About Advantech

Advantech: Partnering for Smart City & IoT Solutions

Founded in 1983, Advantech is a leader in providing trusted innovative embedded and automation products and solutions. Advantech offers comprehensive system integration, hardware, software, customer-centric design services, and global logistics support; all backed by industry-leading front and back office e-business solutions. Advantech has always been an innovator in the development and manufacture of high-quality, high-performance computing platforms. We cooperate closely with our partners to help provide complete solutions for a wide array of applications across a diverse range of industries. To realize our corporate vision of Enabling an Intelligent Planet, Advantech will continue collaborating and partnering for smart city and IoT solutions.

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 continuous, 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.

World-Class Recognition

Advantech is an authorized alliance partner of both Intel® and Microsoft®. Our customers find the technologies we use inside our products to be widely compatible with other products in the global marketplace. Interbrand, the world renowned brand consulting firm, recognized Advantech as one of the Top 20 Taiwanese Global Brands for many years. Advantech appreciates this recognition of our efforts to build a trusted, global brand; it also symbolizes a promise we give to our business partners, which is to keep building a trustworthy brand that is recognized everywhere and improves the lives of all.

Quality and Environmental Compliance

As a member of the global village, Advantech understands the importance of preserving the environment. Our environmental programs focus on reducing, reusing, and recycling materials used in our manufacturing operations. Advantech’s quality and environmental compliance efforts include the following:

- ISO 9001 Certification
- ISO 14001 Certification
- ISO 13485 Certification
- OHSAS 18001 Certification
- TL9000 Certification
- ISO 17025 Certification

Timely Support at Your Convenience

Advantech has over 20 regional hotlines and offices throughout 94 cities, in 23 countries with over 8,000 employees to provide efficient, professional services for customer care, product selection, technical support, and order handling. Through our call centers and online stores, customers worldwide enjoy the convenience of Advantech’s multi-service channels to reduce business turnaround time. Together with the four customer service centers in Taiwan, China, Europe and the United States, our global service network offers an extensive spectrum of services that includes warehousing, logistics, peripheral certification, sourcing & purchasing, and RM&A & value-added services, and technical support & training.

Advantech Corporate Structure and Growth Engines

Networks & Communications
- Blade Computing & Systems
- Network Appliances
- Network Virtualization Platforms
- Network & Embedded Switches
- Broadcasting & Surveillance Platforms

Embedded Core Computing
- Embedded Box Computers
- Modular Computing Boards
- Wireless IoT Modules
- Display Systems & Gaming Solutions
- Industrial Motherboard & I/F Cards
- Embedded Peripherals

Industrial IoT
- Industrial Automation
- Industrial I/O & Controllers
- Industrial HMI
- Automation Computing
- IoT Devices & Solutions
- WebAccess+ Solutions
- iFactory (Industry 4.0) Solutions
- Machine Automation Solutions
- Power & Energy Solutions

Intelligent Systems
- Industrial Computers
- Industrial Servers & Storage
- Intelligent Video Solutions
- Intelligent IoT Modules
- Transportation Solutions
- iConnectivity
- Industrial Communications
- Wireless Industrial Comm. (Networking(B+B))

Smart City Solutions
- Service Automation Platforms
- Industrial Mobile Computing
- Retail Platforms
- Medical Computing & Tablets
- In-Vehicle Computing
- Intelligent Service Solutions
- Intelligent Hospital
- Digital Logistics & Fleet Management
- Intelligent Retail & Hospitality

In response to Smart City and Industry 4.0 trends, Advantech has established three business groups, namely Embedded Design-In, Industrial-IoT, and Smart City Solutions. These three are aligned to three target markets: Embedded Design-In serves Industrial Equipment Manufacturers (IEMs), and is equivalent to Advantech’s central kitchen. Industrial-IoT serves Industry 4.0 and IoT-related industries, and Smart City Solutions serves smart city solution providers in various fields.

In order to cater to market trends, Advantech has undergone significant transformations, from products to solutions, from regional to global consolidation, and has also implemented vertical-market oriented (sector-lead) concepts in an effort to optimize operations and enhance resource-integration benefits.

Advantech’s Go-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 continuous, 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.

World-Class Recognition

Advantech is an authorized alliance partner of both Intel® and Microsoft®. Our customers find the technologies we use inside our products to be widely compatible with other products in the global marketplace. Interbrand, the world renowned brand consulting firm, recognized Advantech as one of the Top 20 Taiwanese Global Brands for many years. Advantech appreciates this recognition of our efforts to build a trusted, global brand; it also symbolizes a promise we give to our business partners, which is to keep building a trustworthy brand that is recognized everywhere and improves the lives of all.

Quality and Environmental Compliance

As a member of the global village, Advantech understands the importance of preserving the environment. Our environmental programs focus on reducing, reusing, and recycling materials used in our manufacturing operations. Advantech’s quality and environmental compliance efforts include the following:

- ISO 9001 Certification
- ISO 14001 Certification
- ISO 13485 Certification
- OHSAS 18001 Certification
- TL9000 Certification
- ISO 17025 Certification

Timely Support at Your Convenience

Advantech has over 20 regional hotlines and offices throughout 94 cities, in 23 countries with over 8,000 employees to provide efficient, professional services for customer care, product selection, technical support, and order handling. Through our call centers and online stores, customers worldwide enjoy the convenience of Advantech’s multi-service channels to reduce business turnaround time. Together with the four customer service centers in Taiwan, China, Europe and the United States, our global service network offers an extensive spectrum of services that includes warehousing, logistics, peripheral certification, sourcing & purchasing, and RM&A & value-added services, and technical support & training.
Intelligent Transportation Systems

Total Solutions Delivery for Railway Infrastructure Systems

Advantech working in cooperation with its partners has long provided reliable platform solutions that pave the way for intelligent transportation in cities around the globe. With a decade of successful experience, Advantech has dedicated resources to designing and developing new products designed for the transportation industry. These products support railway automatic fare collection, wayside, rolling stock, traffic management and more. Our mission is to enable intelligent transportation systems, which also helps us fulfill our vision of creating and delivering smart city technologies.

