

# Advantech Industrial IoT Systems and Devices Star Product Guide

- Vertical Market Solutions
- AI Technology Solutions
- Edge Sensing
- Intelligent Connectivity
- Edge Computing



**ADVANTECH**

*Enabling an Intelligent Planet*

[www.advantech.com](http://www.advantech.com)

# Innovative IIoT Edge to Cloud Technologies

## Smart Camera

ICAM-7000 Series



## EtherCAT I/O Controllers

EtherCAT Control IPC  
AMAX-5580



## EtherCAT

EtherCAT Remote I/O  
AMAX-5000/ 4800 Series



## Domain Platforms



**Oil & Gas**  
TPC/ FPM/ EKI/ ADAM Series



**Railway**  
ITA/ ARS/ EKI Series



**Utility & Energy**  
ECU-4000 Series



## Wireless I/O & Sensors

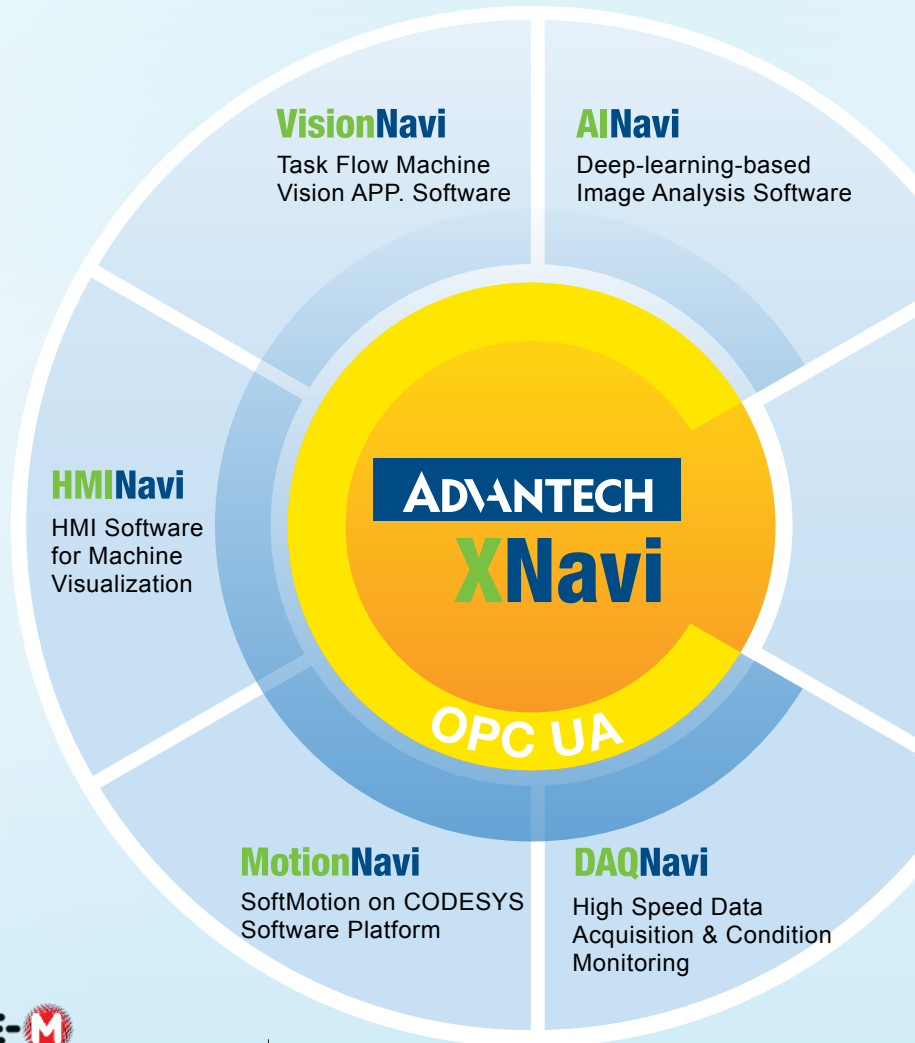


WISE-2000/ 4000 Series



## DAQ and Remote I/O

USB/ ADAM-4000/ 6000 Series/ PCIe Cards



## Edge AI Systems



AI Inference System  
MIC-700AI Series

AI Network Video Recorder  
MIC-700IVA Series

NVIDIA Jetson TX2

NVIDIA Jetson AGX Xavier

NVIDIA Jetson Nano



## Automation Systems

UNO/ MIC/ HMI/ IPC Series



## WebAccess/SCADA

IoT Application Software Platform

## WISE-PaaS/EdgeLink

Powerful Edge-to-Cloud  
Middleware for Intelligent  
Gateway Solutions

## WISE-PaaS/WISE.M+

Industrial IoT Cloud-Based  
Monitoring & Operating Platform

- Equipment Mgmt.
- Device Cloud Mgmt.
- Docker Container Mgmt.

ADVANTECH  
**WISE-PaaS**  
AIoT Solutions & Marketplace

## IIoT Gateways



EtherNet/IP™

Edge/ Communication/ Protocol/ Data Gateways  
WISE/ UNO/ ADAM-6700/ ECU/ EKI Series



## Connectivity & TSN



Cellular Router/ Switch/ Wireless Comm.  
ICR-1000/ 3000/ 4000 Series; EKI-7000/ 8000 Series







## Integrated Soft Computing to Enable Intelligent Machines

# Machine Automation

Advantech offers unique SoftMotion kernel EtherCAT-based solutions for distributed, deterministic motion control with multiple I/O capabilities. Our innovative GigE Vision offload engine uses field programmable gate arrays (FPGA), digital signal processing (DSP) units, and Arm processors as the core of our computing platforms. We also provides versatile application ready platforms and software tools for motion control and machine vision, enabling customers to continuously advance their technologies.

