

Advantech Industrial IoT Systems and Devices Star Product Guide

- ✓ Advantech WebAccess
- ✓ Intelligent HMI
- ✓ Industrial IoT Gateway
- ✓ Intelligent Systems and Platforms
- ✓ Industrial Communication
- ✓ Industrial Networking
- ✓ Control IPCs
- ✓ TagLink-enabled IIoT Data Gateway
- ✓ IIoT Wireless I/O Modules
- ✓ Remote I/O Modules
- ✓ Power & Energy Automation
- ✓ Machine Automation
- ✓ Data Acquisition and Control
- ✓ Rugged Portable HMI Tablets



ADVANTECH

Enabling an Intelligent Planet

WebAccess

Enabling Industry 4.0 & IIoT with Intelligent Automation



Factory Automation

Machine Automation

Food & Beverage

Automotive

WISE-PaaS & WebAccess+ :

Cloud Platform Services

Microsoft Azure
Bluemix

Business Intelligence
Machine Learning
Visualization

3rd Party Service
(AWS, Google, Ali, Baidu...)

Remote
Monitoring and
Management

WISE-PaaS/RMM

Security
Management

WISE-PaaS/Security

Human Machine
Interface

WebAccess/HMI

IT Protocol : MQTT, AMQP, CoAP

Intelligent Automation Systems

Industrial Computer and Server



IPC/ACP/AGS Series

Intelligent HMI



TPC/ IPPC/ FPM/ WOP Series

Industrial IoT Gateways



UNO Series

Application Ready Package

WebAccess/SCADA

WebAccess/HMI



Intelligent Video System

WebAccess/IVS



WA-ST/WA-SU Series



WA-HT Series



WA-HU Series



WA-CT/WA-CU Series
CDS-APAX/ADAM Series



IVS series

iConnectivity

Industrial Communication

WebAccess/NMS



EKI Series

Industrial Networking



IE Multiway, Wizzard, SL 30x Series

Industrial IoT Vertical Markets



Power & Energy

Transportation

The Integrated IoT Software & Solution

<p>Industrial Automation</p> <p>WebAccess/SCADA</p>	<p>Intelligent Video</p> <p>WebAccess/IVS</p>	<p>Network Management</p> <p>WebAccess/NMS</p>	<p>Interactive Multimedia</p> <p>WebAccess/IMM</p>
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Integrated Development Environment

Dashboard builder Node-RED

Dashboard Design
Application Logic Editor
3rd Party Integration

IA Protocol : Modbus/TCP, OPC UA, PROFIBUS

Industrial IoT Platforms & Devices

<p>IoT Devices</p> <p>TagLink-enabled IIoT Data Gateway Control IPCs</p> <p>ADAM-3600/ECU-1100 Series APAX-5000 Series</p>	<p>Machine Automation</p> <p>Machine Vision Solutions</p> <p>AIIS/Frame Grabber Series</p>	<p>Power & Energy</p> <p>P&E Automation Computer</p> <p>ECU-4000 Series</p>	<p>iTransportation</p> <p>Station Self-Service Controller</p> <p>ITA-1000 Series</p>
<p>IoT Wireless I/O Remote I/O</p> <p>WISE-4000 Series ADAM-4000/6000 Series</p>	<p>EtherCAT Solutions Motion Control</p> <p>EtherCAT Series Motion Cards</p>	<p>P&E Automation Gateway</p> <p>ECU-1000 Series</p>	<p>Rolling Stock Solutions</p> <p>ITA-5000/2000 Series</p>

Advantech WebAccess

The IIoT Application Platform

The WebAccess family provides different software solutions to cater to different application environments. For the control level, we provide WebAccess/HMI: a standalone HMI software with more than 450 drivers to communicate with various devices, such as PLCs, meters etc.. For the plant level, we provide WebAccess/SCADA: a web-based SCADA software with private cloud software architecture which integrates with WebAccess/IVS, WebAccess/NMS and WISE-PaaS/RMM and provides an open interface for vertical market applications. For the enterprise level, we provide Cloud-based WebAccess as a application platform to collect data in the cloud, through HTML5 Dashboard to display the data, and help users to extend enterprise applications with cloud services.



Advantech WebAccess Software



Advantech Cloud-based WebAccess

Cloud-based Application Platform

- Easily connects with Intelligent Devices to Cloud Platforms via MQTT, a lightweight publish/subscribe messaging protocol
- Integration with Node-RED as a visual tool for IoT to write to other devices, APIs and online services together
- Predefined nodes for easy integration with external and internal data
- Predefined nodes for data to be displayed on Cloud Dashboard and Microsoft PowerBI
- Plug and play IoT devices ensure there's no need to configure projects in the cloud
- Allows multiple SCADA Nodes to be run on the same computer simultaneously. These SCADA nodes can belong to different project nodes
- Provides an open interface to extend application combining with cloud service, such as Big Data Analysis, Business Intelligence, Machine Learning, Predictive Maintenance, etc



WebAccess/SCADA

Advantech WebAccess/SCADA

Web-based HMI/SCADA Software

- 100% web-based engineering, monitoring and control
- Cross browser HTML5 Intelligent Dashboard
- Supports ample drivers including Advantech I/O modules, controllers and major PLCs
- Easy integration with MES & ERP, via open interfaces
- Integration with WebAccess/IVS, WebAccess/NMS and WISE-PaaS/RMM
- Google Maps and GPS location tracking integration
- Redundant SCADA, ports and devices for high availability

Web-based HMI/SCADA Software for CNC

- Provides I/O sensor & CNC monitoring and control
- Auto explore CNC controllers
- Supports major CNC controllers
- Provides CNC operating status monitoring
- Provides CNC availability inquiry
- Provides CNC historical alarm inquiry
- Supports NC program upload/download
- Provides CNC maintenance management



WebAccess/HMI

Advantech WebAccess/HMI

HMI Runtime Development Software

- Low cost Windows based HMI runtime
- More than 50 screen objects can fulfill almost all types of HMI operating and viewing needs for machine automation
- Supports up to 16 communication links for different applications
- Over 100 field proven communication drivers are provided for free
- Supports data collection, alarm monitoring, recipe handling, and operation logging
- Provides a complete set of useful macro commands. Macro programs can be embedded in objects, screens, and the global process

Intelligent HMI

Leading the HMI Innovation for Smart Factory

As we stand on the edge of the new era of Industry 4.0, Advantech, as a leading enabler of intelligent factories, will continue to advance the new generation of HMI products and solutions for different industries in the IoT world.

Advantech provide an integrated and comprehensive range of HMI products with iDoor Technology including High Performance Control Panels, Web-based Thin-client Terminals (TPC/SPC/PPC/WebOP), Industrial Monitors (FPM) for process automation, on-site operation. For vertical markets such as food & beverage, oil & gas and railway transportation, we also offer reliable domain-focused HMI which meets the required certification of IP69K, C1D2 and EN50155.



Web-based Thin-client Terminals



TPC-651T

5.7"/ 6.5" VGA TFT LED LCD Intel® Atom™ Dual-core Thin Client Panel Computer

- Intel® Atom™ Dual-core E3827 1.75 GHz processor with 4GB DDR3L SDRAM
- -20 ~ 60°C Wide Operating Temperature
- IP66 Front Protection and More Durable 5-wire Resistive Touch Screen with True-flat Touch Design
- Supports iDoor Technology (TPC-1251T-EHKE required)



TPC-1251T/ 1551T

12.1"/ 15" XGA TFT LED LCD Intel® Atom™ Dual-core Thin Client Panel Computer

- Intel® Atom™ Dual-core E3827 1.75 GHz processor with 4GB DDR3L SDRAM
- -20 ~ 60°C Wide Operating Temperature
- IP66 Front Protection and More Durable 5-wire Resistive Touch Screen with True-flat Touch Design
- Supports iDoor Technology (TPC-1251T-EHKE required)



TPC-1751T

17" SXGA TFT LED LCD Intel® Atom™ Dual-core Thin Client Panel Computer

- Intel® Atom™ Dual-core E3827 1.75 GHz processor with 4GB DDR3L SDRAM (Optional: Intel® Celeron™ Quad-core J1900)
- -20 ~ 60°C Wide Operating Temperature
- IP66 Front Protection and More Durable 5-wire Resistive Touch Screen with True-flat Touch Design
- Supports iDoor Technology (TPC-1251T-EHKE required)



TPC-1051WP

10.1" XGA TFT LED LCD Intel® Atom™ Dual-core Thin Client Panel Computer

- Intel® Atom™ Dual-core E3827 1.75 GHz processor with 4GB DDR3L SDRAM
- -20 ~ 55°C Wide Operating Temperature
- 7H Hardness Glass Surface Widescreen with PCT Multi-touch, IP66 Front Protection and True-flat Touch Design, operable with water.
- Supports iDoor Technology (TPC-1251T-EHKE required)



TPC-1551WP

15.6" WXGA TFT LED LCD Intel® Atom™ Dual-core Thin Client Panel Computer

- Intel® Atom™ Dual-core E3827 1.75 GHz processor with 4GB DDR3L SDRAM
- 7H Hardness Glass Surface 16:9 Widescreen with PCT Multi-touch, IP66 Front Protection and True-flat Touch Design
- Supports iDoor Technology (TPC-1251T-EHKE required)



TPC-2150T/ 2210W

15"/ 21.5" XGA/ FHD TFT LED LCD Intel® Atom™ Quad-core Thin Client Panel Computer

- Intel® latest Atom™ processor with 4GB DDR3L SDRAM
- Modular design for flexibility in development and maintenance
- Supports iDoor Technology
- Supports SSD & M.2 storage options
- Rugged with isolation power design



WebOP-3070T

7" WVGA Cortex™-A8 Operator Panel

- Microsoft Windows Embedded CE 6.0
- Backup memory FRAM in 128KB (64 words) without battery
- Power & Terminal I/O ports isolation protection
- -20 ~ 60°C Wide Operating Temperature
- Front panel flat-sealed with IP66 compliance



WebOP-3100T

10.1" WSVGA Cortex™-A8 Operator Panel

- Microsoft Windows Embedded CE 6.0
- Backup memory FRAM in 128KB (64 words) without battery
- Power & Terminal I/O ports isolation protection
- -20 ~ 60°C Wide Operating Temperature
- Front panel flat-sealed with IP66 compliance



WebOP-3120T

12" XGA Cortex™-A8 Operator Panel

- Microsoft Windows Embedded CE 6.0
- Backup memory FRAM in 128KB (64 words) without battery
- Power & Terminal I/O ports isolation protection
- -20 ~ 60°C Wide Operating Temperature
- Front panel flat-sealed with IP66 compliance