Station Self-Service

ETC

Railway Signaling

Rolling Stock

Platform as a Service (PaaS)
Advantech Proven Success in Transportation

Our Glory Global Footprint

Whether it’s AFC, CTC, ETC or any number of other transportation system applications, for the past few years, Advantech is dedicated in its efforts to provide the most stable, intelligent transportation systems to cities around the world. We are specialized in technical know-how and equipped with the domains to build transportation systems on the basis of discrepant needs of various applications. With decades of experiences, our product offerings toward the market of transportation have been more well-founded and completed now. Today, our efforts have been paid off. We have an impressive portfolio of successful case stories that we are proud to share with you. Advantech is and will always be by your side, continuously delivering total solution packages to our partners and customers around the world.
Automatic Fare Collection System (AFC) is one of basic station equipment that consists of automatic gate machine, ticket vending machine and ticket checking machine. In this application, stable and integrated platforms are necessarily to keep passenger flow run smoothly at peak hours; at the same time, all data will be gathered and transmitted into center. Advantech front-end solutions are our offering that designed for this scenario.

**Automatic Gate Machine**
- Turnkey System in Compact Size with Comprehensive I/O
- High reliability with wide operation temperature

**TVM Controller**
- Flexible with Multiple Serial Ports
- Easy Maintenance Design for Front-End Service Integration

**AGM Controller**
- Turnkey System in Compact Size with Comprehensive I/O
- High reliability with wide operation temperature

**Viewable Unmanaged Switch**
- Communicates with SCADA software via Modbus/TCP
- Easy maintenance and trouble shooting
Automatic machines become an essential part in modern transportation service. Automatic gate machines and ticket vending machines are indispensable in mass traffic, playing an indispensable role as automatic fare collection (AFC). In addition to AFC, other automatic service devices are also widely implemented, such as check-in machines in airports, intelligent lockers in public area or even token kiosks in parking solution... These automatic services have smoothly help and ease human daily life.

Advantech IoT device management platform-WebAccess/RMM focuses on remote device management and monitoring. From automatic service perspective, operators can be benefited from simplifying complexity of architecture, reducing construction time and resource, raising system reliability and minimizing maintenance cost. WebAccess/RMM provides a ready-to-use software platform to manage unmanned devices in a simple yet powerful way, increasing efficiency and reducing total cost of ownership.

**Key Features**

- Device and Power Management
  - Quick access to remote device: diagnostics and troubleshooting
  - Sets the power on/off schedule
- Centralized and Remote Management
  - Easily set up multiple devices by a management console
  - Easy to maintain and update hard-to-reach devices
  - Sends alarm notification automatically via eMail or SMS
- Protection Management
  - Powered by McAfee Application Control technology
  - Dynamic whitelisting model to block unauthorized apps
  - No continuous updating required
  - Nearly zero performance overhead
- Backup & Recovery
  - Powered by Acronis Backup and Recovery technology
  - Regular automated backup with dynamic scheduling
  - Hot backup without interrupting current tasks

**WISE-PaaS/RMM applied on Front-end Automatic Service**

**Advantages**

- Simplifies complexity of architecture
- Reduces construction time and resource
- Raising system reliability
- Minimizes maintenance cost

**WebAccess/RMM Features**

- Device and Power Management
  - Quick access to remote device: diagnostics and troubleshooting
  - Sets the power on/off schedule
- Centralized and Remote Management
  - Easily set up multiple devices by a management console
  - Easy to maintain and update hard-to-reach devices
  - Sends alarm notification automatically via eMail or SMS
- Protection Management
  - Powered by McAfee Application Control technology
  - Dynamic whitelisting model to block unauthorized apps
  - No continuous updating required
  - Nearly zero performance overhead
- Backup & Recovery
  - Powered by Acronis Backup and Recovery technology
  - Regular automated backup with dynamic scheduling
  - Hot backup without interrupting current tasks

**Advantages**

- Simplifies complexity of architecture
- Reduces construction time and resource
- Raising system reliability
- Minimizes maintenance cost

**WebAccess/RMM Features**

- Device and Power Management
  - Quick access to remote device: diagnostics and troubleshooting
  - Sets the power on/off schedule
- Centralized and Remote Management
  - Easily set up multiple devices by a management console
  - Easy to maintain and update hard-to-reach devices
  - Sends alarm notification automatically via eMail or SMS
- Protection Management
  - Powered by McAfee Application Control technology
  - Dynamic whitelisting model to block unauthorized apps
  - No continuous updating required
  - Nearly zero performance overhead
- Backup & Recovery
  - Powered by Acronis Backup and Recovery technology
  - Regular automated backup with dynamic scheduling
  - Hot backup without interrupting current tasks

**Advantages**

- Simplifies complexity of architecture
- Reduces construction time and resource
- Raising system reliability
- Minimizes maintenance cost