### Intelligent Vision Inspection Solutions



#### Seamless Integration with One-Stop Solution

- The integration of cameras, sensor, software, and platforms, delivering a one-stop shop solution

#### Easy-to-Use Multitasking Software

- Designed with a graphical and flowchart-based user interface, allowing users to develop and deploy the system in 4 easy steps
- Multitasking capability to improve productivity and efficiency

#### Powerful, Scalable Computing Platforms

- Supports various kinds of computing platforms with Intel Core i3-i7 CPU, providing powerful performance for a variety of applications

### EtherCAT Motion Control Solutions

#### PC-Based Solutions

EtherCAT



#### PCI-1203/ PCIE-1203/ PCIE-1203L

EtherCAT PCI/PCIE Master Cards

Feature:

- Supports up to 64-axis, domain focus APIs, on board compare trigger, position latch and MPG function

Advantage:

- High precision motion and I/O control, no need to understand the complicated EtherCAT protocol

Benefits:

- Easy-to-use, rapid development, wiring-saving

#### Modularized Solutions



#### AMAX-5000 Series

Compact Modular EtherCAT Controller

Feature:

- IEC 61131-3 solution with EtherCAT slice I/O, empowered by CODESYS

Advantage:

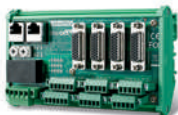
- Open platform with standard interface, easily integrate into any IT/OT applications

Benefits:

- Compact size with high efficiency to improve equipment intelligence and stability as well as maintenance efficiency

#### Slave Modules

EtherCAT



#### AMAX-3245

4-Axis Pulse Train EtherCAT Slave Module

- EtherCAT packet to pulse output with compact size
- 4-Ch 100kHz compare trigger, 4-Ch 100kHz position latch
- Easy wire to pulse-type servo/stepping motor, high speed trigger for on-the-fly camera capture and dispensing

EtherCAT



#### AMAX-4830

16-Ch Isolated DI and 16-Ch Isolated DO EtherCAT Remote I/O Module

- Suitable for EtherCAT networks
- 2,500 V<sub>DC</sub> isolation
- Quick-remove European-type connector
- Supports distributed clock (DC) mode
- LED indicators for I/O status

EtherCAT

NEW



#### AMAX-5000 I/O Series

Compact Modular EtherCAT Slice I/O

- Removable push-in I/O terminal
- Smart power quality diagnosis
- Dual power input
- 2000V<sub>DC</sub> isolation
- Support isolated DI/DO, analogue (V/mV/mA, RTD, thermal couple), AO (V/mA), counter/encoder
- DC mode selectable



## Power Conversion Solutions for Maximum Energy Transition

# Utility and Energy Solutions

To ensure the safety and reliability of energy management and monitoring systems for distributed energy stations, renewable energy sources, grid infrastructures, and manufacturing, Advantech offers the ruggedized, IEC-61850-3 compliant ECU series that include automation controllers, gateways, and data acquisition modules.

### Edge Gateways

**NEW**



#### ECU-500

Server Grade IEC-61850-3-Certified Power Automation Computer

- Intel® Xeon® scalable CPU 20/ 14/ 8 Core (125W/ 85W/ 70W)
- 12 x DIMM sockets support up to 768GB DDR4
- Up to 2 x hot-swappable PSU
- Up to 4 x 2.5" hot-swappable HDD/ SSD (RAID0, 1, 5, 10)
- Up to 2 x PCIe x16 Gen3 slots, PCIe x8 Gen3 slots, PCIe x4 Gen3 slots
- IPMI 2.0-compliant management



**NEW**



#### ECU-4784 Series (Skylake)

IEC-61850-3-Certified Power Automation Computer

- Intel® Xeon® quad-core E3-1505L processor (2.0 GHz) w/ 16 GB of DDR4 ECC RAM
- Intel® Core™ i7 6600U/ Core™ i3 6100U/ Celeron® 3955U processor w/ 8 GB of DDR3L RAM
- 8 x 10/ 100/ 1000MB LAN, 2 x RS-232, 8 x RS-232/ 422/ 485 serial ports
- 3 x Display output/ 3 x SATA/ 2 x I/O expansion slots
- Supports ICDManager/ VT-D/ AMT/ TPM



**NEW**



#### ECU-4676

IEC-61850-3-Compliant Power Automation Computer

- Intel® Atom E3940 processor (1.6 GHz) w/ 4 GB of DDR3L RAM
- 10 x Giga LAN, 10 x Isolated RS-232/ 422/ 485 serial ports
- 8 x DI, 8 x DO - isolated, 1 x IRIG-B

### PCIe Cards



#### ECU-P1524SPE/ 1524PE

2-Port SFP Ethernet card with HSR/ PRP support

- 2 x SFP (1000 Mbps Base-X)
- 2 x SFP (100/ 1000 Mbps HSR/PRP, selection via jumper)
- Wide operating temperature range (-25~70 °C)



#### ECU-P1628D/ 1618D(Comport)

8-Port Isolated/ Non-Isolated RS-232/ 422/ 485 Module

- RS-232: 50~115.2 kbps (max.)
- RS-422/ 485: 50~921.6 kbps (max.)
- 2500 V<sub>DC</sub> isolation (ECU-P1628D)
- Wide operating temperature range (-20~70 °C)



#### ECU-P1528RE / 1528PE

8-port LAN Module

- 1528RE: 8 x RJ45 LAN gigabit module for ECU-4784
- 1528PE: 8 x SFP LAN gigabit module for ECU-4784

### Communication Gateways



#### WISE-PaaS/ EdgeLink

#### ECU-1251

IEC-61850-3-Compliant Edge Communication Gateway with 2x LAN, 4x COM

- ARM Cortex® A8 800-MHz processor w/ 256 MB of DDR3L RAM
- 2 x 10/ 100 MB LAN, 4 x RS-232/ 485 serial ports
- 1 x mini-PCIe slot for wireless expansion
- Wide operating temperature range (-40~70 °C)



#### WISE-PaaS/ EdgeLink

#### ECU-1152

IEC-61850-3-Compliant Edge Communication Gateway with 2x LAN, 6x COM

- ARM Cortex® A8 800-MHz processor w/ 512 MB of DDR3L RAM
- 2 x 10/ 100 MB LAN, 6 x RS-232/ 485 serial ports
- 1 x mini-PCIe slot for wireless expansion
- Wide operating temperature range (-40~70 °C)



**NEW**



#### WISE-PaaS/ EdgeLink

#### ECU-4553

IEC-61850-3-Compliant Edge Communication Gateway with 4x LAN, 16x COM

- ARM Cortex® A8 800-MHz processor w/ 1 GB of DDR3L RAM
- 4 x 10/ 100MB LAN, 16 x RS-232/ 485 serial ports
- Wide operating temperature range (-40~70 °C)



## Total Solutions for Modern Infrastructures

# Intelligent Transportation Systems

Advantech is dedicated to developing systems that fulfill our vision of building intelligent cities worldwide. With over a decade of successful experience, we have considerable expertise designing and developing products in the urban transportation sector. Advantech offers a full product range for rail and roadway applications, such as railway automatic fare collection, wayside control, rolling stock, urban traffic management, highway management, and transportation hub management.