High Performance Control Panels ▶



TPC-1581WP/ 1881WP

15.6/ 18.5" WXGA TFT LED LCD

Intel® Core™ i7/ i3 with PCT Multi-Touch Panel Computer

- Intel® Core™ i7-4650U/ i3-4010U with 4GB DDR3L SDRAM (i7 only in 18.5")
- 7H Hardness Glass Surface Widescreen with PCT Multi-touch, IP66 Front Protection and True-flat Touch Design
- Expandable System IO, Isolated Digital IO, Fieldbus and Communication by iDoor Technology
- Built-in ikey and Home-key for an intuitive UI
- Supports USB 3.0 and HDMI for independent display



TPC-1282T

12" XGA TFT LED LCD

Intel® Core™ i3 Touch Panel Computer

- Intel® Core™ i3-5010U 2.10GHz with 4GB DDR3L SDRAM
- More Durable 5-wire Resistive Touch Screen with IP66 Front Protection and True-Flat Touch design
- Expandable System I/O, Isolated Digital I/O, Fieldbus and Communication by iDoor Technology
- PCIe and mini PCIe expansion support
- Supports two USB 3.0 and HDMI ports for independent display



TPC-5151T/ 5171T

15"/17" XGA/SXGA TFT LED LCD

Intel® Core™ i3 Touch Panel Computer

- Intel® Core™ i3-6010U 2.30GHz with 8GB DDR3L SDRAM
- Modularised design for flexibility in development and maintenance
- TPM for cyber security
- Rugged with isolation power design
- PCIe, mini PCIe expansion and iDoor support
- Supports SSD & M.2 storage options
- Supports four USB 3.0/2.0 and Display Port for independent display
- Independent 3 Ethernet ports for IT/ OT integration

Fanless Panel PCs ▶



PPC-3060S/ 3100S/ 3120S

6.5" VGA/10.4" SVGA/12.1" XGA/ Intel Atom Dual/Quad core Fanless Panel PC

- Intel® Atom™ N2807 Dual-core 1.58GHz processor with Max.4GB DDR3L SDRAM/N2930 Quad-core 1.83GHz processor with Max.8GB DDR3L SDRAM
- Entirely flat panel with Touch Screen
- Compact Fanless Design with solid Al Alloy enclosure
- ELO 5-wire Resistive Touch Screen
- Supports 15 – 24V_{DC} Wide Voltage



PPC-3100/ 3120

10.4" SVGA/ 12.1" XGA/ Intel® Atom™

Dual-core Fanless Panel PC

- Intel® Atom™ Dual-core D2550 1.86GHz Processor with Max 4GB DDR3 SDRAM
- Fanless Design and Low Power Consumption
- 5-wire Resistive Touch Screen
- Optional PCI x 1/ PCIe x 1 Expansion Kit
- Automatic data flow control over RS-485



PPC-3150/ 3170/ 3190

15" XGA/ 17" / 19" SXGA Intel® Atom™

Quad-core Fanless Panel PC

- Intel® Atom™ Quad-core E3845 1.91GHz Processor with Max 8GB DDR3L SDRAM
- -20 ~ 60°C Wide Operating Temperature
- 5-wire Resistive Touch Screen
- Built-in PCI x 1/ PCIe x 1 Expansion Slot
- Built-in Isolated RS-422/485 with Autoflow
- Optional CF and CFast module



PPC-3151

15" XGA Intel® 6th Generation Core™ i5 Fanless Panel PC

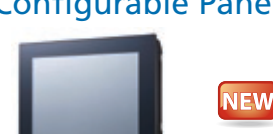
- Intel® Core™ i5-6300U 2.4GHZ/Core™ i3-6100U 2.3GHZ Processor with 16GB DDR4 SDRAM Entirely flat panel with Touch Screen
- Supports one PCIe x 4/ PCI x 1 Bus Expansion
- Built-in isolated RS-422/485 with Autoflow
- Supports 9 – 32V_{DC} Wide Voltage



PPC-4151W/ 4211W

15.6" WXGA/ 21.5" FHD Intel® Core™ i5/ Celeron® with PCT Multi-Touch Wide Screen Fanless Panel PC

- Intel® Core™ i5-4300U 2.9GHz/ Celeron® 2980U 1.6GHz Processor with Max 8GB DDR3L SDRAM
- Entirely flat panel with PCT touch screen
- Supports one PCIe x 4/ PCI x 1 Bus Expansion
- Built-in isolated RS-422/485 with Autoflow



PPC-6151C

15" XGA Intel® 6th Gen. Core i Panel PC with selectable Mini-ITX Motherboard

- Intel® 6th Gen. Core i processor up to 45W TDP (socket type)
- True-flat IP65 front bezel, optional Resistive or P-cap touch screen
- Optional selectable mini-ITX M/B for different features and prices
- Optional AC power supply or 24 V_{DC} input
- Supports dual expansion slots (one PCIe x 4 or two PCI)

Multi-functional Panel PCs ▶



PPC-6120

12.1" XGA Intel® Core™ i5/ i3/ Celeron® Panel PC

- Intel® 4th Generation Core™ i7/ i5/ i3/ Celeron® Processor with 2 x 204-pin SODIMM DDR3/DDR3L SDRAM (Max 16G)
- Built-in Isolated RS-422/485 with Autoflow, Dual IntelR GbE
- Optional PCI x 1/ PCIe x 1 Expansion Kit
- 5-wire Resistive Touch Screen



PPC-6150/ 6170

15" XGA/ 17" SXGA Intel® Core™ i5/ i3/ Celeron® Panel PC

- Intel® Core™ i5-3610ME/ i3-3120ME/ Celeron® 1020E with Max 8GB DDR3/ DDR3L SDRAM
- Dual HDD support Intel RAID 0/1, and Optional second HDD or ODD
- Multiple Bus Expansion Slots, one PCIe x 4, one PCI + Optional one PCIe x 1, two PCI, Optional two PCIe x 1
- Built-in Isolated RS-422/485 with Autoflow, Dual Intel® GbE



PPC-8150/ 8170

15" XGA/ 17" SXGA Intel® Core™ i5/ i3/ Celeron® Panel PC

- Intel® Core™ i5-3550S/ i3-3220 with 2 x 204-pin DDR3 SDRAM (Max 8GB)
- One PCIe x 4 or PCI slot
- Supports 6 x USB, 6 x COMs, 8 bit GPIO
- Supports iManager, SUSIAccess and Embedded Software APIs

Domain-focused HMIs



SPC-1881WP

All around IP65 18.5" Stationary Panel with Intel® i5 Processor

- Intel® Core™ i5-4300U 1.9GHz with 4GB DDR3L SDRAM
- All around IP65 protection with waterproof M12 connector
- Built-in ikey and home-key for an intuitive UI
- 7H Hardness Glass Surface with PCT Multi-touch
- 1 x RS-232/ 1 x USB/ 2 x LAN/ 24V_{DC}-in with Waterproof M12 connector



SPC-1840WP

All around IP65 18.5" Stationary Panel with AMD® Dual-core Processor

- All around IP65 18.5" Stationary Panels with AMDR Dual-core Processor
- 7H Hardness Glass Surface Widescreen with PCT Multi-touch, True-flat Touch Design
- Built-in ikey and Home-key for an Intuitive UI
- Robust design with All Around IP65 design, VESA support
- 1 x RS-232/ 1 x USB/ 2 x LAN/ 24V_{DC}-in with Waterproof M12 connector



SPC-2140WP

All around IP65 21.5" Stationary Panel with AMD® Dual-core Processor

- All around IP65 21.5" Stationary Panels with AMDR Dual-core Processor
- 7H Hardness Glass Surface Widescreen with PCT Multi-touch, True-flat Touch Design
- Built-in ikey and Home-key for an Intuitive UI
- Robust design with All Around IP65 design, VESA support
- 1 x RS-232/ 1 x USB/ 2 x LAN/ 24V_{DC}-in with Waterproof M12 connector



IPPC-5211WS

All Around IP69K 21.5" TFT LED LCD with PCT Touch Panel

- Intel® Celeron® Quad-core J1900 2 GHz
- All-round IP69K protection with corrosion-proof stainless steel
- The detachable product portfolio with accessories for various applications



FPM-8151H

15" XGA TFT LED LCD with Corrosion-proof Stainless Steel Front Panel for Hazardous location

- Corrosion-proof 316L Stainless Steel Front Panel
- IP65 Certified Front Panel Protection
- -20 ~ 60°C Wide Operating Temperature
- More Durable 5-wire Resistive Touch Screen with Anti-glare and Tempered Glass



TPC-8100TR

10.4" EN50155 Railway Panel Computer

- Intel® Atom N2600 Dual core processor 1.6G GHz processor
- All around IP65 with waterproof M12 connector
- Wide operating temperature: -30 ~ 70°C
- EN50155 & EN45545 Compliance for railway application

Industrial Monitors



FPM-7151W

15.6" WXGA Industrial Monitor with PCT, Direct VGA+DVI ports

- 16:9 WXGA LED backlight LCD with True-flat Seamless Design
- 7H Hardness Glass Surface with PCT Multi-touch and IP66 Front Protection
- Supports multi-touch via USB interface in Windows 7/ 8
- Robust design with SECC chassis and Magnesium alloy front panel



FPM-7181W

18.5" WXGA Industrial Monitor with PCT, Direct VGA+DVI ports

- 16:9 WXGA LED backlight LCD with True-flat Seamless Design
- 7H Hardness Glass Surface with PCT Multi-touch and IP66 Front Protection
- Supports multi-touch via USB interface in Windows 7/ 8
- Robust design with SECC chassis and Magnesium alloy front panel



FPM-7211W

21.5" Full HD Industrial Monitor with PCT, Direct VGA+DVI ports

- 16:9 FHD LED backlight LCD with True-flat Seamless Design
- 7H Hardness Glass Surface with PCT Multi-touch and IP66 Front Protection
- Supports multi-touch via USB interface in Windows 7/ 8
- Robust design with SECC chassis and Magnesium alloy front panel



FPM-7061T

6.5" VGA Industrial Monitor with Resistive Touchscreen, Direct-VGA/DP

- 6.5" XGA 50K Lifetime LED Backlight LCD with Anti-glare Screen and Tempered Glass
- IP66 Certified Front Panel Protection with True-flat Seamless Design
- -20 ~ 60°C Wide Operating Temperature
- Robust Design with SECC Chassis and Aluminum Front Panel
- Combination RS-232 & USB Interface for Touchscreen Function



FPM-7121T

12.1" XGA Industrial Monitor with Resistive Touchscreen, Direct-VGA/DP

- 12.1" XGA 50K Lifetime LED Backlight LCD with Anti-glare Screen and Tempered Glass
- IP66 Certified Front Panel Protection with True-flat Seamless Design
- -20 ~ 60°C Wide Operating Temperature
- Robust Design with SECC Chassis and Aluminum Front Panel
- Combination RS-232 & USB Interface for Touchscreen Function



FPM-7151T

15" XGA Industrial Monitor with Resistive Touchscreen, Direct-VGA/DP

- 15" XGA 50K Lifetime LED Backlight LCD with Anti-glare Screen and Tempered Glass
- IP66 Certified Front Panel Protection with True-flat Seamless Design
- -20 ~ 60°C Wide Operating Temperature
- Robust Design with SECC Chassis and Aluminum Front Panel
- Combination RS-232 & USB Interface for Touchscreen Function

Industrial IoT Gateway

Seamless Connection, Aggregation and Transmission to the Cloud for Smart Factory

To stay at the leading edge of Industry 4.0, Advantech's UNO Series is more than just an embedded automation computer. With their advanced communication capabilities they easily connect to the cloud as intelligent IoT gateways in smart factories.