**WebAccess/RMM Features**

- Device and Power Management
  - Quick access to remote device: diagnostics and troubleshooting
  - Sets the power on/off schedule
- Centralized and Remote Management
  - Easily set up multiple devices by a management console
  - Easy to maintain and update hard-to-reach devices
  - Sends alarm notification automatically via eMail or SMS
- Protection Management
  - Powered by McAfee Application Control technology
  - Dynamic whitelisting model to block unauthorized apps
  - No continuous updating required
  - Nearly zero performance overhead
- Backup & Recovery
  - Powered by Acronis Backup and Recovery technology
  - Regular automated backup with dynamic scheduling
  - Hot backup without interrupting current tasks

**Advantages**

- Simplifies complexity of architecture
- Reduces construction time and resource
- Raising system reliability
- Minimizes maintenance cost

**WebAccess/RMM Features**

- Device and Power Management
  - Quick access to remote device: diagnostics and troubleshooting
  - Sets the power on/off schedule
- Centralized and Remote Management
  - Easily set up multiple devices by a management console
  - Easy to maintain and update hard-to-reach devices
  - Sends alarm notification automatically via eMail or SMS
- Protection Management
  - Powered by McAfee Application Control technology
  - Dynamic whitelisting model to block unauthorized apps
  - No continuous updating required
  - Nearly zero performance overhead
- Backup & Recovery
  - Powered by Acronis Backup and Recovery technology
  - Regular automated backup with dynamic scheduling
  - Hot backup without interrupting current tasks

**Advantages**

- Simplifies complexity of architecture
- Reduces construction time and resource
- Raising system reliability
- Minimizes maintenance cost

**WebAccess/RMM Features**

- Device and Power Management
  - Quick access to remote device: diagnostics and troubleshooting
  - Sets the power on/off schedule
- Centralized and Remote Management
  - Easily set up multiple devices by a management console
  - Easy to maintain and update hard-to-reach devices
  - Sends alarm notification automatically via eMail or SMS
- Protection Management
  - Powered by McAfee Application Control technology
  - Dynamic whitelisting model to block unauthorized apps
  - No continuous updating required
  - Nearly zero performance overhead
- Backup & Recovery
  - Powered by Acronis Backup and Recovery technology
  - Regular automated backup with dynamic scheduling
  - Hot backup without interrupting current tasks

**Advantages**

- Simplifies complexity of architecture
- Reduces construction time and resource
- Raising system reliability
- Minimizes maintenance cost

**WebAccess/RMM Features**

- Device and Power Management
  - Quick access to remote device: diagnostics and troubleshooting
  - Sets the power on/off schedule
- Centralized and Remote Management
  - Easily set up multiple devices by a management console
  - Easy to maintain and update hard-to-reach devices
  - Sends alarm notification automatically via eMail or SMS
- Protection Management
  - Powered by McAfee Application Control technology
  - Dynamic whitelisting model to block unauthorized apps
  - No continuous updating required
  - Nearly zero performance overhead
- Backup & Recovery
  - Powered by Acronis Backup and Recovery technology
  - Regular automated backup with dynamic scheduling
  - Hot backup without interrupting current tasks

**Advantages**

- Simplifies complexity of architecture
- Reduces construction time and resource
- Raising system reliability
- Minimizes maintenance cost

**WebAccess/RMM Features**

- Device and Power Management
  - Quick access to remote device: diagnostics and troubleshooting
  - Sets the power on/off schedule
- Centralized and Remote Management
  - Easily set up multiple devices by a management console
  - Easy to maintain and update hard-to-reach devices
  - Sends alarm notification automatically via eMail or SMS
- Protection Management
  - Powered by McAfee Application Control technology
  - Dynamic whitelisting model to block unauthorized apps
  - No continuous updating required
  - Nearly zero performance overhead
- Backup & Recovery
  - Powered by Acronis Backup and Recovery technology
  - Regular automated backup with dynamic scheduling
  - Hot backup without interrupting current tasks

**Advantages**

- Simplifies complexity of architecture
- Reduces construction time and resource
- Raising system reliability
- Minimizes maintenance cost

**WebAccess/RMM Features**

- Device and Power Management
  - Quick access to remote device: diagnostics and troubleshooting
  - Sets the power on/off schedule
- Centralized and Remote Management
  - Easily set up multiple devices by a management console
  - Easy to maintain and update hard-to-reach devices
  - Sends alarm notification automatically via eMail or SMS
- Protection Management
  - Powered by McAfee Application Control technology
  - Dynamic whitelisting model to block unauthorized apps
  - No continuous updating required
  - Nearly zero performance overhead
- Backup & Recovery
  - Powered by Acronis Backup and Recovery technology
  - Regular automated backup with dynamic scheduling
  - Hot backup without interrupting current tasks

**Advantages**

- Simplifies complexity of architecture
- Reduces construction time and resource
- Raising system reliability
- Minimizes maintenance cost

**WebAccess/RMM Features**

- Device and Power Management
  - Quick access to remote device: diagnostics and troubleshooting
  - Sets the power on/off schedule
- Centralized and Remote Management
  - Easily set up multiple devices by a management console
  - Easy to maintain and update hard-to-reach devices
  - Sends alarm notification automatically via eMail or SMS
- Protection Management
  - Powered by McAfee Application Control technology
  - Dynamic whitelisting model to block unauthorized apps
  - No continuous updating required
  - Nearly zero performance overhead
- Backup & Recovery
  - Powered by Acronis Backup and Recovery technology
  - Regular automated backup with dynamic scheduling
  - Hot backup without interrupting current tasks