### Rugged-design Computer Platforms

EN 50155



#### ITA-5831

EN 50155 Compact Fanless System

- Intel® Core™ i7/ i5/ Celeron platform with QM170
- EN 50155 TX (-40~70°C) and IEC 61373 body mounted Class B standards
- Compliant with EMC standard EN 50121-3-2/ EN 50121-4
- Ruggedized communication and power port connectors (M12)
- Supports easy-swappable storage and I/O modules

EN 50155



#### ITA-5231/ 5231S/ 5231G/ 5231W

EN 50155 Fanless System

- Intel® Core™ i7/i5/Celeron platform with QM170
- EN 50155 TX (-40~70°C) and IEC 61373 body mounted class B standards
- Compliant with EMC standard EN 50121-3-2 / EN 50121-4
- Supports easy-swappable storage and I/O modules
- Supports anti-vibration HDD tray, MXM GPU modules, and connectivity modules in specific models

NEW



#### ITA-3650/ ITA-3650G/ ITA-3650N

Intel 6th & 7th Gen Fanless System for Traffic Management

- Intel 6th & 7th Generation Desktop Processor with H110 PCH
- Supports onboard memory with SO-DIMM and NVRAM
- Supports 2 x GbE, 6 x USB, 6 x COM ports
- Supports 2 x 2.5" storage bay & 1 x mSATA
- Operating temperature -25 ~ 60 °C and 9-36V<sub>DC</sub> power input
- Optional expansion for MXM GPU and Networking

### Rugged-design Computer Platforms

EN 50121-4



#### ITA-2231

EN 50121-4 2U Fanless System

- Intel® 6th Gen Core™ i7 processor w/ 16 GB onboard memory (up to 32 GB via DIMM expansion)
- Compliant with EN 50121-4 EMC standard for signalling applications
- Provides 3 x ITA-EM modules, 1 x PC/104, and 1 x Mini PCIe slots for expansion
- Wide operating temperature range (-25~60 °C)
- Supports single and dual AC/DC power modules



#### ITA-1711

Intel® Celeron™ J1900 Fanless Compact System

- 4 GB of DDR3 onboard RAM w/ optional NVRAM
- 2 x GbE, 6 x USB, 14 x COM, and 1 x USB 3.0
- Replaceable secondary display (VGA 2/ DVI-D/ LVDS)
- Supports dual outputs of full HD resolution video
- Serial RS-232/ 422/ 485 ports support with automatic flow control

EN 50155



#### ARS-P2800/ P3800

EN 50155 Passenger Information System Panel PC

- 28" LCD (1920x357) and 38" LCD (1920x540) resolution
- 1 x GbE (optional 2 x GbE for Daisy-Chain), 1 x USB 2.0
- EN 50155 T1 (-25~55°C), IEC 61373 Class B
- IP54 rating ensures protection against dust/ water ingress
- Customized panel sizes available upon request

### Touch Panel PCs

EN 50155

NEW



#### ITA-8100/ ITA-8120

EN 50155 Railway Panel Computer

- 10.4" & 12.1" touch panel with 1024x768 resolution
- 2 x GbE, 1 x USB 2.0, 2 x RS-422/ 485, 1 x Audio and 1 x DIO (M12)
- Supports UIC 612-01 keypad and auto brightness adjustment
- Wide voltage input range: 24/48/72/110 V<sub>DC</sub> (±40%)
- Wide operating temperature range: -40~70 °C

### EN 50155 Switches



#### EKI-9500 Series

28/ 16/ 12/ 10/ 8-Port EN 50155 Rolling Stock Switch

- EN 50155, EN 50121-3-2, IEC 61373 compliant
- PoE/ PoE+ models are available
- Various port combination with Fast Ethernet/ Giga Ethernet option
- IP40/ IP54/ IP67 and rugged housing

EN 50155



#### EKI-9512E-4GETB

EN 50155 Rolling Stock NAT Router for Ethernet Train Backbone

- EN 50155, EN 50121-3-2, IEC 61373 compliant
- IEC 61375 compliant - TRDP & TTDP for railway application
- Layer 3 routing function - VRRP, R-NAT for on-board routing
- Provides 4 x Gigabit uplink port with bypass function



## Industrial AI Platform from the Edge to the Cloud

# AI Technology and Server Solutions

Implementing AI technology is important for advancing the scope of Industrial IoT. AI technologies are highly tailored to individual tasks and each application requires specialized research and unique construction. Advantech has developed a complete AI platform, from the edge to the cloud, inference to training. Our mission is to provide extraordinary AI technology under different applications in industrial scenarios.

### Edge AI Computing



#### MIC-730AI

AI Inference System on NVIDIA Jetson® Xavier

- Fanless and compact design
- Linux Ubuntu 18.04 pre-installed
- Supports NVIDIA Jetpack and DeepStream SDK
- Supports 1x miniPCIe and 1x M.2 (NVMe)
- Supports i-Door and i-Module
- Ideal for machine vision, robotic guidance and medical imaging applications



#### MIC-720AI

AI Inference System on NVIDIA® Jetson™ Tegra X2

- Fanless and compact design
- Linux Ubuntu 18.04 pre-installed
- Supports NVIDIA Jetpack and DeepStream SDK
- Supports 1 x IEEE 802.3af PoE, 2 x USB 3.0 and 1 x internal USB 2.0
- Ideal for road-side traffic and machine vision applications



#### MIC-710AI

AI Inference System on NVIDIA® Jetson Nano™

- Fanless compact design
- Linux Ubuntu 18.04 pre-installed
- Supports NVIDIA Jetpack and DeepStream SDK
- Supports 1x miniPCIe and 1x M.2 (NVMe)
- Supports i-Door expansion
- Ideal for automatic AI IoT and education applications

### AI Network Video Recorders (NVRs)



#### MIC-730IVA

8ch AI Network Video Recorder on NVIDIA® Jetson AGX Xavier™

- Supports 8x PoE RJ45 LAN
- Linux Ubuntu 18.04 pre-installed
- Supports NVIDIA Jetpack and DeepStream SDK
- Supports 2 x 3.5" HDD
- Supports RS-485 and 8 Bit DI/DO
- Ideal for smart city, smart retail, logistics, casino and surveillance applications



#### MIC-710IVA

8ch AI Network Video Recorder on NVIDIA® Jetson Nano™

- Supports 8x PoE RJ45 LAN
- Linux Ubuntu 18.04 pre-installed
- Supports NVIDIA Jetpack and DeepStream SDK
- Supports 2x 3.5" HDD
- Supports RS-485 and 8 Bit DI/DO
- Ideal for smart city, smart retail, logistics, casino and surveillance applications