The cloud-enabled embedded IoT Gateway, coming with iDoor technology, not only provides scalable computing power for field site control but also fully supports different PLCs running divergent protocols by integrating with IoT Software WebAccess/HMI for remote management.

With seamless connection, aggregation, data filtering and transmission to the cloud, the micro size and different mounting way of embedded IIoT gateway also fit in any control cabinets or equipment without space limitations.



Control Cabinet PCs



NEW

UNO-1252G/ 1251G

Micro Size DIN-Rail Industrial IoT Gateway

- Intel® Quark / TI Coretex A8 processor with 256MB memory
- 2 x LAN, 2 x USB, 2 x mPCIe, 2 x COM, 8 x DI/O, 1 x microSD, 1 x SIM, 1 x iDoor (UNO-1252G)
- 2 x LAN, 1 x USB, 1 x mPCIe, 3 x COM, 1 x CAN, 2 x microSD, 1 x microSIM (UNO-1251G)
- Programmable OLED display for indicating system status (UNO-1252G)



NEW

UNO-1372G

Intel® Atom Quad-Core Small-Size DIN-Rail Controller

- Intel® Atom E3845 1.91GHz processor with 4GB DDR3L memory
- 3 x GbE, 3 x mPCIe, 2 x USB2.0, 1 x USB3.0, 1 x RS-232, 1 x RS-422/485, 1 x VGA, 1 x HDMI, 8 x DI/O, 1 x Line-out, 1 x iDoor
- Exchangeable RTC battery with easily access at top side



NEW

UNO-1483G

Intel® Core™ i3 Regular-Size DIN-Rail Controller

- Intel® 4th Gen Core™ i3 processor up to 1.7GHz with 8GB DDR3L memory
- 4 x GbE, 3 x mPCIe, 1 x PCIe, 2 x USB 2.0, 2 x USB3.0, 1 x RS-232, 2 x RS-422/485, 1 x VGA, 1 x DP, 8 x DI/O, 1 x Line-out, 1 x iDoor
- Dual power input and remote power button for reducing power down time



NEW

UNO-3282G/ 3273G

Intel® Core™ i7/ Atom™ Wall Mount Automation Computer

- Intel® 6th Gen. Quad Core Processors with 8GB DDR4 Memory/ Intel® Apollo-Lake Processors with 4GB DDR3L Memory
- 2 x GbE, 6 x USB3.0, 2 x RS-232/422/485, 1 x DVI-I, 1 x HDMI, 1 x PCIe x 16, 1 x PCI, 2 x mPCIe, 1 x CFast, 1 x iDoor (UNO-3283G)
- Dual hot-swappable HDD/SSD slots with thumb screws for easy maintenance



NEW

UNO-3382G/3384G

Intel® Core™ i7/ Celeron Book Mount Automation Computer

- Intel® 4th Generation Core™ i7/ Celeron processors with 4GB/8GB DDR3L memory
- 2 x GbE, 2 x USB2.0, 2 x USB3.0, 1 x RS-232/422/485, 1 x DP, 1 x HDMI, 2 x mPCIe, 1 x CFast, 2 x iDoor, (UNO-3384: 2 x PCI/PCIe)
- Dual hot-swappable HDD/SSD slots with thumb screws for easy maintenance
- Supports DIN-rail, stand, wall and book mounting



NEW

UNO-3483G

Intel® Core™ i7 Enclosure Mount Automation Computer

- Intel® 3rd Gen Quad Core processor, up to 2.1 GHz with 8GB DDR3L memory
- 2 x GbE, 2 x USB 2.0, 2 x USB 3.0, 1 x RS-232 (pin header), 1 x RS-422/485 (pin header), 1 x VGA, 1 x HDMI, 1 x PCIe x 4, 3 x mPCIe, 2 x iDoor
- Dual hot-swappable HDD/SSD slots with thumb screws for easy maintenance



Embedded Automation PCs



NEW

UNO-2272G

Intel® Atom™/Celeron Palm-Size Automation Computer

- Intel® Atom™ N2800/ Celeron J1900 Processors up to 2.41 GHz with 2GB DDR3/ DDR3L Memory
- 1 x GbE, 3 x USB 2.0/3.0, 1 x RS-232, 1 x VGA or HDMI, Audio
- Compact fanless design



NEW

UNO-2362G/ 2372G

AMD® Dual Core T40E Small-Size Automation Computer

- AMD® Dual Core T40E 1.0GHz processor with 2GB DDR3 SO-DIMM built-in memory
- 1 x GbE, 4 x USB 2.0, 1 x RS-232, 1 x RS-485, 1 x mPCIe, 1 x DP, 1 x HDMI
- Daisy-chain for Ethernet with auto-bypass protection enabled



NEW

UNO-2483G/2473G

Intel® Core™ i7/ i3/ Celeron/ Atom™ Regular-Size Automation Computer

- Intel® 4th Gen Core™ i7/i3/Celeron J1900/ Atom™ processors up to 1.9GHz with 4GB/8GB DDR3L built-in memory
- 4 x GbE, 4 x USB 2.0/3.0, 2 x RS-232, 2 x RS-422/485, 3 x mPCIe, 1 x VGA, 1 x HDMI, audio (UNO-2483G)
- Chassis grounding protection

Communication iDoor Modules



PCM-24R1TP

Intel 82574L, GbE, IEEE 1588 PTP, RJ45 x 1

- 1 port GbE LAN
- IEEE 1588 precision time protocol ready



PCM-24R2GL

Intel i350 mPCIe, GbE, IEEE 802.3ab, RJ45 x 2

- 2 port GbE LAN
- Intel i350



PCM-24R2PE

Intel i350, GbE, PoE IEEE 802.3af, PD, RJ45 x 2

- 2 port PoE (Power Over Ethernet)
- Max. 15.4 DC power output per port



PCM-24U2U3

USB 3.0 mPCIe card, USB-A type x 2

- 2 port USB 3.0
- USB A type



PCM-24S2WF

Atheros AR9462, 802.11 a/b/g/n 2T2R w/ BT4.0, SMA x 2

- Atheros AR9462
- 802.11 a/b/g/n 2T2R w/ Bluetooth 4.0



PCM-24S33G

6-band HSPA Cellular Module, GPS, SIM Holder, SMA x 2

- 3.75G HSPA+GPS
- Dual-SIM card holder with switch for redundancy

Smart I/O & Comm. iDoor Modules



PCM-24D2R2/ PCM-24D2R4

OXPCIe952 UART, Isolated RS-232, RS-422/485, DB9 x 2

- 2,000 V_{DC} isolation protection
- RTS/CTS/Xon/Xo flow control



PCM-24D4R2/ PCM-24D4R4

OXPCIe954 UART, Non-isolated RS-232, RS-422/485, DB37 x 1

- Non-isolation 4 COM ports with expansion cable
- 50 bps ~ 921.6 kbps serial speed (RS-422/485)



PCM-27D24DI

Digital I/O, Isolated 16DI/8DO, DB37 x 1

- 16DI, 8DO
- 2,500 V_{DC} isolation protection

Industrial Fieldbus iDoor Modules



EtherCAT

PCM-26R2EC

Hilscher netX100 FieldBus mPCIe, EtherCAT, RJ45 x 2

- Real-time fieldbus EtherCAT protocol
- Supports Master/Slave



EtherNet/IP

PCM-26R2EI

Hilscher netX100 FieldBus mPCIe, EtherNet/IP, RJ45 x 2

- Real-time fieldbus EtherNet/IP protocol
- Supports Master/Slave



PROFINET

PCM-26R2PN

Hilscher netX100 FieldBus mPCIe, PROFINET, RJ45 x 2

- Real-time fieldbus PROFINET protocol
- Supports Master/Slave



CANopen

PCM-26D2CA

SJA1000 CANBus, CANOpen, DB9 x 2

- CAN 2.0 A/B
- 1Mbps, 16MHz



PROFIBUS

PCM-26D1DB

Hilscher netX100 FieldBus mPCIe, PROFIBUS, DB9 x 1

- Fieldbus PROFIBUS protocol
- Supports Master/Slave



ETHERNET POWERLINK

PCM-26R2PL

Hilscher netX100 FieldBus mPCIe, POWERLINK, RJ45 x 2

- Real-time fieldbus POWERLINK protocol
- Supports Slave

Multiple I/O & Peripheral iDoor Modules



PCM-2300MR

MR4A16B, MRAM, 2MByte

- 2MB MRAM Storage
- Speed 6 MB/Sec



PCM-27J3AU

Audio with Mic-in, Line-in/out

- 3-Port Audio Stereo
- mPCIe, 3.5 mm Jack



PCM-23U1DG

Internal Locked USB 2.0 Port for Dongle, USB x 1

- 1 port internal USB 2.0 for security key
- USB A type w/ lock

Intelligent Systems and Platforms

Infrastructure of IoT Era

With diverse innovative technologies ranging from cloud computing (industrial servers, video servers), edge computing (fanless, slim, and portable devices), to high-performance embedded systems, Advantech's Industrial Cloud Services and System Design-to-Order Services (System DTOS) transform embedded systems into intelligent systems equipped with smart, secure, energy-saving features. Advantech's intelligent systems are designed to satisfy vertical markets in the intelligent transportation, factory automation/machine automation, cloud infrastructure, and intelligent video application sectors.



