

PeopleCount utilizes vision AI technology to detect people. It can be applied to people counting, occupancy management, and smart queue.

FaceMatch

FaceMatch is a facial recognition platform that enables users to identify facial profiles with 99.8% accuracy.

ObjectVA

ObjectVA is a low code platform for object detection and recognition. Through object recognition training, it improves personnel safety and management efficiency.

Intelligent Video Analysis
- Interactive service boosts customer engagement
- Vision AI optimizes management efficiency
- Low code/no code platform for integration
- Comprehensive dashboard leads to business insights

Food & Beverage

- Menu board signage
- Object recognition self-checkout
- Digital auditing
- Temperature and humidity monitoring

Shopping mall

- Customized advertisement signage
- People counting and occupancy
- Smart queueing

Interactive Digital Signage

SignageCMS is an intuitive and flexible solution for interactive content design and display management.

SignageBI provides visualized data of SignageCMS content. Easily understand customer analytics and dwell time analysis.

Quality & Safety Management

IoTSensing

Advantech provides diverse sensors to collect data. IoTSensing is designed specifically for temperature, humidity and air quality monitoring.

Inspection

Inspection is a user-friendly software solution for conducting quality control inspections and operations auditing.
## Solution Architecture

### Focus Domains
- Retail
- Food & Beverage
- Hospitality
- Sport Space
- Public Spaces

### Industrial APPs
#### Interactive Digital Signage
- **SignageCMS**
  - Interactive signage design
  - Schedule & dispatch management
  - IoT data display integration

- **SignageBI**
  - Content display analysis
  - Audience statistics
  - Data visualization

#### Intelligent Video Analysis
- **PeopleCount**
  - People counting
  - Occupancy counting
  - Counting data integrated with POS system

- **FaceMatch**
  - Real-time facial recognition
  - Face analysis (gender, age, etc.)
  - Face ID search and match

- **ObjectIVA**
  - Object detection and recognition
  - Object recognition integrated with SignageCMS

#### Quality & Safety Management
- **Inspection**
  - Digital auditing and inspection
  - Event records and tracking
  - Quality reports

- **IoTSensing**
  - Collect air quality data
  - Monitor temperature and humidity
  - Event records and tracking

### Cloud Platform
- IoT Suite
  - AioT Development Toolset

  - WISE-STACK
    - On-Premises

- IT & OT Integration
- Low-Code / No-Code
- Open Architecture
- Safe & Reliable
- Faster Delivery
- Efficient Data Processing

### Solution Packages
- Interactive Signage Edge
- Self-service KIOSK
- Traffic & Occupancy
- Smart Queuing
- Access Control
- Vision AI
- Safety
- Cold Chain
- EHS Monitoring
## Success Stories

### NOKE Enhances Comprehensive Mall Management with Smart Retail Solutions

NOKE, an exciting new shopping mall in Taipei, opened its doors to the public in 2023. NOKE recognized the significance of leveraging digital technology to enhance operations and business management.

<table>
<thead>
<tr>
<th>Case Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Immersive shopping atmosphere through diverse digital signage</td>
</tr>
<tr>
<td>• Data-driven business analysis and security management</td>
</tr>
<tr>
<td>• Comprehensive counting and occupancy management</td>
</tr>
</tbody>
</table>

### Truedan Enhances Service Quality with Advantech’s Inspection Solution

The renowned Taiwanese beverage brand, Truedan, implemented Advantech’s intelligent store inspection solution. This solution is helping Truedan boost service quality, ensure beverage safety, minimize labor costs, promote environmental sustainability, increase operational efficiency, and enhance the brand’s image.

<table>
<thead>
<tr>
<th>Case Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Digital auditing improves service quality</td>
</tr>
<tr>
<td>• Inspection platform records ensures beverage safety</td>
</tr>
<tr>
<td>• Digital checklists reduce labor costs</td>
</tr>
</tbody>
</table>

### Natural First Creates New Growth Momentum with Smart Retail

Natural First, a renowned Taiwanese beverage chain has successfully overcome the challenges of the pandemic through the digital transformation of their operations.

<table>
<thead>
<tr>
<th>Case Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Takes only two minutes to update digital signage across stores</td>
</tr>
<tr>
<td>• Supervisors can report store data analysis in real time</td>
</tr>
<tr>
<td>• Paperless operations for product promotions and store management</td>
</tr>
</tbody>
</table>

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Know more about iService Suite
Intelligent Healthcare

Intelligent Hospital Solutions (iHospital Suite)

Advantech iHospital Solutions empower hospitals to achieve the best patient outcomes through intelligent features like Smart Ward platforms, outpatient solutions, operating room optimization, and telehealth capabilities. Real-time location systems (RTLS) further enhance these benefits by providing hospitals with ultimately maximizing efficiency and patient safety.