### Storage Solutions



#### HPC-8104 + ASMB-786

1U Rackmount Entry Storage Server

- Supports Intel Xeon E & 8th/ 9th Generation Core processors
- DDR4 2666/2400/2133 MHz ECC/Non-ECC UDIMM up to 128 GB
- 1 x PCIe x16 (Gen3) expansion slot
- 4-bay hot-swap 3.5"/2.5" SAS3/SATA3 drive bays with 2 x 2.5" internal SSD and one ultra slim ODD

### Training Servers and AI Workstations



#### SKY-6420

High Density GPU Server (4U 10 GPUs)

- Supports dual 2nd Gen Intel Xeon Scalable Processors
- 24 DIMM slot, Intel Optane DCPMM
- Supports 10 x double width GPU card and 1 x single width PCIe card
- Hot Swappable system fan design
- 4800 W 3+1 redundant power supply



#### SKY-6400

Hybrid GPU Server (4U 4 GPUs)

- Supports dual 2nd Gen Intel Xeon Scalable Processors
- 12 DIMM slot, Intel Optane DCPMM
- Supports 4 x double width PCIe cards and 2 x single width PCIe cards
- Easy maintenance system fan design
- Unify front bezel design



#### HPC-7484+ASMB-805

AI AOI Server (4U 2 GPUs)

- ATX workstation motherboard with Intel Xeon W-2100 & W-2200 processors
- DDR4 2666 MHz RDIMM up to 512 GB
- 3 x PCIe x16 (or 1 x PCIe x16 and 4 x PCIe x8)
- Workstation 1S up to 4.1 GHz
- 8 x hot-swap 3.5"/2.5" SAS3/ SATA3 and 1 x 2.5" internal HDD bay

DAQNavi



## Diverse Form Factors to Satisfy All DAQ Requirements

# Data Acquisition and Control

Advantech offers a wide range of industrial data acquisition and control devices with various interfaces and functions. Based on PC technology, from add-on cards and portable modules to signal conditioning and graphical software tools, Advantech's industrial I/O products are reliable, accurate, affordable, and suitable for a range of industrial automation applications such as measurement, laboratory operations, machine automation, and production testing.

### PCI Express DAQ Cards



#### PCIE-1810

16-ch, 12-bit Multi-Function PCI Express Card

- Sample rate: 500 KHz
- Resolution: 12-bit
- Analog and digital triggers
- Waveform generator for AO channels



#### PCIE-1812

8-ch, 16-bit Simultaneous Sampling Multi-Function PCI Express Card

- 8 x differential simultaneous sampling AI channels (sample rate: up to 250 kHz; resolution: 16-bit)
- 2 x AO channels (sample rate: up to 3 MHz; resolution: 16-bit)
- 2 x analog/ digital triggers for AI/ AO channels
- 4 x 32-bit programmable encoder counters/ timers
- 32 x programmable DI/DO channels with interrupt function

NEW



#### PCIE-1805

32-ch, 16-bit Analog Input PCI Express Card

- 32-ch single-ended or 16-ch differential analog input, up to 1MS/s
- 16-bit resolution for A/D conversion
- $\pm 10$  V to  $\pm 1$  V voltage measurement
- 0 ~ 20 mA or 4 ~ 20 mA current measurement
- Support digital and analog triggers



#### PCIE-1802/ 1802L/ 1803

8/ 4/ 8-ch, 24-bit Dynamic Signal Acquisition

- 8/ 4 x simultaneously sampled AI channels (sample rate: up to 216 KHz)
- 24-bit resolution A/ D converters (dynamic range: 115 dB)
- Wide input voltage range ( $\pm 0.2$ -10 V)
- Built-in anti-aliasing filter

### PCI Express AO Cards

NEW



#### PCIE-1824

32-ch, 16-bit Analog Output PCIE Card

- 32 high-density analog output channels
- Flexible Output Range:  $\pm 10$  V, 0 ~ 20 mA and 4 ~ 20 mA
- Synchronized output function
- High ESD protection (2,000 V<sub>ESD</sub>)

### Counter Cards

NEW



#### PCIE-1884

4-ch, 32-bit Encoder Counter with Preload Position Compare FIFO PCI Express Card

- 4 x 32-bit programmable encoder counters
- Quadrature (X1, X2, X4), dual pulse (CW/CCW), signed pulse (OUT/DIR) modes
- Programmable trigger output (preload FIFO) for position comparison

### PCI Express Digital I/O Cards



#### PCIE-1730H/ 1756H/ 1758

32/ 64/ 128-ch Isolated DI/DO PCIe Card

- 32/ 64/ 128-ch isolated DI/DO channels w/ 24 V compatibility
- Interrupt handling capability for all DI channels
- Software-selectable digital filter time for all DI channels
- 32-ch TTL DI/DO w/ 5 V compatibility (PCIE-1730H only)
- High-voltage isolation on all isolated DI/DO channels (2,500 V<sub>DC</sub>)



#### PCIE-1761H/ 1762H

8/ 16-ch Relay and 8/ 16-ch Isolated Digital Input w/ Digital Filter and Interrupt PCIe Card

- 8/16-ch opto-isolated digital input channels
- 8/16-ch relay actuator output channels
- Interrupt handling capability for all DI channels

NEW



#### PCIE-1763AH/ 1763DH

16-ch Solid-State Relay (SSR) Output and 16-ch Isolated Digital Input w/ Digital Filter & Interrupt PCIe Card

- 16-ch isolated digital input (IDI) with both dry and wet contact configurations
- Interrupt and noise filter for all IDI channels
- Suitable for both AC ( $> 80$  V<sub>AC</sub>) and DC low voltage load ( $< 60$  V) applications with frequent ON/ OFF switching
- Much less contact problems such as arcs, bounce, and noise



## USB DAQ Modules



### USB-5801

4-ch, 24-bit USB 3.0 DSA Module

- SuperSpeed USB (5Gbps)
- 4 x 24bit simultaneous sampling analog inputs up to 192kS/s
- IEPE excitation for every channel
- 1 x tachometer for revolution speed measurement
- Built-in USB hub



### USB-5817

8-ch, 16-bit USB 3.0 Analog Input Module

- SuperSpeed USB (5Gbps)
- 16-bit resolution with 200kS/s Sampling rate
- $\pm 275$  V high common-mode voltage range
- Measuring and output error  $< \pm 0.1\%$
- Built-in USB hub



### USB-5830/ 5856

32/ 64-ch Isolated Digital I/O USB 3.0 Module

- SuperSpeed USB (5 Gbps)
- Built-in USB hub
- 2,500 V<sub>DC</sub> isolation protection
- Level 3 ESD and surge protection