Industrial Computers



ACP-4020

4U Rackmount Chassis for Half-Size SBCs or ATX Motherboards

- Compact 4U rackmount chassis (348 mm depth)
- Supports 14-slot BP for half-size SBC or ATX/MicroATX motherboard
- Shock-resistant disk drive bay holds 1 internal 2.5" and 2 front-accessible 3.5" drives, and 1 slim optical disk drive
- 2 front-accessible USB 3.0 ports
- Front-accessible system fan
- Built-in intelligent system module for fan control and remote management



ACP-4340

4U Rackmount Chassis with 4 Hot-Swappable Drive Trays for Full-Size SHBs/SBCs or ATX/MicroATX Motherboards

- Supports PICMG backplane with up to 14 slots or ATX/Micro-ATX motherboard
- Shock-resistant disk drive bay holds four hot-swappable 3.5" and 2.5" SAS/SATA disk trays, 1 slim optical disk drive, and 1 2.5" internal drive
- 2 front-accessible USB 3.0 ports
- Front-accessible system fan
- LED indicators and alarms for system fault detection
- Built-in intelligent system module for fan control and remote management



HPC-7442

4U Rackmount Chassis with up to 8 SAS/SATA HDD Trays for EATX/ATX Motherboards

- Shock-resistant disk drive bay holds 4 hot-swappable 3.5" and 2.5" SAS/SATA disk trays, 1 slim optical disk drive, and one 3.5" internal drive
- Supports 80 PLUS-certified single/redundant power supply
- Front-accessible system fan
- LED indicators and alarms for system fault detection
- Optional storage upgrade kit with 8 hot-swappable HDD trays

Server-Grade IPCs



ASMB-823

Intel® Xeon® E5 ATX Server Board

- LGA2011 ATX server board with Intel® Xeon® E5-2600 v3 dual processor
- DDR4 2133 MHz RDIMM, up to 192 GB
- 4 PCIe x 16 (Gen 3), 2 PCIe x 8 (Gen 3), and 1 PCIe x 4 (Gen 2) slots
- 9 SATA III and 6 USB 3.0 ports



ASMB-923

Intel® Xeon® E5 EATX Server Board

- LGA 2011 EATX server board with Intel® Xeon® E5-2600 v3 dual processor
- DDR4 2133 MHz RDIMM, up to 256 GB
- 4 PCIe x 16 (Gen 3), 2 PCIe x 8 (Gen 3) and 1 PCIe x 4 (Gen 2) slots
- 10 SATA III and 4 USB 3.0 ports

GPU Server



AGS-923

2U GPU Server with Dual Intel® Xeon® E5 Processors

- Supports NVIDIA Tesla, GRID, Quadro, AMD FirePro, and Advantech DSP cards
- 8 DIMM sockets for DDR4 (ECC) at 2133 MHz, up to 256 GB
- Supports 4 FH/FL double-depth PCIe x 16 expansion cards and 1 FH/HL single-depth PCIe x 8 expansion card
- 8 hot-swappable SATA/SAS HDD bays
- Quad GbE LAN (1 sharing IPMI function) ports

Machine Vision Systems ▶



AIIS-1200P/U

Fanless Vision System with Intel® Celeron® SoC CPU and 2-Channel GigE PoE or 2-Channel USB 3.0 Camera Interface

- Intel® Celeron® SoC CPU
- IEEE 802.3af-compliant 2-channel GbE PoE for GigE camera/2-channel controller for USB 3.0 camera
- Compact and lightweight (less than 0.9)



AIIS-5410P

Fanless Vision System with Intel® Core™ i7/i5/i3 CPU, 4-Channel GigE PoE Camera Interface, and PCI or PCIe Expansion Slot

- 6th Generation Intel® Core™ i7/5/i3 BGA1440 processor
- 4-channel GbE PoE
- Powered device auto detection and classification

Modular Industrial Computer



MIC-7500 + i-Module

Compact Fanless System with 6th Generation Intel® Core™ i Processor

- 6th Generation Intel® Core™ i7/i5/i3 BGA type CPU with QM170 chipset
- Supports MIC-75 series i-Modules, isolation COM modules, and 32-bit GPIO modules

Transportation Systems ▶



ITA-1711

Fanless AFC System with Intel® Celeron™ J1900 Processor, Dual GbE, and Dual Display Ports

- Wide 9 ~ 36 V_{DC} input range
- 2 GbE, 6 USB 2.0, and 10 COM ports
- Supports RS-232/422/485 with serial port automatic flow control
- Up to 4 GB of DDR3 memory, with optional NVRAM
- Supports one 2.5" HDD



Fully compliant with EN 50121-4

ITA-2230

EN50121-4-Compliant 2U Fanless System with 3rd Gen Intel® Core™ i Processor

- Intel® Core™ i7 processor with 4 GB of DDR3 memory
- Compliant with EN 50121-4 railway EMC standards
- Supports 3 ITAM modules, 1 PCI104, and 1 miniPCIe slot for expansion
- Wide operating temperature range (-25 ~ 60°C)
- Supports single/dual power module



Fully compliant with EN 50155

ITA-5831

EN 50155-Certified Compact Fanless System with 6th Generation Intel® Core™ i Processor

- Intel® Quad-Core™ i7 processor with 8 GB of DDR4 memory
- Satisfies EN 50155 Tx (-40 ~ 70°C) and IEC 61373 body mount Class B standards
- Compliant with EN 50121-3-2 rolling stock EMC standard
- Ruggedized communication and power port connectors (M12)
- Supports easy-swap storage and I/O modules

Industrial Motherboards ▶



AIMB-705

LGA1151 6th Generation Intel® Core™ i7/i5/i3/Pentium ATX with DVI/VGA, DDR4, SATA III, USB 3.0, and 6 COMs

- Intel® 6th Generation Core™ i7/i5/i3/Pentium® processor
- Dual-channel (non-ECC) DDR4 at 1866/2133 MHz, up to 32GB
- Supports VGA and DVI outputs



AIMB-785

LGA1151 6th Generation Intel® Core™ i7/i5/i3/Celeron/Pentium ATX with Triple Display, DDR4, and SATA III

- Intel® Core™ i7/i5/i3/Celeron®/Pentium® processor with Q170 chipset
- 4 DIMM sockets support DDR4 at 1866/2133 MHz, up to 64 GB
- Supports triple displays (VGA/2 DVI-D) and dual GbE LANs



ASMB-585

LGA 1151 Intel® Xeon® E3 v5/6th Generation Core™ Micro ATX Server Board with 4 DDR4, 1 PCIe x 16, 3 PCIe x 4, Quad LANs, and USB 3.0

- Micro ATX Server Board with Intel® Xeon® E3-1200 v5/Core™ i5/i7 processor
- 4 DIMM sockets support DDR4 (ECC/non-ECC) at 2133/1866/1600 MHz, up to 64 GB

Single Slot Board Computers ▶



PCE-3029

LGA 1151 6th Generation Intel® Core™ i7/i5/i3 Half-Size SHB with PCIe 3.0, Dual Independent Displays, Dual GbE LANs, SATA III, m-SATA, and USB 3.0

- Compliant with PICMG 1.3
- Intel® Core™ i7/i5/i3/Celeron®/Pentium® processor with H110 chipset
- Dual-channel (non-ECC) DDR4 at 1866/2133 MHz, up to 32 GB



PCE-5029

LGA 1151 6th Generation Intel® Core™ i7/i5/i3 PICMG 1.3 SHB with DDR4, Dual LANs, and USB 3.0

- Intel® 6th Core™ i7/i5/i3 processor with H110 chipset
- Dual-channel (non-ECC) DDR4 at 1866/2133 MHz, up to 32 GB
- Supports PCIe 3.0, USB 3.0, and SATA 3.0



PCE-5129

LGA 1151 6th Generation Intel® Core™ i7/i5/i3 PICMG 1.3 SHB with DDR4, Dual LANs, USB 3.0, M.2, Triple Displays, and AMT

- Intel® Core™ i7/i5/i3 LGA1151 processor with Q170 chipset
- Dual-channel (non-ECC) DDR4 at 1866/2133 MHz, up to 32 GB
- Supports PCIe 3.0, M.2, USB 3.0, SATA3.0, and SW Raid 0/1/ 5/10

Industrial Communication

Simplify the Way You Connect

Advantech's Industrial Communication products draw on over 20 years of experience to provide reliable wired and wireless communication (3G, GPRS, and WLAN) for mission critical applications. These products include: Industrial Ethernet Switches, Industrial Wireless AP/Client, Media Converters, Serial Device Servers, Cellular IP Gateways, and Modbus Gateways. They are also capable of securely transmitting critical and sensitive information, remotely monitoring and controlling networked devices and emphasizing high communication capabilities for industrial applications.



Software

WebAccess/NMS Network Management System

- Cross Web Browser Compatible
- Online Google map and offline OpenStreetMap support
- Supports all Advantech Ethernet-based products
- Automatically generated topology
- PoE, ring, wireless, cellular connection indication



Industrial Routers

EKI-1331/ 1334 Industrial HSPA+ Gateway/Router

- Universal five-band UMTS/HSPA+ 850/900/1800/1900/2100 MHz
- Protocols converting between serial and Ethernet: Modbus RTU & TCP
- Provides NAT and VPN
- EMC Level III for industrial standards



NEW

Industrial Wireless AP/ Clients Serial Device Servers



NEW

EKI-6331AN/ 6332GN 802.11N WiFi AP/ Bridge/ Client

- Compliant with IEEE 802.11 a/n and 802.11 b/g/n
- High output power
- Fast roaming
- IP55 waterproof



EKI-1521/ 1522/ 1524/CI/I 1-port/ 2-port/ 4-port RS-232/ 422/ 485 Serial Device Server

- 2 x 10/100 Mbps Ethernet ports for LAN redundancy
- VCOM, TCP server, TCP Client, UDP and RFC2217 operating modes
- I models support a wide operating temperature; CI models support isolation and wide operating temperature



NEW

EKI-1528I/CI-DR 8-port RS-232/ 422/ 485 Din Rail Serial Device Server

- 2 x 10/100 Mbps Ethernet port for LAN redundancy
- VCOM, TCP server, TCP Client, UDP and RFC2217 operating mode
- I models support a wide operating temperature; CI models support isolation and wide operating temperature

Serial Device Servers



EKI-1526/ 1528 Series 16/8-port RS-232/ 422/ 485 Rackmount Serial Device Server

- Connect up to 8 or 16 port series RS-232/422/485 devices directly to TCP/IP networks
- High speed baud rates from 50bps to 921.6Kbps ensure high volume transmission needs
- VCOM, TCP server, TCP Client ,UDP and RFC2217 operating modes

WLAN Device Servers



EKI-1361/ 1362 / EKI-1361-MB/ 1362-MB 1/ 2-port RS232/ 422/ 485 to 802.11b/ g/ n WLAN Serial/ Mobus Device Servers

- Links any serial device to an IEEE 802.11b/ g/ n network
- Provides 1/2 x RS-232/ 422/ 485 port
- Secures data access with WEP, WPA, and WPA2
- Supports WLAN Ad-Hoc and Infrastructure modes
- MB version supports Modbus TCP and Modbus RTU

Modbus Gateways



EKI-1221/ 1222/ 1224/CI/I 1-port/ 2-port/ 4-port Modbus Gateway

- 2 x 10/100 Mbps Ethernet port for LAN redundancy
- Surge protection for D.C. power ports with line to line 2KV and line to earth 4KV for signal port with 4KV
- Integration of Modbus TCP and Modbus RTU/ASCII networks
- I models support a wide operating temperature
- CI models support isolation and wide operating temperature