**Advantages**

- Simplifies complexity of architecture
- Reduces construction time and resource
- Raising system reliability
- Minimizes maintenance cost

**WebAccess/RMM Features**

- Device and Power Management
  - Quick access to remote device: diagnostics and troubleshooting
  - Sets the power on/off schedule
- Centralized and Remote Management
  - Easily set up multiple devices by a management console
  - Easy to maintain and update hard-to-reach devices
  - Sends alarm notification automatically via eMail or SMS
- Protection Management
  - Powered by McAfee Application Control technology
  - Dynamic whitelisting model to block unauthorized apps
  - No continuous updating required
  - Nearly zero performance overhead
- Backup & Recovery
  - Powered by Acronis Backup and Recovery technology
  - Regular automated backup with dynamic scheduling
  - Hot backup without interrupting current tasks

**Advantages**

- Simplifies complexity of architecture
- Reduces construction time and resource
- Raising system reliability
- Minimizes maintenance cost

**WebAccess/RMM Features**

- Device and Power Management
  - Quick access to remote device: diagnostics and troubleshooting
  - Sets the power on/off schedule
- Centralized and Remote Management
  - Easily set up multiple devices by a management console
  - Easy to maintain and update hard-to-reach devices
  - Sends alarm notification automatically via eMail or SMS
- Protection Management
  - Powered by McAfee Application Control technology
  - Dynamic whitelisting model to block unauthorized apps
  - No continuous updating required
  - Nearly zero performance overhead
- Backup & Recovery
  - Powered by Acronis Backup and Recovery technology
  - Regular automated backup with dynamic scheduling
  - Hot backup without interrupting current tasks
Advantech offers various ruggedized products that target for on-road application. With the trend of urbanization, the numbers of vehicles on the road are increasing which indicates the need of road surveillance in city is mushrooming to keep the city safe 24/7. Advantech fanless controller, with the feature of high performance and wide operating temperature, they will be the best offerings for traffic management system.

Traffic Management Surveillance System

Outdoor Bullet IP Camera
VIVOTEK IP8365EH is a professional outdoor bullet network camera offering 30 fps @ 2-Megapixel resolution with superb image quality.

Rugged ETC Controller
• Support Wide Operating Temperature to Utilize in Outdoor Environment
• Expansion capability to meet ETC various solution

PoE Management Communication Systems
• Support PoE power output for IP cameras
• Redundancy to ensure system and communication reliable
ETC Solution

**WebAccess/IVS applied on ETC Solution**

**Intelligent Video Software Services**

Advantech WebAccess/IVS establishes Intelligent Video Transportation Solution, providing innovative services to traffic management by involving urban surveillance and intelligent video analysis technology. Advantech offers 2 ARP(Application ready Package) - TrafficAccess VDS and TrafficAccess IDS to collect traffic information and identify incidents automatically.

<table>
<thead>
<tr>
<th>Key Features</th>
<th>ITA-3711</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Video surveillance management</td>
<td>Intel® Celeron™ J1900 Quad Core Fanless Processor</td>
</tr>
<tr>
<td>- Real time monitoring &amp; recording</td>
<td>• Onboard 4G DDR3 Memory and optional NVRAM</td>
</tr>
<tr>
<td>- Play back &amp; manual backup</td>
<td>• Support up to 14 serial port and 24 bit DI &amp; 34 bit DO</td>
</tr>
<tr>
<td>- Flexible data search</td>
<td>• Support 3 PCI/PCIe expansion Slots (optional 2PCIe/PCIe or 3PCI or 1PCI&amp;2PCIe)</td>
</tr>
<tr>
<td>- Intelligent video analytics</td>
<td>• Support 2 Mini-PCIe with USIM socket</td>
</tr>
<tr>
<td>- Dwell time</td>
<td></td>
</tr>
<tr>
<td>- Camera Tamper</td>
<td></td>
</tr>
<tr>
<td>- Optical self diagnostic</td>
<td></td>
</tr>
<tr>
<td>• Easy to be integrated by SDK &amp; API</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MIC-7500 with i-Module</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel 6th Generation Core i Processor Compact Fanless System</td>
</tr>
<tr>
<td>• Intel 6th Generation Core i7/i5/i3 BGA type CPU with Intel QM170 PCH</td>
</tr>
<tr>
<td>• 1-Module expansion module</td>
</tr>
<tr>
<td>• VGA &amp; DVI Interface</td>
</tr>
<tr>
<td>• 1 x 2.5&quot; HDD/1 x CFast slot/1xmSATA</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ASR-3100</th>
</tr>
</thead>
<tbody>
<tr>
<td>1U Rackmount dual Intel® E5-2600 v3/v4 NVMe Storage Server</td>
</tr>
<tr>
<td>• Dual LGA 2011-R3 Intel® E5-2600 v3/v4 processors</td>
</tr>
<tr>
<td>• 16x DDR4-2133 RDIMMs for a maximum of 512 GB</td>
</tr>
<tr>
<td>• Supports up to 16x hot-swappable 2.5&quot; NVMe/SAS/SATA drives</td>
</tr>
<tr>
<td>• Intelligent Platform Management Interface (IPMI) support</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DVP-7030E</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-ch H.264/MPEG-4 PCI Video Capture Card with SDK</td>
</tr>
<tr>
<td>• Compatible with Windows 8.1</td>
</tr>
<tr>
<td>• 4-channel composite video inputs with H.264/MPEG4 software compression</td>
</tr>
<tr>
<td>• 120/100 fps (NTSC/PAL) at full D1 resolution for recording and display</td>
</tr>
<tr>
<td>• Free bundled recording &amp; CMS software</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IP8365EH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bullet Network Camera</td>
</tr>
<tr>
<td>• 2-Megapixel CMOS Sensor</td>
</tr>
<tr>
<td>• 35 fps @ 1920x1080</td>
</tr>
<tr>
<td>• Motorized P-iris Lens</td>
</tr>
<tr>
<td>• Removable IR-cut Filter for Day &amp; Night Function</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EKI-7712G-4FPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>8G+4SF Port Gigabit Managed Redundant Industrial PoE Switch</td>
</tr>
<tr>
<td>• 8 x IEEE 802.3 atf PoE Gigabit ports + 4 SFP ports</td>
</tr>
<tr>
<td>• SFP socket for Easy and Flexible Fiber Expansion</td>
</tr>
<tr>
<td>• Redundancy: X-Ring Pro (Ultra high-speed recovery time &lt; 20 ms), RSTP/STP (802.1w/1D)</td>
</tr>
<tr>
<td>• 1XM function enables fast deployment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EKI-1528-DR</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-port RS-232/422/485 Serial Device Server</td>
</tr>
<tr>
<td>• Provides 2 x 10/100 Mbps Ethernet ports for LAN redundancy</td>
</tr>
<tr>
<td>• Provides COM port redirection (Virtual COM), TOP and UDP operation modes</td>
</tr>
<tr>
<td>• Supports up to 921.6 kbps, and any baud rate setting</td>
</tr>
<tr>
<td>• Allows a max. of 5 hosts to access one serial port</td>
</tr>
</tbody>
</table>
Railway Signaling