## Communication Solutions



### PCI-1600/ PCIE-1600

2/ 4/ 8-Port PCI/ PCIe Serial Communication Card with Surge/ Isolation Protection

- PCI/ PCIE-1604/ 1610/ 1620: RS-232 port
- PCI/ PCIE-1602/ 1612/ 1622: RS-232/ 422/ 485 port
- Optional surge/ isolation protection
- Fast data transmission: up to 921.6 kbps



### PCI-1680/ PCIE-1680

2-Port CAN Bus PCI/ PCIe Communication Card

- Supports two simultaneous CAN networks
- Fast data transmission: up to 1 Mbps
- CAN controller frequency: 16 MHz
- Isolation protection: 2,500 V<sub>DC</sub>



### USB-4630

4-Port Isolated USB 3.0 Hub

- The world's first isolated SuperSpeed USB Hub (5 Gbps)
- 2,500 V<sub>DC</sub> voltage isolation for upstream ports
- Lockable USB 3.0 cable included
- Can be powered via USB bus or 10~30 V<sub>DC</sub> external power source

## Data Acquisition Gateways



### WISE-750

Intelligent Vibration Gateway

- Set-and-run AI monitoring system
- Comprehensive evaluation, configuration and deployment kit
- Compact size
- 4 channel measurement paired with alarm indication
- Accelerometer included

## DAQ-Embedded Computers



### MIC-1810/ 1816

Data Acquisition Platform w/ Intel® Processor

- Intel® Celeron® 3955U / Core™ i3-6100U
- MIC-1810: 16x AI channels (sample rate: up to 500 KHz; resolution: 12-bit), 2 x AO channels (sample rate: up to 500 KHz; resolution: 12-bit)
- MIC-1816: 16-bit, 16 x AI channels (sample rate: up to 1 MHz) 16-bit, 2 x AO channels (update rate: up to 3 MHz)
- 16 x isolated DI/O



### MIC-1816R

DAQ Platform with ARM Cortex™-A9

- i.MX6 Quad - 4x Cortex-A9 processor
- Build-in 4G EMMC NAND Flash for OS (Yotco only)
- Sampling rate up to 1MS/s
- 4 x IEPE input with preamp gain = 1, 10, 100
- 8 x Analog input with voltage or 4~20mA
- 2 x Analog outputs, up to 3 MS/s, 16-bit resolution
- 16 x isolated digital input and 8 x isolated digital output

## Machine Condition Monitoring Software

DAQNavi



### DAQNavi/MCM

Machine Condition Monitoring Software

- Dynamic signal acquisition and analysis
- Real-time monitoring and alarm notification
- Provides feature extraction algorithms for data processing
- Remote management for distributed monitoring solutions
- Integrated with WebAccess/SCADA
- Ensures easy setup without additional programming



## Booster for Equipment Manufacturers, Rental Services, and End Users

# Edge DAQ Devices

Advantech's edge data acquisition solutions with WISE-PaaS/EdgeLink, Node-RED and Python are designed to simplify remote monitoring. These solutions improve service quality by facilitating product care, enable equipment monitoring, and allow for efficient energy consumption analysis. This allows manufacturers, rental services, and end users to obtain insights on usage behaviors by deriving intelligence through big data analysis.

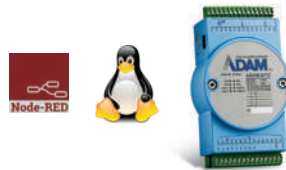
### Data Acquisition Gateways



#### ADAM-6750

Compact Intelligent Gateway with Digital I/O

- Linux-based
- CPU: Arm® Cortex-A8 (32-bit, 1 GHz)
- RAM: 512MB
- Memory: 512MB
- External storage: micro-SD
- 2 x LAN, 2 x RS-485 port, 2 x USB
- 12-ch DI/ 12-ch DO



#### ADAM-6717

Compact Intelligent Gateway with Analog Input

- Linux-based
- CPU: Arm® Cortex-A8 (32-bit, 1 GHz)
- RAM: 512MB
- Memory: 512MB
- External storage: micro-SD
- 2 x LAN, 2 x RS-485 port, 2 x USB
- 8-ch AI/ 4-ch DO/ 5-ch DI



#### ADAM-6715

Compact Intelligent Gateway with RTD Input

- Linux-based
- CPU: Arm® Cortex-A8 (32-bit, 1 GHz)
- RAM: 512MB
- Memory: 512MB
- External storage: micro-SD
- 2 x LAN, 2 x RS-485 port, 2 x USB
- 6-ch RTD/ 4-ch DO/ 4-ch DI



#### ADAM-6760D

Compact Intelligent Gateway with DC Relay Output

- Linux-based
- CPU: Arm® Cortex-A8 (32-bit, 1GHz)
- RAM: 512MB
- External storage: micro-SD
- 8 DC relay & 8DI
- 2 x LAN, 2 x RS-485 port, 2 x USB



#### ADAM-6718

Compact Intelligent Gateway with Thermocouple Input

- Linux-based
- CPU: Arm® Cortex-A8 (32-bit, 1GHz)
- RAM: 512MB
- External storage: micro-SD
- 7 x T/C, 7 x DO, 4 x DI
- 2 x LAN, 2 x RS-485 port, 2 x USB



#### ADAM-6724

Compact Intelligent Gateway with Analog Output

- Linux-based
- CPU: Arm® Cortex-A8 (32-bit, 1GHz)
- RAM: 512MB
- External storage: micro-SD
- 3 x AO, 3 x AI, 6 x DO, 5 x DI
- 2 x LAN, 2 x RS-485 port, 2 x USB



## ADAM-5630/ ADAM-5630E

4/8 slot Risc-based Modular DA&C Controller

- TI Cortex-A8 (600 MHz) with 512 MB of DDR3 RAM
- Real-time Linux
- 2 x LAN ports with two MAC addresses
- 4/8 expansion slots
- SD slot for local data storage
- Wired and wireless communication expansion options
- Supports web services

## Expansion Modules



### ADAM-5101

Storage Expansion Module

- Supports mini PCI express or M.2 interface



### ADAM-5101P

Mini-PCI Express Expansion

- Supports wireless expansion
- 2 x Antenna Points



### ADAM-5091

Serial Expansion Module

- 4 x serial ports
- Supports RS-485/ 232/ 422



### ADAM-5192

Network Expansion Module

- 2 x LAN ports



## ADAM-5000 Expansion I/O Modules

- 9 x AI/AO Modules
- 16 x DI/DO Modules
- 2 x Counter/Frequency Modules

## WISE-PaaS/EdgeLink



### ADAM-3600

Wireless Intelligent RTU

- TI Cortex-A8 (600MHz) with 256MB DDR3L
- Real-time Linux
- 4 expansion slots
- SD slot for local data storage
- 2 x LAN ports with two MAC addresses
- 2 x wireless communication interface (mini-PCIe)
- 8 x DI, 8 x AI, 4 x isolated DO channels