Industrial Ethernet Managed Switches



NEW

EKI-7428G-4CI

24G+4G Combo ports Industrial Rackmount Managed Switch

- IXM for Fast Deployment
- Management: SNMP v1/v2c/v3, WEB, Telnet, Standard MIB
- -40 ~ 70°C wide-range operating temperature
- Dual 12-48 V_{DC} power input
- Redundancy: Gigabit X-Ring Pro (ultra high-speed recovery time < 20 ms), RSTP/STP (802.1w/1D), MSTP



NEW

EKI-7710E/G-2C

8FE / 8G +2G Combo Ports / 8FE / 8G + 4G SFP Ports Industrial Managed Switch

- 8 Gigabit ports + 2 Gigabit Copper/SFP combo ports (EKI-7710G)
- 8 Fast Ethernet / Gigabit ports + 4 Gigabit SFP ports (EKI-7712G)
- IXM function enables fast deployment
- IP30
- Management: SNMP v1/v2c/v3, WEB, Telnet, Standard MIB, Private MIB



NEW

EKI-7720E/G-4F

16FE / 16G + 4G SFP Ports Industrial Managed Switch

- 16 Fast Ethernet / Gigabit ports + 4 Gigabit SFP ports
- Redundancy: X-Ring Pro (recovery time < 20 ms)
- IXM function enables fast deployment
- Security: 802.1x (Port-Based, MD5/TLS/TTLs/PEAP Encryption), RADIUS
- Management: SNMP v1/v2c/v3, WEB, Telnet, Standard MIB, Private MIB

PROFINET or EtherNet/IP supporting Industrial Ethernet Switches



EtherNet/IP

NEW

EKI-5500/5600-EI

Entry-Level Managed Switch Support EtherNet/IP Protocol

- EtherNet/IP protocol
- EDS files /AOI available
- FactoryTalk[®] compliant Faceplate
- Dual 12 ~ 48 V_{DC} power input and P-Fail relay
- EMS level 3 protection



PROFINET

NEW

EKI-5500/5600-PN

Entry-Level Managed Switch Support PROFINET Protocol

- Real-time PROFINET protocol
- Media Redundancy(MRP)Master/Slave
- GSD files available
- -40 ~ 70°C wide-range operating temperature
- IEEE 802.3az Energy Efficient Ethernet (EEE)

Viewable Unmanaged Ethernet Switches



TAIWAN EXCELLENCE 2016

EKI-5000 Series

Viewable Unmanaged Switch

- Communicates with SCADA software via Modbus/TCP
- Communicates with NMS via SNMP
- Port-based QoS for deterministic data transmission
- Loop detection
- Dual Power input

Industrial PoE Switches



NEW

EKI-7428G-4CPI

24G PoE ports +4G Combo ports Industrial Rackmount Managed Switch

- 24 x IEEE 802.3 af/at PoE Gigabit ports + 4 x Gigabit Copper/SFP combo ports
- IXM for Fast Deployment
- Management: SNMP v1/v2c/v3, WEB, Telnet, Standard MIB
- -40 ~ 70°C wide-range operating temperature
- Dual 48 V_{DC} power input



NEW

EKI-7710E/G-2CP

8FE / 8G PoE ports +2G Combo Ports Industrial Managed Switch

- 8 x IEEE 802.3 af/at PoE ports + 2 Gigabit Copper/SFP combo ports
- IXM function enables fast deployment
- IP30
- Management: SNMP v1/v2c/v3, WEB, Telnet, Standard MIB, Private MIB



NEW

EKI-7712E/G-4FP

8FE / 8G PoE ports + 4G SFP Ports Industrial Managed Switch

- 8 x IEEE 802.3 af/at PoE ports + 4 Gigabit SFP ports
- Redundancy: X-Ring Pro (recovery time < 20 ms)
- IXM function enables fast deployment
- IP30
- -40 ~ 75°C wide-range operating temperature (Wide temp model)

EN50155 Railway Switches



NEW

EKI-9512/P 9516/P

EN-50155 M12 Managed Switch Ethernet Switch

- Complies with EN50155 and EN45545-2
- All Gigabit connections support dual ring protection and non-blocking traffic forwarding
- M12 connector with IP67 protection
- IEEE 802.3af/802.3at per port with system PoE power management (PoE models)
- Supports wide operating temperatures from -40 to 75°C

eMark In-Vehicle Switches



NEW

EKI-5728/5729P/5624P

In-Vehicle Viewable Unmanaged Switch

- eMark certified
- Port-based QoS for deterministic data transmission
- Dual power input
- IEEE 802.3az Energy Efficient Ethernet (EEE)
- -40~75°C operating temperature range
- Dual Power input
- Communicates with SCADA software via Modbus/TCP

IEC61850-3 Power & Energy Switch



NEW

EKI-9228G

IEC-61850 Industrial Rackmount Managed Switch

- 16 x Gigabit RJ-45 ports + 4 Gigabit x SFP ports + 8 x Gigabit Combo ports
- SFP socket for Easy and Flexible Fiber Expansion
- Redundancy: Gigabit X-Ring (ultra high-speed recovery time < 20 ms), RSTP/STP (802.1w/1D), MSTP
- Dual wide range AC/DC power input

Industrial Networking

Seamless Data Connectivity from the Network Edge to the Network Core

The Advantech B+B SmartWorx line of industrial networking products provides robust, reliable, sophisticated connectivity all the way from the network edge to the network core. They transfer data between copper, fiber and wireless connection and translate multiple generations of data networking protocols, whether the data comes from legacy serial and Modbus devices or the latest Industrial Internet of Things equipment. Where wired connections are threatened by harsh environments, Advantech B+B SmartWorx provides ruggedized devices that will keep your data flowing and isolated devices that will stop electrical transients (surges) cold. When wired connectivity is impractical, we provide a host of industrial grade wireless solutions to ensure data can still be transmitted and received wherever it's needed. Whatever your data networking challenges may be, we can provide the answers.



Fiber Media Conversion



MiniMc series Miniature Ethernet Fiber Media Converters

- Compact, simple and flexible
- 10/100 or 10/100/1000 Mbps
- Fixed fiber (MM850 SC, SM1310 SC) and SFP
- Link Fault Pass Through for remote troubleshooting
- Powering options: DC jack, terminal block or USB/PoE
- -40 to 80°C wide operating temperature ("IE" models)



PoE/PoE+ Giga MiniMc PoE Switching Media Converter

- Rugged, standalone, compact enclosure
- IEEE 802.3af PoE (15.4W) / IEEE 802.3at PoE+ (25.5W)
- 10/100/1000 Mbps
- Fixed fiber and SFP
- PoE Reset on Fiber LOS (configurable)
- Link Fault Pass Through for remote troubleshooting



IE Multiway Optical Gigabit Ethernet Demarcation

- Multi-function (Gigabit switch, 1+1 protection, dual copper to fiber media/mode converter)
- OAM, Vlans, Q-in-Q and SNMP management
- Extended temperature rating (-40 to +80°C)
- 5-24V_{DC} or 48V_{DC} (terminal block)

Wireless Sensing



Wzzard series Wireless Networking I/O & Sensors – Intelligent Sensing Platform

- Ultra low power 802.15.4e SmartMesh IP technology
- Rugged, IP66, fiber reinforced polyester PBT enclosure
- MQTT and JSON IoT protocol to application platform
- UL Class 1/Division 2 for hazardous locations

USB Conversion



485USBTB-2W & 485USB9F-2W In-line USB to RS-485 Converters

- High retention USB connectors
- Perfect for field service applications
- Small – fits easily into any laptop bag
- USB port powered



UH104 & UH401 4-port USB 2.0 Hub & 1-port 4KV Isolator

- High retention USB connectors
- Ultra-compact
- -40 to 80°C wide operating temperature
- 15 kV ESD protection

Serial Conversion



485DRCI, 485OPDRI & 232OPDRI Triple Isolated Serial Converter & Repeaters

- Three-way 2KV optical isolation (input, output, power)
- Wide -40 to +80°C temperature range
- UL Class 1/Division 2 for hazardous locations
- 10–48 V_{DC} input power range

LTE Routers & Gateways



SL 30x series SmartSTART Routers & Gateways

- LTE/UMTS/HSPA+/UMTS/HSDPA/GPRS/EDGE
- Wi-Fi (optional)
- Two SIM card holders
- VPN and Python support
- Low-power mode
- UL Class 1/Division 2 for hazardous locations



SR 3xx series SmartFLEX Routers & Gateway

- LTE/UMTS/HSPA+/UMTS/HSDPA/GPRS/EDGE
- Wi-Fi (optional); GPS receiver (wired version not included)
- Two SIM card holders + MicroSD card holder
- PoE PD/PSE (optional)
- VPN and Python support
- Low-power mode
- UL Class 1/Division 2 for hazardous locations

Control IPCs

Scalable PC-based Automation Controllers for Smart Factory

Advantech's APAX series is designed for industry 4.0, which leverages embedded computing technology and modular system design. It features flexible I/O expansion, real-time I/O control and Fieldbus, network capability through various interfaces.

The APAX series can bridge Operational Technology (OT) and Information Technology (IT) together by providing an integrated control system and open environment that users can add their knowledge and software, such as database or MES interface to it.



Control IPCs



NEW



APAX-5580

Embedded Control IPC

- Intel® Haswell Core i7/i3/Celeron processors upto 1.7GHz with 4GB DDR3L memory
- 2 x mPCIe interfaces for telecommunication
- One key operating system recovery
- Supports up to 8 local and 32 remote COM ports
- 2 x LAN, 2 x USB3.0, 1 x VGA, 1 x SD slot, 1 x COM port and 2 x mPCIe slots



APAX-5580CDS

CODESYS-ready Control Platform

- Supports CODESYS V3.5 RTE
- Onboard Fieldbus support: EtherCAT, PROFINET, Ethernet/IP
- PLC-graded RTC battery for 10 years
- Supports up to 8 local and 32 remote COM port
- Supports max 32 APAX I/O expansion, up to 768 digital I/O, 192 analog input

Couplers



APAX-5070/ 5071/ 5072

Fieldbus Communication Coupler

- APAX-5070 supports 1ms Modbus response time
- Flexible Modbus mapping table
- Supports UDP data streaming and event alarms

PCIe Modules for APAX-5580



APAX-5435

iDoor Interface Module

- Supports Fieldbus and telecommunication by Advantech iDoor Technology
- Supports mSATA for data storage



APAX-5490

RS-232/422/485 Module

- Change RS-232/422/485 mode by hardware switch
- Auto flow control in RS-485 mode
- Isolation protection



APAX-5430

SATA HDD Module

- SATA I/II/III 2.5" HDD/SDD
- Supports RAID 0/1

APAX I/O Modules



NEW

APAX-5090

Communication Module by Local Bus

- 4 x RS-232/422/485 ports
- Up to 32 visual COM port with APAX-5580
- Supports distributed topology with APAX bus



APAX-5017H

12-ch High Speed Analog Input Module

- Voltage and current inputs including $\pm 10V$ and 4 ~ 20mA
- Each channel can be configured with different input types and ranges
- 100/1000 sampling rate per channel



APAX-5080

4/8-ch High Speed Counter Module

- 5 counter mode: Up, Up/Down, Pulse/Direction, A/B phase, Frequency from 0.1Hz~1MHz
- 4 x DI channels for counter gate inputs
- 4 x DO channels for alarm outputs

TagLink-enabled IIoT Data Gateway

Powering Smarter and Safer Data Acquisition Tasks

TagLink is software dedicated to Industrial IoT applications. The name represents the two key features necessary for making data transition easier. 'Tags' are for users to make customized and advanced settings changes, while 'Link' means the software makes the data link between edge devices and the cloud become smarter and safer.