Scenario & Solution Portfolio

### iVideOR

- Increased patient safety
- Supports a safe hygienic, and streamlined OR
- Increase OR uptime

### RTLS

- Enhance the efficiency of care delivery
- Ensure patient and staff safety in hospital
- Improve equipment utilization to reduce costs

### iWard Solutions

- Maximizes nurse work efficiency
- Enhances quality of patient care
- Improves patient engagement
- Achieve healthcare data interoperability

iWard solutions optimize hospital efficiency and care quality by integrating Nursing Dashboards for streamlined operations. The Patient system enhances satisfaction with a range of services. iWard solutions improve outcomes and prioritize patient safety.

iVideOR solutions redefine the OR experience. It simplifies medical video management, allows healthcare professionals to livestream surgeries, record procedures, and manage captured video data from a centralized location. Start working with iVideOR, optimizing pre-op to post-op workflows and enhancing patient care now.

iOutpatient solutions provide a smart queuing system, digital signage, self-check-in kiosk, and BI intelligence. These components enhance operational efficiency, improve patient satisfaction, optimize patient outcomes, and ensure better patient safety.
Advantech’s real-time location system (RTLS) utilizes Bluetooth Low Energy (BLE) technology to precisely track assets and patients within a 3-meter range. This leads to increased visibility and enhanced operational efficiency.

Advantech’s iTeleMed solutions provide a unified platform for remote care, virtual outpatient services, and convenient access to medical records. The iTeleMed P2P software portal facilitates virtual interactions, bridging healthcare interactions. With a lightweight web-based design, HIPAA compliance, and intuitive operation, these solutions empower healthcare institutions to deliver intelligent patient-centered care. Additionally, Advantech’s iHospital Solutions encompass intelligent solutions for wards, outpatient care, operating rooms, telehealth, and real-time location systems (RTLS), enabling advanced patient-centered healthcare.
Solution Architecture

Cloud Micro Services

Command Center
- Device management
- Building management
- Operation Management
- Hospital insights
- Clinics Dashboard

Data Acquisition
Medical Data AI
Medical Image AI

SaaS Platform

Hospital System

Specialties Care System

Inpatient Ward

Public Space iCaret (ForMed)

EHR/Practice Management
NIS
LIS
PACS

Smart Emergency
- EMR Dashboard
- RTLS

ICU Intelligent
- Device gateway
- Vital sign
- Alert notification

Smart Obstetrics
- OBS Nursing Dashboard (Intrapartum/Management/Postpartum)
- OBS Patient system

Smart OR
- OR Scheduling
- OR Control System
- OR Dashboard
- OR Video Streaming and Recording

Patient Care
- Patient education
- Patient satisfaction

Nurse Scheduling

Patient Management

Medication Management

Signage System

Kiosk

Queueing System

Telehealth

RTLS
Success Stories

Driving Thai Hoa Hospital’s Transformation into Vietnam’s First Smart Hospital

“Advantech is a great choice; they have enthusiastic and professional staff. We are now an outstanding hospital thanks to their intelligent solutions.”

- Pham Viet Thai, Investor in Thai Hoa Hospital

Case Benefits
- Enhanced patient experience
- Centralized data management
- Improved operational efficiency

Advantech Joins GeneJet Biotech and Hungchi Hospital to Build First Intelligent Maternity Ward in Taiwan

“Our Hospital has always prided itself on being a guardian of health for women and children. By collaborating with Advantech and GeneJet Biotech, the deployment of smart technology will not only improve decision-making for physicians and nurses but also facilitate safer, more advanced maternal and fetal healthcare services.”

- Dr. David Chang, superintendent of Hungchi Women and Children’s Hospital

Case Benefits
- Intelligent maternity ward accelerates smart healthcare
- Improving healthcare outcomes through holistic maternal care
- Innovative technologies that increase patient satisfaction

CHC Healthcare Group Accelerates HOR Development in Taiwan with Medical-Grade Solutions

“Advantech’s iVideOR software meets our needs for real-time video recording and sharing. Commonly available software now allows us to engage in telemedicine while significantly reducing the communication costs of surgical consultation.”