Advantech wayside solution, including ITA-2000 Series are 3U CPCI, are designed and functioned as front-end processor for railway signaling. With compliance with EN 50121-4, they are the most suitable for wayside applications, including interlocking, Automatic Train Control (ATC), railway signage and others. With EN 50121-4 compliance and development of rock solid Advantech systems and platforms, applications in wayside control are precisely monitored, delivering a more secure railway operating environment.

Railway Signaling communication
- High port communication with wide temperature
- EN 50121-4 certificate for wayside, NEMA TS2 certificate for traffic control

Performing Serial devices to Ethernet connection
- Seamless communication between serial signal to Ethernet
- Feature two independent Ethernet ports to guarantee Ethernet network reliability

3U CPCI
- PICMG open standard, ultimate flexibility and reliability
- Blade type with high density, easy to scale out and maintenance
- Compact Dimension and redundant system support
WebAccess/SCADA applied on Railway Signaling solution

SCADA Solution
Cloud-based WebAccess is a 100% web-based HMI and SCADA software with private cloud software architecture and public cloud architecture, aiming at providing centralized big data for operators to configure, change/update or monitor their equipment, projects and systems all over the world. The SCADA system will evolve from overall control and monitoring of traction power facilities, signals, station platform CCTV, ticket vending machines, intrusion and fault alarms, passenger information systems and security systems and big data analysis with Cloud-based WebAccess.

Key Features
- Integration with Google Map
  - Integrates real-time data with Google Maps
  - Integrates with GPS modules to track the location
- Cloud-based WebAccess
  - Cloud Dashboard
  - WebAccess Portal (Node-RED)
  - Cloud-based Super SCADA & Multi-Projects
  - Auto Discover & Configuration
  - RESTful API & MQTT
  - HTML5 Dashboard
  - Dashboard Editor & Viewer
  - Widget Library & Widget Builder
  - Easy Configuration
  - Cross Browser & Devices Viewing
  - Support Open Interface
  - RESTful API
  - SignalR

ITB-2231
Intel® Core™ i7 Fanless 2U Rackmount System with 3 ITAM Module
- Built-in Intel® Core™ i7-6822EQ, 2.8 GHz CPU
- Onboard 16 GB DDR4 Memory
- 2U Fanless Rackmount System
- Support 3 ITAM Modules for I/O expansion

ITB-EM modules
Compliance with railway applications (EN50121-4)
- 8-Port RS-232/422/485 Serial Port Module
- 8-Port RJ45 GbE Module
- 4-Port RJ45 GbE Module
- 4-Port SFP Module, 4-Port, Dual GbE, Dual CAN Module

3U PCI modules
- MIC-3328
  - 3U CompactPCI® PlusIO Intel® 3rd Generation Core™ Processor Blade
- MIC-3329
  - 3U CompactPCI® Intel® Quad-Core Atom™ SoC processor Blade
- MIC-3955
  - 3U CompactPCI® 4-port RS-232/422/485 Communication Card

EKI-7428G-4CI
24G+4G Combo port L2 Managed Switch
- SFP socket for Easy and Flexible Fiber Expansion
- Management: SNMP v1/v2c/v3, WEB, Telnet, Standard MIB
- 10M function enables fast deployment
- Security: 802.1x (Port-Based, MD5/TLS/TTLS Encryption), HTTPS, SSH and SNMPv3

EKI-7710E-2CPI
4-port RS-232/422/485 Serial Device Server
- Provides 2 x RS-232/422/485 and 2 x Gigabit Ethernet ports for LAN redundancy
- Supports up to 921.6 kbps and any baud rate setting
- Allows a max. of 5 hosts to access one serial port

EKI-1524
4-port RS-232/422/485 Serial Device Server
- Provides 2 x 10/100 Mbps Ethernet ports for LAN redundancy
- Provides COM port redirection (Virtual COM), TCP and UDP operation modes
- Supports up to 921.6 kbps, and any baud rate setting
- Allows a max. of 5 hosts to access one serial port