With integrated applications for protocols and software, and the open SDK/API, TagLink is dedicated technology for future IIoT Data Gateway applications. Currently Advantech has two IIoT Data Gateways with TagLink: the ADAM-3600 series with 20~50 local I/O points for Oil, Gas and Water industries, and the small but robust ECU-1152 for Power and Energy applications.



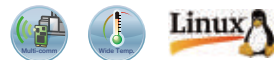
Multi-protocol DA&C System ▶



ADAM-3600-C2G

8 AI / 8 DI / 4 DO / 4-Slot Expansion, 2 x LAN, 3 x COM and Dual Wireless

- Supports Industrial Protocols: DNP3, IEC-60870-5-104, Modbus
- Supports IT Protocols OpenVPN / HTTP/HTTPS (RESTful) / WASCADA
- TI Cortex A8 600MHz CPU with DDR3L 256MB RAM
- RT-Linux OS with TagLink realtime database
- Onboard IO- 8AI / 8DI / 4DO with 4-Slot I/O expansion flexibility
- Internal 2 x Mini-PCIe Interface for Dual Wireless Networking
- Certified Wireless Solution Zigbee/ Wi-Fi/ 3G/ 4G/ GPRS/ GPS
- IEC61131-3 & C programming language SDK support
- Wide operation temperature -40~70°C
- Supports iCDManager for remote connectivity diagnosis
- TagLink Studio for off-line configuration and remote deployment and on-line monitoring
- SQLite database for data logger on SD card



Expansion I/O Modules ▶



NEW

ADAM-3600 Series I/O Expansion Modules

ADAM-3600 is with 20 points on-board IO, and 4-slot for IO expansion modules. It provides versatile IO combination without occupying extra space in the cabinet.

- ADAM-3617 4-ch Analog Input Module
- ADAM-3618 4-ch Thermocouple Module
- ADAM-3624 4-ch Analog Output Module
- ADAM-3651 8-ch Digital Input Module
- ADAM-3656 8-ch Digital Output (Sink type) Module

Power & Energy Automation Gateway ▶



NEW

ECU-1152

4 DI / 4 DO, 2 x LAN, 6 x COM, and Wireless

- Supports Industrial Protocols DNP3, IEC-60870-5-104, Modbus
- Supports IT Protocols OpenVPN / HTTP/HTTPS (RESTful) / WASCADA
- TI Cortex A8 800MHz Processor with DDR3L 512MB RAM
- 2 x 10/100MB LAN, 6 x RS-232/485 COM, 4 x DI, 4 x DO
- 1 x Mini-PCIe for 3G/GPRS/GPS
- Supports RT-Linux OS, with TagLink realtime database
- Wide operation temperature -40~70°C
- TagLink Studio for off-line configuration and remote deployment and on-line monitoring
- SQLite database for data logger on SD card



IoT Wireless I/O Modules

Providing IoT Wireless Smart Devices from I/O to Sensor

As wireless applications become a more common and preferred solution, Advantech has introduced a variety of wireless remote I/O devices to the market to become an important IoT enabler. With the Wi-Fi-based WISE-4000 series and the WSN-based ADAM-2000 series, users are free from worrying about a wired layout and extra associated costs, for a more flexible deployment. Furthermore, the WISE-4000 series brings an authentic IoT experience to the market. By realizing an "Anytime, Anywhere" solution, users can retrieve data via mobile devices and can now configure modules and troubleshoot from mobile devices to save time.



IoT Wireless I/O Modules

WISE-4050

4-ch Digital Input and 4-ch Digital Output IoT Wireless I/O Module

- 2.4 GHz IEEE 802.11b/g/n WLAN
- Protocols: Modbus/TCP, TCP/IP, UDP, DHCP, HTTP
- RESTful web API in JSON format for IoT integration
- Supports both wireless client and server modes that can be accessed directly without AP or router
- Supports file-based cloud storage and local logging
- Supports mobile device web configuration with HTML5
- 10~30V_{DC} power with reverse protection



WISE-4060

4-ch Digital Input and 4-ch Relay Output IoT Wireless I/O Module

- 2.4 GHz IEEE 802.11b/g/n WLAN
- Protocols: Modbus/TCP, TCP/IP, UDP, DHCP, HTTP
- RESTful web API in JSON format for IoT integration
- Supports both wireless client and server modes that can be accessed directly without AP or router
- Supports file-based cloud storage and local logging
- Supports mobile device web configuration with HTML5
- 10~30V_{DC} power with reverse protection



WISE-4012

4-ch Universal Input and 2-ch Digital Output IoT Wireless I/O Module

- 2.4 GHz IEEE 802.11b/g/n WLAN
- 4-ch UI: 0~10V, 0~20mA, 4~20mA, digital input
- RESTful web API in JSON format for IoT integration
- Web Services: REST, HTML5, JavaScript, JSON
- Supports both wireless client and server modes that can be accessed directly without AP or router
- Supports file-based cloud storage and local logging
- Supports mobile device web configuration with HTML5



WISE-4012E - IoT Developer Kit

6-ch Universal Input/Output IoT Wireless I/O Module for IoT Developer

- 2.4 GHz IEEE 802.11b/g/n WLAN
- 2-ch 0~10V Input, 2-ch DI, and 2-ch Relay Output
- Includes WebAccess with demo project for developer
- Includes extension board for simulating sensor status
- Includes micro USB cable for power input
- Supports both wireless client and server modes that can be accessed directly without AP or router
- Supports mobile device web configuration



M2M (Machine to Machine) I/O Modules

ADAM-2520Z/ 2510Z

Wireless Modbus RTU Gateway

- 2.4 GHz IEEE 802.15.4 compliant RF
- Outdoor range up to 1,000 m
- Supports battery input with 2 x AA alkaline batteries
- Supports Modbus RTU protocol
- Network capacity with 32 nodes (routers & end devices)
- Supports Star/ Tree/ Mesh Network Topologies



ADAM-2031Z

Wireless Temperature & Humidity Sensor Node

- 2.4 GHz IEEE 802.15.4 compliant RF
- Low duty cycle and low power consumption
- Outdoor range up to 110 m
- Supports battery input with 2 x AA alkaline batteries
- Built-in temperature/ humidity sensor input



ADAM-2051Z/ 2051PZ

Wireless 8-ch Digital Input Node with Power Amplifier

- 2.4 GHz IEEE 802.15.4 compliant RF
- Outdoor range up to 1,000 m
- Supports battery input with 2 x AA alkaline batteries
- 10K Ω input resistance



ADAM-2017PZ

Wireless 6-ch Analog Input Node with Power Amplifier

- 2.4 GHz IEEE 802.15.4 compliant RF
- 6-ch differential input: ± 150 mV, ± 500 mV, ± 1 V, ± 5 V, ± 10 V, ± 20 mA, 0~20mA, 4~20 mA



Remote I/O Modules

Providing Remote I/O Connectivity with RS-485 and Ethernet, with More Options

When “Internet of things” is no longer just a slogan, Advantech’s versatile products boost clients’ production performance by meeting different application needs. With a typical automation network using RS-485 to transmit serial signals the ADAM-4000 & robust ADAM-4100 series, and the designed for harsh environments. Robust RS-485 based ADAM-4100 series, Ethernet based ADAM-6000 series and Daisy-chain Ethernet based ADAM-6200 series, managing field devices becomes easier and the field site status can be identified, tracked and altered remotely. There are over 1 million ADAMs in the world, in various industries such as industrial automation, environmental and facility management, intelligent transportation system, and so on and their record of being highly efficient devices is well proven.



Daisy-chain Ethernet I/O Modules



ADAM-6200 Series

- Daisy chain connection with auto-bypass protection
- Auto-calibration without providing any input
- Web language support: HTML5, JavaScript, XML
- Support GCL and Peer-to-Peer
- Group configuration capability to set up multiple modules at one time
- DI/O LED Indication
- Safe value settings for DO or Relay failure

Module Selection

Isolated Analog I/O Modbus TCP Module

- ADAM-6217: 8-ch AI
- ADAM-6224: 4-ch AO & 4-ch DI

Isolated Digital I/O Modbus TCP Module

- ADAM-6250: 8-ch DI & 7-ch DO
- ADAM-6251: 16-ch DI
- ADAM-6256: 16-ch DO

Relay Output Modbus TCP Module (with DI)

- ADAM-6260: 6-ch RL
- ADAM-6266: 4-ch RL & 4-ch DI

Real-time Ethernet I/O Modules



ADAM-6100 Series

- Daisy chain connection functionality
- Supports PROFINET or Ethernet/IP protocol
- Coupler-free design
- GSD, L5K and EDS file ready for network commissioning
- 2,500 V_{DC} isolation protection

Module Selection

(PROFINET:PN, EtherNet/IP:EI)

Isolated Analog I/O Module

- ADAM-6117E1/PN: 8-ch AI

Relay Output Module

- ADAM-6160E1/PN: 6-ch RL

Isolated Digital I/O Module

- ADAM-6150E1/PN: 8-ch DI & 7-ch DO
- ADAM-6151E1/PN: 16-ch DI
- ADAM-6156E1/PN: 16-ch DO

Smart Ethernet I/O Modules



ADAM-6000 Series

- Modbus TCP/IP, UDP and HTTP protocol
- Embedded web server
- Data stream and event trigger
- GCL and Peer-to-Peer
- Support C#.NET, VB.NET

Module Selection

Isolated Analog I/O Modbus TCP Module

- ADAM-6017: 8-ch AI & 2-ch DO

Isolated Digital I/O Modbus TCP Module

- ADAM-6050: 12-ch DI & 6-ch DO

Relay Output Modbus TCP Module

- ADAM-6060: 6-ch DI & 6-ch Relay
- ADAM-6066: 6-ch DI & 6-ch Power Relay

RS-485 I/O Modules



ADAM-4000/4100 Series

ADAM-4000

- Supports Modbus RTU protocol
- Over Voltage Protection: ±35V_{DC}
- Isolation Voltage: 3000 V_{DC}

ADAM-4100

- Wide operating temperature -40 ~ 85°C (-40 ~ 185 °F)
- 1KV surge, 3KV EFT, 8KV ESD Protection
- High common mode voltage: 200V_{DC}
- Burn-out Detection

Module Selection

Isolated Analog I/O Module

- ADAM-4117: Robust 8-ch AI
- ADAM-4024: 4-ch AO & 4-ch DI

Isolated Thermocouple/RTD Input Module

- ADAM-4118: Robust 8-ch T/C
- ADAM-4015: 6-ch RTD module

Isolated Digital I/O Module

- ADAM-4051: 16-ch DI
- ADAM-4055: 8-ch DI & 8-ch DO

Power & Energy Automation

Ensure Reliable P&E Automation with IEC 61850-3 Compliant Products

Advantech's new product line for the power and energy market features a range of devices developed to provide the best solutions in this modern marketplace. Advantech's IEC 61850-3 compliant computers, extension cards and gateway products are specifically designed to meet the critical requirements of power and energy applications. The powerful ECU-4000 and UNO-4600 series automation computers are primarily designed for use in smart substations. The ECU-1152 and 4552, designed for renewable energy situations, have built-in TagLink software which enables them to act as intelligent power automation gateways.