## WISE-PaaS/EdgeLink



### ECU-1155

Container-Based Edge Intelligent Gateway

- i.MX6 dual lite 1GHz CPU with 512MB DDR3L
- Ubuntu 18.04 Linux
- 2 expansion slots for ADAM-3600 series I/O
- 2 x LAN ports, 2 x COMPORT, 2 x CAN
- 1 x wireless communication interface (mini-PCIe)
- Wide operation temperature -20 ~ 70°C



### ADAM-3651/ ADAM-3656

Digital I/O Expansion Module

- ADAM-3651: 8-ch DI module
- ADAM-3656: 8-ch DO module



### ADAM-3617/ ADAM-3624

Analog I/O Expansion Module

- ADAM-3617: 4-ch AI module
- ADAM-3624: 4-ch AO module



### ADAM-3668

4-ch Relay Output Module

- 2CH form A and 2CH form C
- Contact rating: 0.3A@125V<sub>AC</sub>, 1A@30V<sub>DC</sub>





# Industrial Wireless I/O and Sensor Modules for Big Data Acquisition and Cloud Integration

## Wireless IoT Sensing Devices

With developments in wireless and cloud technologies, more and more remote monitoring applications have adopted cloud services for wide area management systems. To shorten the gap between the field site data and the cloud, Advantech provides wireless I/O and sensor modules that can get and pass data directly to the cloud by utilizing wireless communication technology, such as Wi-Fi, 4G, LoRaWAN, NB-IoT/LTE-M, and proprietary LPWAN (Sub-G) through IoT protocols MQTT, CoAP and LwM2M.

### Wireless I/O Modules



#### WISE-4210

Industrial Proprietary LPWAN (Sub-G) IoT Wireless I/O Module

- Better penetration through concrete and steel
- Less interference compare with 2.4GHz spectrum
- Application-ready I/O combination with modularization design



#### WISE-4220

Industrial 2.4GHz Wi-Fi IoT Wireless I/O Module

- Wireless interface to reduce the wiring cost for data acquisition
- Configuring by mobile devices directly without installing any APPs
- Zero data loss by using log function with RTC time stamp



#### WISE-4471/ WISE-4671

Industrial NB-IoT/LTE-M IoT Wireless I/O Module

- Dual mode support with global coverage in NB-IoT and LTE-M
- Faster and easier deployment with existing infrastructures
- Supports direct public cloud service for IoT integration



#### WISE-4610

Advanced Industrial LoRaWAN IoT Wireless I/O Module

- Longer communication range compare with 2.4GHz for wide range outdoor application
- Better penetration through concrete and steel with less interference
- Rechargeable battery inside with solar panel charging



#### WISE-S200

I/O and Sensor Module for WISE-4200/4400 Series

- WISE-S214 4 x AI & 4 x DI
- WISE-S215 4 x RTD
- WISE-S231 Temperature & Humidity Sensor
- WISE-S250 6 x DI, 2 x DO & 1-port RS-485
- WISE-S251 6 x DI & 1-port RS-485



#### WISE-S400

I/O and Sensor Module for WISE-4400 Series

- WISE-S414 4 x AI (upon request)
- WISE-S472 1 x D1, 1-port RS-485 & 1-port RS-485/ 232



#### WISE-S600/ WISE-S600T

I/O Module for WISE-4600 Series

- M12:
- WISE-S614 4 x AI & 4 x DI
  - WISE-S615 4 x RTD
  - WISE-S617 2 x AI, 2 x DI, 1 x DO & 1-port RS-485
  - WISE-S672 6 x DI, 1-port RS-485 & 1-port RS-485/ 232 terminal
- Block:
- WISE-S614T 4 x AI & 4xDI
  - WISE-S615T 4 x RTD
  - WISE-S617T 2 x AI, 2 x DI, 1 x DO & 1-port RS-485

### Wireless Sensor Modules



#### WISE-2210/ WISE-2211

Proprietary LPWAN (Sub-G) Self-Powered Analog Input Module

- Directly measure and transmit current transformer (CT) and transmitter (DC 4~20mA)
- Less interference and better penetration compare with 2.4GHz spectrum
- 3 x AI for CT and transmitter



#### WISE-2410

LoRaWAN Smart Condition Monitoring Sensor

- Compliant with ISO 10816 (guidelines for machine vibration evaluation)
- No power and communication wiring with LoRaWAN technology
- Computing onboard, directly transmits vibration characteristic values to application



#### WISE-2834

Intelligent RFID Gateway

- 4-ports UHF RFID read/write function
- Node-RED package solution
- 4-ports antenna, 4 x DI and 4 x DO
- Ethernet and Wi-Fi interface for up-link



#### Wizzard™ Edge Monitoring

Starter Kits, Nodes, Sensors

- Non-intrusive, non-disruptive to existing networks
- Network overlay is self-configuring, self-healing
- Condition-based, energy, refrigeration, HVAC/ compressor starter kits are scalable at any time
- Industrial and commercial low-power nodes
- Humidity, vibration, current, temperature, AI, DI sensors

# Transformation for IIoT's Wider & Larger Application

## Remote I/O Modules

Advantech's ADAM remote I/O modules have been used by industry for over 25 years. New product offerings and latest technology updates continue to fulfill an increasingly diverse range of applications. With RFID and USB technology, users have additional options for configuration and inspection, even when unpowered. Additionally, for larger network infrastructures, ADAM Ethernet-based remote I/O modules use SNMP and MQTT to enhance communication efficiency.