EKI-2741SX
1G/10/100/1000TX (x) to Fiber Optic Gigabit Industrial Media Converters
- Provides 1 x 1000 Mbps Ethernet port with RJ45 connector
- Provides 1 x 1000 Mbps fiber port with SC or SFP (mini-GBIC) type connector for 1000Base-SX/LX device
- Provides DP switch for full/half duplex setting
Rolling Stock

Advantech provides diverse product lines towards rolling stock solution. From cameras, switches to controllers, all specifically cater to rolling stock applications, including Ethernet Train Network, Passenger Information System (PIS), CCTV system and Vehicle Monitoring System. Advantech in-train products are compliant with the EN 50155, EN50121-3-2, and EN 50121-4 railway standards, which enable products to withstand high levels of vibration and enhance operating resistance for railway scenario.

Rolling Stock Passenger Information System (PIS)

• Compact Size Design for Ease Integration in Limited Space
• Fully EN 50155 Certified
• Flexible configuration with PoE Module

Communication/NVR Controller

• Compact Size Design for Ease Integration in Limited Space
• Fully EN 50155 Certified
• Flexible configuration with PoE Module

High Capacity Server

• Diverse Function EN50155 On-board Server: content& video and Monitoring Management Purpose
• Configurable Design, Modules including PoE, CCM, CAN, Battery, Storage etc.

Ethernet Train Network

• EN 50155 16-port Train communication network (TCN) Managed Ethernet with PoE/PoE+
• IEEE 802.3at/802.3at per port with system PoE power management

CCTV- In-train Surveillance System

• Diverse Function EN50155 On-board Server: content& video and Monitoring Management Purpose
• Configurable Design, Modules including PoE, CCM, CAN, Battery, Storage etc.
Digital signage in transportation applies in a wide range of applications, such as arrival/departure information, live news, weather feed, or even advertisement promotions. Digital signage can enhance the travel experience.

Advantech Digital Signage Software—WebAccess/IMM possesses dynamic and visual broadcasting content, enabling engaging audience more with visual and interactive effects. Besides, WebAccess/IMM applied in public transportation allows station manager easily to manage the broadcasting content remotely with few steps and provide real-time updates. Advantech Digital Signage Software—WebAccess/IMM offers a web-based architecture where users can layout, schedule and dispatch signage content via the internet, up to 500 displays on the remote ends.

Key Features
- **Server-Client Architecture**
  - Remote editing and dispatch programs up to 500 clients
  - Remote power on/off, easily for station manager to control
- **User-friendly Interface**
  - Visualization interface
  - Drag and drop operation
  - Quick finish signage dispatch with 3 steps
- **Media Format**
  - TV/Webpage/Flash/PPT/Scrolling Text
  - Image: JPG/GIF/BMP/PNG
  - Video/Audio: MPEG/AVI/WMV/WMA/MP3/FLV
- **System Backup and Restoration**
  - Backup multimedia files
  - Backup system setting and program data
  - Restore all setting and data by one-click

**ITM-5831**
- Intel® 6th Generation Core™ i Processor Fanless System
- EN 50155 Certified Product for Railway Applications
- Intel skylake-H platform with QM170
- Fanless computer for railway vehicle applications, fully compliant with EN 50155
- Satisfy temp. standard: EN 50155 TX (-40 ~ 70° C) and IEC 61373 body mount class B

**ITM-5231**
- Intel® 6th Generation Core™ i Processor Fanless System
- EN 50155 Certified Product for Railway Applications
- Intel skylake-H platform with QM170
- Fanless computer for railway vehicle applications, fully compliant with EN 50155
- Satisfy temp. standard: EN 50155 TX (-40 ~ 70° C) and IEC 61373 body mount class B

**TPC-8100TR**
- 10.4" EN50155 Railway Panel Computer
  - 10.4" SVGA 800x600 with 400 nits LED LCD display
  - Dual core 1.6 GHz processor and SH Hardness resistive touch
  - Fanless and all around IP65 with waterproof M12 connector
  - Alternative keypad control in front bezel

**DSD-5038**
- 38" stretched display, 16:4:5
  - 38" High Resolution Stretched Display (1920 x 538) with LED backlight
  - Ultra wide viewing angle (176/176)
  - Dynamic contrast adjustment
  - Super color tone function
  - VGA and DVI compliant with HDMI converter cable (optional)

**EKI-9512-ETB**
- EN 50155 12-port ETB Managed Ethernet Switch
  - Complies with EN50155 and EN45545-2
  - All 10/100 Mbps connections support dual ring protection and non-blocking traffic forwarding
  - 8x M12 Fast Ethernet ports and 4 x M12 Fast Ethernet ports with bypass relay
  - X-Ring Pro supports rapid and predictable convergence

**EKI-9516P**
- EN 50155 16-port Full Gigabit Managed Ethernet Switch with PoE/PoE+
  - Complies with EN50155 and EN45545-2
  - All Gigabit connections support dual ring protection and non-blocking traffic forwarding
  - 12 x M12 Gigabit ports and 4 x M12 Gigabit ports with bypass relay function
  - X-Ring Pro supports rapid and predictable convergence

**MD8562**
- Mobile Dome Network Camera
  - 2-megapixel CMOS Sensor
  - Up to 30 fps @ 1080p Full HD
  - Wide Angle Fixed Lens
  - EN50155 Co-megapixel for Professional Mobile Surveillance
Station Management

Station Management is an integrated platform that consists of Integrated Supervisory Control System (ISCS), Fire alarm system (FAS), Building Automation System (BAS) and others. Station Management System, due to its complicated systems, requires stable and scalable hardware to keep it well-functioned 24/7. Advantech’s industrial and server-grade systems are well-known for ruggedized features and wide expansion which play indispensable roles in this specific application.