P&E Automation Computer



ECU-4784

TUV IEC-61850-3 Certified Power Automation Computer with Intel Haswell Core i7 Processor and I/O Expansion Slots

- More processor for selection: Intel® Haswell Core i7 4650U/ Core i3 4010U/ Celeron 2980U/ Ivy Bridge i7 3612QE
- 8 x 10/100/1000MB LAN, 2 x RS-232 and 8 x RS-232/422/485 COM
- 2 x IO Expansion Slots
- Supports iCDManager/ VT-D/ AMT/ TPM



ECU-4674

IEC-61850-3 Compliant Power Automation Computer with Intel Atom N2600 Processor and PCI-104 Expansion Slot

- Intel® Atom™ N2600 1.6GHz Processor
- 2 x 10/100/1000MB, 6 x 10/100MB LAN, 2 x RS-232, 16 x RS-232/485 COM
- 8 x Isolated DI, 8 x Isolated DO, 1 x IRIG-B, 1 x PCI-104 Expansion Slot
- Supports iCDManager function



UNO-4673A/ 4683

IEC-61850-3 Certified Power Automation Computer with Intel® Atom™ D510/ Core i7 Processor and I/O Expansion Slots

- Intel® Atom™ D510 1.66 GHz Processor (UNO-4673A)/ Intel® Core i7 2.0 GHz Processor (UNO-4683)
- 2 x 10/100/1000MB, 4 x 10/100MB LAN, 2 x RS-232/422/485 COM
- 3 x I/O Expansion Slots

P&E Automation Extension Cards



ECU-P1524PE

Gigabit Base Ethernet Card with HSR/PRP Protocol for ECU-4784

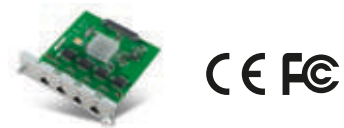
- 2xSFP(1000Mbps Base-X)Ethernet Port
- 2xSFP(HSR/PRP Protocol, Jumper for selection)
- Operating Temperature: -25~ 70°C



ECU-P1761

4 x DI, 4 x Relay Output and 1 x IRIG-B Card for ECU-4784

- 4 x Isolated Digital Input(Wet contact)
- 4 x Isolated Relay Output(Form C)
- 1 x IRIG-B(BNC)
- Operating Temperature: -25~ 70 °C



UNOP-1514C/RE/PE

4 x Fiber Optic/RJ-45/SFP Ethernet Card for ECU-4784/UNO-4673A/4683

- 100MB Base-FX, Up to 2km, 4 x SC type Fiber (1514C)
- 10/100/1000MB RJ-45 type (1514RE)
- 1000Mbps SFP type (1514PE)
- Operating Temperature: -20~ 70°C

P&E Automation Gateways

ECU-1152

Power Automation Gateway with Cortex A8 Processor, 2xLAN, 6xCOM, and Wireless Communication on-board DI/DO and Wireless

- TI Cortex A8 800MHz Processor
- 2x10/100MB LAN, 6xRS-232/485 COM
- 1x Mini-PCIe for 3G/GPRS/4G/Wifi Wireless
- Modbus, DNP3, IEC-60870 Protocol
- Support RT-Linux OS, TagLink Software



ECU-4552

Power Automation Gateway with Cortex A8 Processor, 4xLAN, 10xCOM and on-board DI/DO

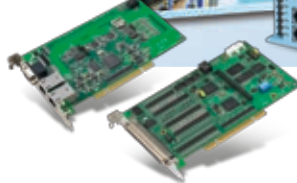
- TI Cortex A8 800MHz Processor
- 4x10/100MB LAN, 10xRS-232/485 COM, 24DI, 4DO
- 1x Mini-PCIe(Reserved)
- Modbus, DNP3, IEC-60870 Protocol
- Support RT-Linux OS, TagLink Software



Machine Automation

Integrated Soft Computing to Enable Intelligent Machines

Advantech developed its own SoftMotion control and GoE (GigE Vision offload engine) and uses the FPGA (Field Programmable Gate Array) and DSP (Digital Signal Processing) as the core-computing hardware platform. Advantech's motion control card and frame grabber series use Ethernet-based EtherCAT and GigE Vision technologies to provide the best performance PC-based solutions in machine automation. Meanwhile, our team not only develop cards, but also provide SRPs (Solution Ready Package) based on computing platforms to fulfill the demands from SI partners and end customers.



EtherCAT Solutions



PCI-1203

EtherCAT Master PCI Card

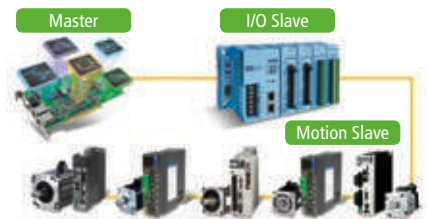
- Supports up to 32 axis and huge I/O points by cycle time = 500us
- Integrated Advantech Common Motion SDK for user programming
- Diagnostics for fast error handling



ADAM-5000/ECAT

4-slot Distributed High Speed I/O System for EtherCAT

- Complete DI/O, AI/O and Encoder modules support
- Supports EtherCAT Distributed Clock (DC) mode and SyncManager mode
- Compatible with Advantech Common Motion SDK



Features

- Ready-to-use Softmotion functions for EtherCAT high axis and huge I/O applications
- Real-Time & No Packet Loss on any computing platform

Motion Control PCI Cards



PCI-1245L/ 1245LIO/ 1245E/ 1285E

Basic/Economic 4/8-axis Stepping and Servo Motor Control PCI Card

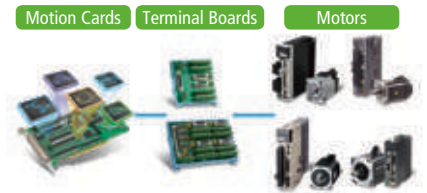
- P2P/Linear interpolation/Homing
- Extra 16 x DI / 16 x DO extension (PCI-1245LIO) (NEW)
- Path table & Path DO (PCI-1245E/85E) (NEW)



PCI-1245/ 1265/ 1285

Standard SoftMotion 4/6/8-axis Stepping and Servo Motor Control PCI Card

- Precise multi-axis synchronization
- 2/3-axis Arc move (NEW)
- High speed 2D compare trigger (NEW)
- Tangential following
- 8 x DI / 8 x DO / 2 x AI (PCI-1265)
- Functions supported by Economic version



Features

- Softmotion functions for vertical application
- Guarantee deterministic control
- Ready-to-use cables for brand motors

GigE Vision Solutions



PCI-1672E/ 1674E

Dual/Quad Channel, PoE Interface Card

- Intel® server-grade GbE Mac Controller
- PCI ExpressR x 4 compliant
- PoE power from PCIe slot (Total Max. 18W)
- Powered Device (PD) auto detection and classification
- Supports IEEE 802.3u Auto-Negotiation
- Supports Jumbo frame (9,500 byte) and link aggregation



PCI-1172/ 1174

Dual/Quad Channel, Intelligent GigE Vision Frame Grabber with GoE

- GoE (GigE Vision Offload Engine), FPGA image reconstruction, No packet loss, No CPU workload
- GigE Vision, GENICAM and GENTL Compliant
- AD Hoc, automatic IP configuration
- Direct power from PCIe slot (Total Max. 18W)
- ToE (Trigger over Ethernet)



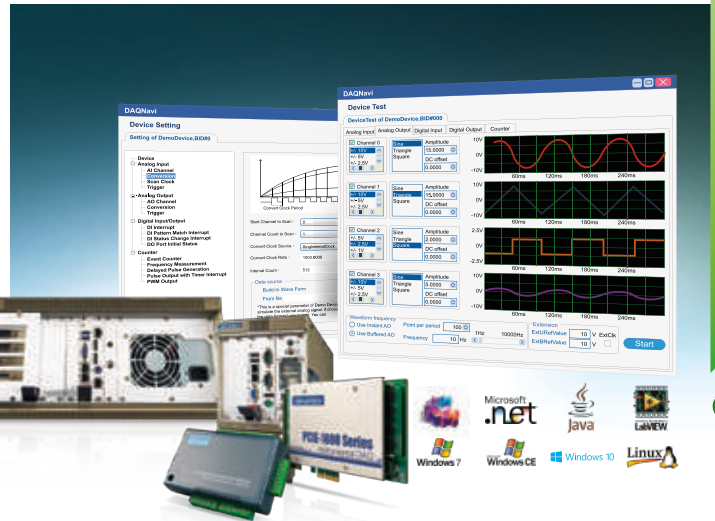
Features

- IEEE 802.3af, PoE compliant
- PoE power from PCIe slot (Total Max. 18W)
- Free SDK to develop and deploy

Data Acquisition and Control

Diverse Form Factors to Satisfy All DAQ Requirements

Advantech offers a wide range of industrial data acquisition and control devices with various interfaces and functions. Based on PC technology, from ISA to PCI Express, and signal conditioning to graphical software tools, Advantech's industrial I/O products are reliable, accurate, affordable, and suitable for diverse industrial automation applications, such as testing and measurement, laboratory operations, machine automation, and production testing. Moreover, Advantech's latest DAQNav I/O driver supports Windows 7, 8, 10, and Linux OS, enabling customers to seamlessly integrate Advantech's data acquisition cards with the latest platforms for improved performance and reduced development time.