### Serial & USB Products



#### Industrial Conversion & Isolation Converters, Repeaters, Hubs

- Wide operating temperature range options
- Isolation, surge and ESD protection
- Port-power & high retention USB port options
- Industrial certifications

#### Module Selection

- BB-485LDR9: Industrial RS-422/ 485 Converter
- BB-485OPDR: Industrial RS-422/ 485 Repeater
- BB-USOPTL4: Industrial USB to RS-422/ 485 Converter
- BB-UHR307: Industrial 7-port USB Hub

### Serial I/O Modules



#### ADAM-4100 Series Robust RS-485 I/O Modules

- Wide operating temperature range (-40~85°C/ -40~185°F)
- High protection level: 4-kV surge, 4KV EFT, 8-kV ESD
- High common mode voltage: 200 V<sub>DC</sub>
- Power input: 10~48V<sub>DC</sub>

#### Module Selection

- ADAM-4117: Robust 8-ch AI module
- ADAM-4118: Robust 8-ch thermocouple
- ADAM-4150: 7-ch DI/ 8-ch DO module
- ADAM-4168: 8-ch relay module
- ADAM-4115: 6-ch RTD input module

#### ADAM-4000 Series RS-485 I/O Modules

- Watchdog timer
- ±35 V<sub>DC</sub> over voltage protection
- 3,000 V<sub>DC</sub> voltage isolation

#### Module Selection

- ADAM-4017+: 8-ch AI module
- ADAM-4024: 4-ch AO/ 4-ch DO module
- ADAM-4015: 6-ch RTD module
- ADAM-4051: 16-ch DI module
- ADAM-4055: 8-ch DI/ 8-ch DO module

### Ethernet I/O Modules



#### ADAM-6200 Series Daisy-Chain Ethernet I/O Module

- Cloud management: configuration, monitoring, and firmware updates
- Daisy chain connectivity with auto-bypass protection
- Supports HTML5, JavaScript, XML
- Supports GCL and P2P functions
- Group configuration capability
- Supports security MQTT with TLS

#### Module Selection

- ADAM-6217: 8-ch AI module
- ADAM-6224: 4-ch AO/ 4-ch DI module
- ADAM-6250: 8-ch DI/ 7-ch DO module
- ADAM-6251: 16-ch DI module
- ADAM-6266: 4-ch Relay/ 4-ch DI module



#### ADAM-6100 Series Real-Time Ethernet I/O Module

- Daisy chain connectivity
- Coupler-free design
- GSD, L5K, and EDS file-ready
- 2,500 V<sub>DC</sub> isolation protection

#### Module Selection

- ADAM-6117EI/PN: 8-ch AI module
- ADAM-6160EI/PN: 6-ch relay module
- ADAM-6150EI/PN: 8-ch DI/ 7-ch DO module
- ADAM-6151EI/PN: 16-ch DI module
- ADAM-6156EI/PN: 16-ch DO module

\* PROFINET: PN, EtherNet/ IP: EI



#### ADAM-6000 Series Smart Ethernet I/O Module

- Cloud management: configuration, monitoring, and firmware updates
- Embedded web server
- Data stream function to push data
- Supports GCL and P2P functions
- Supports C# .NET and VB.NET
- Supports security MQTT with TLS

#### Module Selection

- ADAM-6015: 7-ch RTD module
- ADAM-6017: 8-ch AI/ 2-ch DO module
- ADAM-6050: 12-ch DI/ 6-ch DO Relay module
- ADAM-6060: 6-ch DI/ 6-ch Relay module

# Seamless Data Connectivity from the Network Edge to the Core

## Industrial Communication

Advantech leverages over 35 years of industry experience to develop reliable wired and wireless communication solutions for mission critical applications. These products include industrial Ethernet switches, industrial Fieldbus gateways, Modbus gateways, cellular IP gateways, cellular routers, wireless access points/clients, media converters, and serial device servers, all of which contribute to securely transmitting data, monitoring and controlling networked devices.



### Intelligent Connectivity Software

#### WebAccess/DMP



#### WebAccess/DMP

##### Device Management and Provisioning

- Remote Router management and application delivery
- Device health monitoring and statistics
- RESTful APIs
- Zero-Touch provisioning for mass deployment
- Multi-Tenancy options
- Supports cloud & on-premise version

#### WebAccess/NMS



#### WebAccess/NMS

##### Network Management System

- Cross-browser compatible
- Online Google Maps and offline OpenStreetMap support
- Dynamic connectivity indication
- Automatically discovers and diagrams network topology
- PoE, ring, wireless, cellular connection indication

#### WebAccess/VPN



#### WebAccess/VPN

##### Advanced Secure Networking Platform

- Remote access solution for routers
- Secure Private Networks in Internet
- Encrypted & reliable communication, centrally defined VPN topology
- Managed LAN, 1:1 NAT modes, firewall & access control
- User-friendly management, easy deployment

### Communication Gateways



#### ICR-4400 series

##### New 5G Ready High Speed Router Platform & Edge Computing Gateway

- LTE advanced PRO cellular connectivity, download speed up to 1Gbps
- Quad-Core CPU & enhanced memory, docker ready
- 2 x SIM, eSIM, 5 x Gigabit Ethernet with optional 4 x PoE
- SFP fiber port, USB, GNSS Receiver, RS-232, RS-485, CAN bus, 2 x DI, 2 x DO
- Optional dual band WiFi 802.11AC



#### ICR-3800 series

##### Railway 4G LTE Router & Gateway - EN 50155 Certified

- Railway LTE 4G router for rolling stock applications
- LTE Cat.4, 2 x SIM, GNSS Receiver
- 2 x Ethernet 10/100, 1 x RS232 and I/O, 1 x USB, all M12 connectors
- Robust metal cover with wall mount option
- Advanced security features, VPN, Open Linux OS



#### ICR-3200 series

##### Industrial IoT 4G LTE Router & Gateway

- LTE Cat.4 with 3G/2G fallback, 2 x SIM, eSIM
- Powerful CPU with 1.3 GB storage to host customer SW applications, Python, Node-RED
- 2 x Ethernet 10/100, 1 x RS-232, 1 x RS-485 and I/O
- Optional - Wi-Fi 802.11ac, Bluetooth v5.1, GNSS Receiver
- Advanced security features, VPN, Open Linux OS



#### SmartFlex SR30x series

##### Flexible, Modular 4G LTE Router & Gateway

- LTE Cat.3 with 3G/2G fallback, 2x SIM, GNSS Receiver
- 2 x Ethernet 10/100 (Independent or switched)
- Optional - 5x Ethernet, PoE, RS-232/RS-422/RS-485, Wi-Fi
- Advanced security features, VPN, Open Linux OS
- E-mark, UL CID2, ATEX certifications

### Communication Gateways & I/O Nodes



#### WISE-6610 LoRaWAN Gateway and LoRaWAN I/O Node

- Long-distance wireless data transmission and third-party LoRaWAN device compliant
- Embedded network server and Node-RED, bundle a lightweight IoT protocol MQTT
- LoRaWAN gateway design with backup function
- LoRaWAN node design with IP66-rated reinforced-fiber polyester PBT enclosure