- Dr. Chia-Hsien Chen, Director of the Orthopedics Department at Hsin Kuo Min Hospital

Case Benefits
- Streamlined surgical processes and enhanced safety
- Scalability and cost-effectiveness
- Flexibility and customization for clinical needs

Learn More About iHospital Suite
As a leading global industrial solution provider, Advantech offers professional services relating to customers’ real needs. Given that total service solution providers are the mainstream of our long-term business strategy, Advantech’s regional service business group (AS+, Advantech Services Plus) focuses on comprehensive regional customer services, such as professional maintenance support, project management and system integration, solution leasing, and peripheral procurement, in order to enhance the sustainability of business development. Based on the GIRC (Globally Integrated Regional Competence) concept from Advantech’s Y2025 vision, our service teams around the world proactively expand their service scope to more value added plans, in order to fulfill real demands and needs.

Evolution of Maintenance Support
Starting from the Asia area, our specialized onsite support teams offer an on-time door-to-door problem solving and regular inspection service for all kinds of Advantech devices. Clients may contact our call center to receive this service or use the web-based on-site tracking system, which can accelerate the down time of devices as well as the turnaround time of repairs. 24/7 online technical support and document download function allows clients to apply, consult, and verify any hardware/software problem anytime from anywhere.

Strategy of System Integration Ecosystem
Providing a one-stop SRP (Solution Ready Package) service to our valuable end customers is one of our core competencies. Advantech’s dedicated project management team provides strong professional and disciplined management skills, cross-function communication, architecture planning, SRP installation, and after-sales maintenance and operation. Our domain-focused customers will get a total service integrated solution within their vertical market and receive a more efficient and sufficient support.

Flexibility of Device and Solution Acquisition
Advantech Services Plus team offers highly flexible leasing solutions to our precious clients. As a leaseholder, our clients can enjoy the advantage of better cash flow and turnover rates. More importantly, they will receive extra warranty and maintenance services during the rental duration, as well as the flexibility of determining whether to have a proprietary device and solution after a designated time. Maximum utilization rates of a device during its own life cycle can also reduce material and energy wastage, and align the core ideas of CSR (Corporate Social Responsibility) and ESG (Environmental, Social and Governance).

Compatibility of Industrial Sourcing & Distribution Service (IS&D)
Advantech’s global peripheral procurement network consists of local teams that leverage strong relationships with worldwide suppliers and diligent vendor and product management to provide quality-assured compatible peripherals with short lead times and competitive prices. Valuable customers receive a one-stop shopping service for industrial peripherals.

• Global standardization management; 100% compatible peripherals
• Trusted quality with revision control
• Short lead times and competitive price
Advantech has offices in 28 countries and more than 8,700 employees dedicated to providing efficient, professional services related to customer care, product selection, technical support, and order handling. Our call centers and online stores offer worldwide customers the convenience of multi-service channels as well as accelerated turnaround times. Supported by four logistics centers located in Taiwan, China, Europe, and the United States, Advantech’s global service network offers an extensive spectrum of services that includes warehousing, logistics, peripheral certification, sourcing and purchasing, return merchandise authorization, value-added services, and technical support and training.

Manufacturing
Advantech’s world-class manufacturing centers are located in Taiwan, China and Japan to maintain precise quality control and deliver comprehensive, timely, and cost-effective production.

Quality and Environmental Compliance
- ISO 9001 / TL 9000 Certification
- ISO 14001 / 45001 Certification
- ISO 13485 Certification
- ISO 50001 Certification
- ISO 14064 Certification
- ISO 17025 Certification
- RoHS Directive Compliance
- WEEE Directive Compliance
- Authorized Sony Green Partner
- REACH SVHC Directive Compliance
- RMI Conflict Minerals Declaration
- IECEX QAR Certification

Configure-To-Order Services
Advantech’s Configure-To-Order services (CTOS) increase the accessibility of industrial computing solutions with the provision of web-based configuration tools, complex assembly services that support high-mix low-volume box builds and customized assembly, design modification, system integration, and functional testing services.

Logistics Services
With strong integrated ERP and SAP supply chain solutions, our global logistics network offers a wide range of options for different delivery models including local and global solutions that meet your unique needs and budget requirements.

Customer Support Services
We offer optimized maintenance and support plans by leveraging the full scope of our service portfolio to help you reduce costs and proactively mitigate business risks. In addition to complete technical and service support, we also offer a variety of customizable service packages.