- **Fanless Rugged IPC**
  - High availability with redundant PSUs
  - Flexible Configuration Design for Multiple COM, CAN, LAN etc.

- **Surveillance Storage Server**
  - High-Density Disk Array solution for mission-critical Service with zero down Time

- **Center Communication System**
  - High ports Layer 3 managed switch
  - Reliable and efficient network management.
Advantech WebAccess/NMS is a web browser-based software package for networking management system (NMS). WebAccess/NMS can integrate the Google Map and show the exactly location of networking device. WebAccess/NMS can show the PoE link and status on IP camera, X-Ring topology and routing path. User can use remote configuration to access and control the switch, IP-based platforms and third-party devices. WebAccess/NMS can replay the historical trap or event benefits the trouble shooting to identify the root cause and issue type accurately.

**Key Features**

- **Integration with real-time MAP**
  - Integrates real-time data with Google Maps and OpenStreetMap
  - Integrates with GPS location to track the location
  - Automatic topology view and logical view
  - Integrates with IGMP
  - Centralized configuration and Firmware Management
  - Scheduling for periodic configuration backup and firmware upgrade
  - Trace configuration of history changes

- **Cloud-based WebAccess**
  - Restful API
  - HTML5 Web-base portal
  - Easy for troubles shooting
  - Alarm/event Playback
  - Historical trap
  - Can manage comprehensive devices, not only network devices
  - SNMP & Modbus for device management
  - Advantech IP-base devices

**Station Management**

**WebAccess/NMS applied on Station Management Solution**

Advantech WebAccess/NMS can be applied on the Station Management Solution to provide comprehensive management and monitoring functionality.

**HPC-7400**

4U Compact Rackmount / Tower Chassis for EATX/ATX Motherboard
- 4U compact industrial server chassis suitable for space-sensitive applications
- Supports EATX/ATX/MicroATX motherboard
- Shock-resistant 2 x 5.25" (front) + 2 x 3.5" int (rear) and optional 2 x 3.5" int, HDD bays
- Supports 8GBplus 1U single and 1+1 redundant higher watt power supply

**ASR-5300I**

3U 16-bay IP-SAN Storage with Reinforced Reliability for Surveillance
- Single Controller Configuration
- JUNIE (LFF) Short-Depth Form-Factor
- Built-in 4 x (SASB 10Gb) Host Interfaces
- Default 2GB Cache, Support up to 16GB

**AVS-840**

4U Intel® Xeon® E3-1200v2 Video Wall Controller, Supporting 40-output Video Wall
- Validated by Matrox
- Support Mura Cards: 10 standard Mura MPX
- Maximum Video Input: 40 Analog/Digital
- Maximum Video Output: 40 Analog/Digital

**EKI-9428G**

Ind. Rackmount L3 Managed Switch
- 16 x Gigabit RJ-45 ports + 4 Gigabit x SFP ports + 8 x Gigabit Combo ports
- L3 Function: Static Route, VRRP, OSPF, RIP V1/V2, PM-DM
- SFP socket for Easy and Flexible Fiber Expansion
- Management: SNMP v1/v2c/v3, WEB, Telnet, Standard MIB

**ITA-2211**

Intel® Atom™ E2645 2U Fanless Rackmount System with 3 ITAM Module
- Built-in Intel® Atom™ E3845, 1.91 GHz CPU
- Onboard 4GB DDR3 Memory
- 2U Fanless Rackmount System
- Support 3 ITAM Module for I/O Expansion

**EKI-1526**

16-port RS-232/422/485 Serial Device Server
- 16-port RS-232/422/485 serial communication
- Provides 2 x 10/100 Mbps Ethernet ports for LAN redundancy
- Supports up to 921.6 kbps, and any baud rate setting
- Provides COM port redirection (Virtual COM), TCP and UDP operation modes

**APAX-5580**

4U Compact Rackmount / Tower Chassis for EATX/ATX Motherboard
- 4U compact industrial server chassis suitable for space-sensitive applications
- Supports EATX/ATX/MicroATX motherboard
- Shock-resistant 2 x 5.25" (front) + 2 x 3.5" int (rear) and optional 2 x 3.5" int, HDD bays
- Supports 8GBplus 1U single and 1+1 redundant higher watt power supply
Advantech Online Sales Force

Enabling an Intelligent Planet
To provide fast and convenient services to our customers and users, Advantech provides several easily-accessible web portals including: the Advantech.com website, Buy.Advantech.com, and an Online Support Portal to serve different requirements. To supplement our electronic contacts, we’ve also built up regional call centers to take care of customers who prefer human contact. These methods allow us to deliver our services by live chat, phone line and email anytime and anywhere.

40 Teams in 27 Cities Serve Global Inquiries

Advantech.com Website
Through www.advantech.com, we not only offer comprehensive products, but also real-time updated information to our customers. In addition to product information, you also can find case studies of proven applications from diverse sectors. Furthermore, registered MyAdvantech members can access the RMA service center, updated price lists, and various promotion programs.