PCI Express DAQ Cards



PCIE-1730

32-Channel TTL and 32-Channel Isolated DI/O PCI Express Card

- 16-channel TTL DI and 16-channel TTL DO with 5 V compatibility
- 16-channel isolated DI and 16-channel isolated DO with 24 V compatibility
- High-voltage isolation on all isolated DI/O channels (2,500 V_{oc})



PCIE-1810/1816/1816H

12/16-Bit 16-Channel AI Multi-Function PCI Express Card

- PCIE-1810 & PCIE-1816: 500 KS/s
- PCIE-1816H: 1 MS/s
- Analog and digital triggers
- Waveform generator for AO
- 24 programmable digital I/O lines
- Two 32-bit programmable counters/timers



PCIE-1752/1754/1756

64-Channel Isolated DI/O PCI Express Card

- PCIE-1752: 64-channel isolated DO
- PCIE-1754: 64-channel isolated DI
- PCIE-1756: 32-channel IDI, 32-channel IDO
- High-voltage isolation on all channels (2,500 V_{oc})
- Retains output settings and values after system hot resets
- Interrupt handling capacity



PCIE-1802

8-Channel, 24-Bit, 216 kS/s Dynamic Signal Acquisition PCI Express Card

- 8 simultaneously sampled analog inputs, up to 216 KS/s
- 24-bit resolution ADCs with 115 dB dynamic range
- Wide $\pm 0.2 \sim 10$ V input range
- Built-in anti-aliasing filter
- Software-configurable 4/10 mA IEPE accelerometer



PCIE-1760

8-Channel Relay and 8-Channel Isolated DI PCI Express Card

- 8-channel isolated DI with programmable digital filter
- High-voltage isolation on input channels (2,500 V_{oc})
- 2-channel Form C and 6-channel Form A relay output
- 2-channel counter input (PWM output available)



PCIE-1840

125MS/s, 16-Bit, 4-Channel Digitizer PCI Express Card

- 4 analog inputs, up to 125 MHz, 16-bit resolution
- 500-MHz time-interleaved sampling
- Supports non-stop data streaming
- 2 GB of onboard memory
- Tunable anti-aliasing filter, AC/DC coupled

PCI DAQ Cards



PCI-1714U/1714UL

Simultaneous 4-Channel Analog Input PCI Card

- A/D converter for each channel
- PCI-1714U: 12-bit, 30 MS/s, 4-channel single-ended AI
- PCI-1714UL: 12-bit, 10 MS/s, 4-channel single-ended AI
- 30 V_{oc} over-voltage protection



PCI-1716/L

250KS/s, 16-Bit, 16-Channel Multi-Function PCI Card

- 16 single-ended/8 differential/combo analog inputs
- 16-bit A/D converter, up to 250 kHz sampling rate
- Auto-calibration
- 16-channel digital input and 16-channel digital output
- 2 analog output channels (PCI-1716 only)



PCI-1730U/1756

32/64-Channel Isolated DI/O Universal PCI Card

- High-voltage isolation on output channels (2,500 V_{oc})
- Wide 5 ~ 40 V_{oc} output range
- High-sink current for isolated output channels (200 mA max./channel)
- Current protection for each port

USB DAQ Modules



USB-4711/4716

150 kS/s, 12-Bit/200 kS/s, 16-Bit
16-Channel Multi-Function USB Module

- 2 analog output channels
- 5V/TTL-compatible DI/O (8 inputs, 8 outputs)
- 1 counter for event counting, frequency measurement, and PWM output
- Lockable USB cable for connection security



USB-4750

32-Channel Isolated DI/O USB Module

- 16 isolated DI and 16 isolated DO channels
- 2 isolated counters for event counting and frequency measurement
- Retains last output value after system hot resets
- 2,500 V_{DC} isolation protection



USB-4761

8-Channel Relay and 8-Channel Isolated DI
USB Module

- 8-channel Form C (SPDT) relay channels
- Relay contact rating 0.25 A @ 250 V_{AC}, 2 A @ 30 V_{DC}
- LED indicators show activated relay
- 2,500 V_{DC} isolation protection

PCI/PCIE Communication Cards



PCI-1610/1612

4-Port PCI Serial Communication Card with
Surge/Isolation Protection

- PCI-1610: RS-232 port
- PCI-1612: RS-232/422/485 ports
- Optional surge/isolation protection
- Fast data transmission speed, up to 921.6 kbps
- 256-byte FIFOs with advanced management



PCI-1620/1622

8-Port PCI Serial Communication Card with
Surge/Isolation Protection

- PCI-1620: RS-232 port
- PCI-1622: RS-232/422/485 ports
- Optional surge/isolation protection
- Fast data transmission speed, up to 921.6 kbps
- 256-byte FIFOs with advanced management



NEW

PCIE-1620/1622

8-Port PCI Express Serial Communication
Card with Surge/Isolation Protection

- PCIE-1620: RS-232 port
- PCIE-1622: RS-232/422/485 ports
- Optional surge/isolation protection
- 256-byte FIFOs with advanced management



NEW

PCIE-1602/1604

2-Port RS-232/422/485 PCI Express/PCI
Communication Card with Isolation

- PCIE-1602: 2 RS-232/422/485 ports
- PCIE-1604: 2 RS-232 ports
- Optional surge protection
- Optional isolation protection for RS-232/422/485
- 256-byte FIFOs with advanced management



NEW

PCIE-1610/1612

4-Port RS-232/422/485 PCI Express/PCI
Communication Card with Isolation

- PCIE-1610: 4 RS-232 ports
- PCIE-1612: 4 RS-232/422/485 ports
- Optional surge protection
- Optional isolation protection for RS-232/422/485
- 256-byte FIFOs with advanced management



NEW

PCIE-1680

2-Port CAN-bus Universal PCI
Communication Card with
CANopen Support

- Supports two simultaneous CAN networks
- Fast data transmission speed, up to 1 Mbps
- 16 MHz CAN controller frequency
- Isolation protection of 2,500 V_{DC}
- I/O addresses automatically assigned by PCI PnP

CompactPCI Systems

MIC-3106/3111/3121

4U CompactPCI System with
2/7 Peripheral Slots

- 2G operational anti-vibration protection
- 2G shipping anti-vibration protection
- Air-tight seal connector for corrosive environments
- Modular design supports hot-swappable components
- Easily exchanged peripheral cards reduce maintenance costs
- Low-noise cooling fan for quiet operation



NEW



MIC-3106

NEW



MIC-3111

NEW



MIC-3121

Rugged Portable HMI Tablets



For Intelligent Onsite Management and Inspections

Advantech's portable HMI products are designed to assist mobile workers with managing onsite factory inspections. Equipped with the latest Intel® chipset and RF technology (WLAN, WWAN, and GPS), Advantech's rugged tablets enable seamless reliable data transmissions, ensuring workers have constant access to relevant information. The PWS-870 tablet and application-oriented peripherals are built for rough handling in extreme environments and the tablet has been drop-tested at 4ft, and certified to military standard MIL-STD-810G. An extension module with MSR and UHF RFID capabilities can be customized according to requirements. For extended operations, the PWS-870 can be easily removed from the wall docking station with just one hand. Additionally, the universal cover features a handle, stand, bag, and hand strap for hands-free carrying options.



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Star Product Highlights

Fully Rugged Tablet



PWS-870

10" 16:9 Fully Rugged Tablet with Fourth Generation Intel® Core™ i Processor

- MIL-STD-810G and IP65 certified, can withstand drops of up to 4 ft.
- 10.1" HD high-brightness, multi-touch, Gorilla Glass panel with digitizer
- Fourth generation Intel® Core™ i processor supports Windows 8
- Built-in 4G LTE, WLAN (802.11 a/b/g/n/ac), BT4.0, and GPS modules with Beidou/GLONASS support
- Hot-swappable battery offers up to 11 hours operation
- Built-in dual cameras, a 1D/2D barcode scanner, and NFC RFID
- Wide array of peripherals including a vehicle docking station, desk docking station, and customizable extension modules

Accessories



Wall Docking Station

- Anti-theft locking mechanism
- Rapid device docking and removal (1 second)
- Equipped with 1 x DC-in, expansion I/O, 2 x USB 3.0, 1 x LAN, and 1 x GNSS port



Desk Docking Station

- Equipped with 1 x DC-in, 2 x USB 3.0, 1 x LAN, 1 x RS-232, and 1 x VGA port
- Secondary battery charger



External Battery

- Capacity: 14.8V 4080mAh
- IP rating: IP65 with PWS-870
- Dimensions: 141.2 x 106.2 x 17 mm
- Weight: 385g



Multiple Battery Charger

- Stores and charges up to 4 PWS-870 external batteries
- LEDs indicate charge status
- Easy table fixing
- Power input: 19.5V/7.7A



Multi I/O Extension

- Interfaces: USB 3.0 (type A, 5V/0.9A) x 1, RS-232 (D-Sub 9) x 2, 10/100/1000 Ethernet (RJ45) x 1
- Dimensions: 192.2 x 45.2 x 25 mm
- Weight: 140g



UHF RFID Extension

- Interfaces: USB 3.0 (type A, 5V/0.9A) x 1, RS-232 (D-Sub 9) x 2, 10/100/1000 Ethernet (RJ45) x 1
- Dimensions: 192.2 x 45.2 x 25 mm
- Weight: 140g



MSR & Smart Card Reader Extension

- ISO 7816 PC/SC
- EMV 4.0 Level 1
- Supports I2C memory card, SLE4418, SLE4428, SLE4432, SLE4442, SLE4436, SLE5536, SLE6636, AT88SC1608, AT45D041 card

- MSR (Magnetic Card Reader)
 - MagneSafe IntelliHead
 - Supports US 7810 & ISO 7811/AAMVA
 - Card speed: 6 to 60 ips (15.4 to 12.4 cm/s)
 - Triple DES encryption
 - DUKPT key management



Universal Cover Package

- Material: Plastic, PVC
- Color: Black
- Dimensions: 305 x 254.2 x 88.4 mm
- Weight: 500g (universal cover, hand strap and shoulder belt)
- Package content: universal cover, hand strap, shoulder belt

Regional Service & Customization Centers

China

Kunshan
86-512-5777-5666

Taiwan

Taipei
886-2-2792-7818

Netherlands

Eindhoven
31-40-267-7000

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0800-2426-8080

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1-408-519-3898

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Shenzhen 86-755-8212-4222
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Penang 60-4-537-9188

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London 44-0-870-493-1433

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Warsaw 48-22-31-51-100

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St. Petersburg 8-800-555-81-20

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Milpitas 1-408-519-3898
Irvine 1-949-420-2500

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São Paulo 55-11-5592-5355

Mexico

Toll Free 1-800-467-2415
Mexico City 52-55-6275-2777

ADVANTECH

Enabling an Intelligent Planet

www.advantech.com

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