Online Support
Providing superior self-support mechanisms is one of the most essential parts of being a top-tier automation company, and we take pride in the outstanding level of service that we offer. To best support our customers, we’ve created a suite of useful interactive online tools, including:
- Technical Documents: Manuals, datasheets, updated drivers and utilities—all available for download through the support portal.
- 3D Product Models: Simulated products in 3D format to provide detailed visualizations for evaluation.
- Online Training: Self-training documents and videos to provide trainees with integrated information.
- Online Catalog: A comprehensive online catalog with extensive product information.

24/7 Online Service
To effectively respond to customers’ questions, our regional call centers support inquiries about: purchasing, shipping, technical, RMA issues and more. Contact your regional call center to get the support you need today.

Online Store
Buy.Advantech.com
To extend Advantech’s services, we launched the Buy.Advantech online store which offers one-stop shopping for Human Machine Interfaces, Industrial Ethernet networking, Controller & I/O products, plus computing platforms. This eStore offers comprehensive product information to build systems easily, with live expert support to solve problems, online configuration providing easy system customization options, instant quotations, an extensive library of FAQs and all the latest up-to-date downloads and firmware.

Global Hotlines
US / Canada 1-888-576-9668
China 800-810-0345/8389
Russia 8-800-555-01-50 (Moscow) 8-800-555-81-20 (St. Petersburg)
Mexico 52-01-888-467-2415
Taiwan 0800-777-111
Japan 0800-500-1005
Thailand 66-2-248-3140
Brazil 0800-770-5355
Korea 080-363-9494/9495
Indonesia 62-21-7511939
Europe 00800-2426-8080/8081
Singapore 65-6442-1000
Malaysia (KL) 60-3-7725-4188
U.K./ Ireland 0800-1044-377
New Zealand 0800-1044-377

Milpitas Cincinnati Düsseldorf Beijing Taipei Tokyo Victoria

Corporate Information
Advantech iPlanet Care

Manufacturing

Our dual, world-class manufacturing centers in Taiwan and China maintain precise quality control, and offer a full range of production in a timely and cost-effective manner. To maximize the efficiency of operational procedures, we have implemented a cluster manufacturing system within our segmented manufacturing service units. This unique approach enables a direct, simplified, and highly streamlined design-to-manufacturing process.

Our dual, world-class manufacturing centers in Taiwan and China maintain precise quality control, and offer a full range of production in a timely and cost-effective manner. To maximize the efficiency of operational procedures, we have implemented a cluster manufacturing system within our segmented manufacturing service units. This unique approach enables a direct, simplified, and highly streamlined design-to-manufacturing process.

One-Stop Global Services

Advantech iPlanet Care combines exceptional business expertise, powerful design capacities, and a thorough global service network to provide one-stop global services and total solutions. Our broad range of global support packages adds maximum flexibility and efficiency to your projects.

Global Logistics Services

With strong integrated ERP and SAP supply chain solutions, our worldwide 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. Advantech’s Logistics Service gives you the flexibility to simplify your logistical networks, bring your products to market on time, and enjoy a timely return on your investment.

- Optimized and flexible shipping solutions
- Integrated ERP and SAP supply chain solution with global distribution network
- Centralized plants with local delivery

Global Peripheral Procurement Services

Advantech global peripheral procurement network consists of local teams that leverage strong, worldwide supplier relationships and strict vendor and product management to offer quality-guaranteed, compatible peripherals with short lead times and competitive prices.

- Localized procurement with worldwide network support
- Global standardization management; 100% compatible peripherals
- Trusted quality with revision control
- Short lead time and competitive price

Global Customer Support Services

Our global presence provides localized reliable customer support services. We can create an optimized maintenance and support plan, leveraging the full power of our service portfolio to help reduce costs and proactively mitigate business risks to best meet your needs. In addition to our complete technical and repair support, we provide a variety of customizable after-sales services, including extended warranty, advance replacement, upgrade, fast repair, etc. With our knowledgeable local support groups, we enable a consistent support experience around the world and help keep your investment at peak performance and within your budget.

- 24/7 technical support: hotline AE & online chat support
- Global deployment with local full-line repair capability
- Easy-to-use web-based repair and tracking system (eRMA)
- Various value-added, after-sales service packages

Corporate Information

Configure To Order Services

Advantech’s Configure To Order Services (CTOS) makes industrial computing solutions more accessible by offering web-based configuration tools, comprehensive, complex assembly services with high-mix, low-volume box build and customized assembly, modification, system integration and functional testing services.

- Online intelligent configuration
- Comprehensive approach to complex configuration solutions
- 2 year global warranty covering system & peripherals integrated
- Localized quality control services

Certified Quality Assurance System

Advantech has been designing and manufacturing industrial PCs according to our 3C Quality Statement:

- Always strive for overall customer satisfaction
- Apply closed-loop mechanisms to resolve problems
- Continuous improvement

At Advantech, quality is our main priority. A complete line of safety, EMC and reliability measures such as ESD, vibration, drop testing, temperature, humidity and HALT chambers are available to ensure our products meet the strictest standards. All facilities are at least ISO 9001 and 14001 certified while others hold additional certifications such as ISO 13485, TIS09, TL9000 and OHSAS18001. An environmental program that focuses on reducing, reusing and recycling of materials throughout the manufacturing process is also applied at Advantech. All our products are ISO 9001 compliant and Environmental Management Systems such as QO80000 are applied to meet worldwide environmental requests. Advantech’s efforts towards environmental protection have been recognized by Sony since 2004 (Sony Green Partner).

- Complete ISO coverage
- Green policies
- Constant quality and reliability monitoring
- Ease of access to quality contacts

Corporate Information