### Industrial Wireless AP/Clients



#### EKI-6333AC/EKI-136X Series/EKI-9502G

##### 802.11N Wi-Fi AP/ Bridge/ Client/ EN50155 Router

- Supports 802.11n MIMO 2T2R
- EKI-136X series support serial device to Wi-Fi or Lan to Wi-Fi variety function
- Supports secure access with WEP, WPA/WPA2-Personal, WPA/WPA2-Enterprise
- Wireless band 2.4G/5G Selective
- Provides web-based configuration
- Cellular connectivity with dual SIM cards design for each cellular module (EKI-9502G)



## Protocol Gateways



### EKI-1242 Series

Modbus RTU/TCP to Various Industrial Protocols Fieldbus Gateway

- Dual power inputs
- Designed for protocol extensibility and adaption
- Built-in real-time diagnostics
- I models support a wide operating temperature range

## Modbus Gateways/ Routers

NEW



### EKI-1220(R) Series

1/ 2/ 4-Port Modbus Gateway/ Router

- Integrated stateful firewall for protection from intrusion
- Supports redundancy-enhanced Modbus ID
- Integrates Modbus TCP and Modbus RTU/ ASCII network

## Serial Device Servers



### EKI-1500 Series

1/2/4/8/16-Port RS-232/ 422/ 485 Rackmount Serial Device Server

- Connect up to 8/ 16-port RS-232/ 422/ 485 devices directly to TCP/ IP networks
- High-speed baud rates (50 bps-976.5 Kbps)
- VCOM, TCP server, TCP client, UDP, and RFC2217 modes

## 10G Ethernet Solutions

NEW



### EKI-7412G-4X/7428G-4X 10G Series

Network Management System

- 10G uplink bandwidth supported
- Powerful and reliability managed features
- 1U 19 inch Rack-mount design
- Up to 60°C operating temperature

## L3 Managed Switches



### EKI-9700/ 9600 Series

Industrial Layer 3 Managed Switch

- Static routing/ NAT (EKI-9612G, EKI-9628G)
- Static routing, RIP v1/ v2, OSPF v2, VRRP (EKI-9728G)
- Supports up to 4 x 10GbE fiber ports (EKI-9728G)
- -40~75°C wide temperature

## L2 Managed Switches



TSN

### EKI-7700/ 8500 Series

Industrial Managed Switch

- EKI-8500 TSN Ethernet Switch
- Supports Gigabit / Fast Ethernet ports + Gigabit Copper/ SFP combo ports
- IXM function enables fast deployment
- IP30-rated chassis design
- EN50121-4 and NEMA TS-2 certified
- Supports Advantech Security Pack for cyber security

## Unmanaged Switches



### EKI-5000 Series

Industrial Unmanaged Switch

- IECEx, ATEX, CID2 certification
- Monitoring utility
- Port-based QoS for deterministic data transmissions
- Loop detection
- Dual power inputs

## EN50155 Rolling Stock Switches



### EKI-9500 Series

28/16/12/10/8-Port EN 50155 Rolling Stock Switch

- EN 50155, EN 50121-3-2, IEC 61373 compliant
- PoE/ PoE+ models are available
- Various port combination with Fast Ethernet/ Giga Ethernet option
- IP40/ IP54/ IP67 and rugged housing

## IEC 61850-3 Power Energy Switches



### EKI-9200 series

Industrial IEC 61850-3 Switches

- IEC 61850-3 & IEEE1613 certified.
- Dual power input (90~264V<sub>ac</sub>/ 88-370V<sub>dc</sub>) models available
- Flexible port options, providing up to 20 x fiber ports.
- Wide operating temperature range (-40~85 °C)

## 90W High Power PoE Solutions



NEW



### EKI-7712G-4FMPI / EKI-2701MPI

Industrial 802.3bt Managed Switch and Injector

- Up to 90W power transmission via 4-wire cable
- IEEE 802.3bt/at compliant
- Wide operation temperature (-40~70°C)
- Fully layer 2 managed features (EKI-7712G-4FMPI)

## Intelligent Modular Media Converters



### IMC-700 series

Intelligent Modular Media Converter with Highest Density

- Modular design with chassis up to 20 slots
- Widest varieties of slide-in media conversion and optical demarcation modules
- SNMP manageable via iView software featuring massive provision and monitoring
- Dual (redundant) AC and/or DC hard-wappable power supplies and fans

## 10/100/1000Mbps PoE+ Media Converters



### IMC-390

- Support IEEE802.3at PoE+ standards
- Serves as power sourcing equipment (PSE) device
- Supports Link Fault Pass Through (LFPT)
- Designed with two 10/100/1000Base-T and SFP or a fixed fiber transceiver 1x9 uplink port

## Long Reach Extenders



### IMC-150L / EKI-1751L

- Extends Ethernet up to 800m at 10Mbps or 500m at 100Mbps over UTP cable
- Extends Ethernet up to 1km at 10Mbps or 500m at 100Mbps over coaxial cable (IMC-150LI)
- Dual design with PoE+ PD/PSE (IMC-150LPI)
- Extends Ethernet up to 2000 m over VDSL (EKI-1751L)

## Industrial Long Haul PoE Extenders



### 10/100M PoE Extender Over VDSL2

- Local/remote units featuring power-over-VDSL PSE/PD, respectively
- VDSL2 compliant with transmission distance over kilometers
- Long haul data and power transmission over UTP or coaxial cables
- Remote unit supports PoE PSE per each Ethernet downlink port, with maximum 30 watt power budget

## Infrastructure for the IoT

# Intelligent Systems and Platforms

With a diverse range of innovative technologies including cloud computing (industrial and video servers), edge computing (fan-less, slim, portable devices), and high performance embedded systems, Advantech's intelligent systems are equipped with smart, secure, energy-saving features. Our intelligent systems are designed specifically for vertical markets in intelligent transportation, factory automation/machine automation, cloud infrastructure, and intelligent video application sectors.



## Modular Industrial Computers



### MIC-770

Compact Fan-Less System with 8th Gen Intel® Core™ i CPU Socket

- Intel® 8th/ 9th Gen Core™ i CPU socket-type (LGA1151) with Intel® Q370/ H310 chipset
- Wide operating temperature (-10 ~ 50 °C)
- VGA and HDMI output
- 2 x GigaLAN, 2 x USB 3.1 and 6 x USB 3.0



### MIC-770 + MIC-75G20

Desktop Compact Fan-Less System with GPU iModule

- Intel® 8th/ 9th Gen Core™ i CPU socket-type (LGA1151) with Intel® Q370/ H310 chipset
- Offering powerful GPU solution with nVIDIA 250W, 2-slot width/287.35mm length GPU cards for new AI application
- Dual 24V<sub>DC</sub> power inputs with reliable power and OCP solution for up to 600W maximum peak power currency



### MIC-770 + MIC-75G30

Desktop Compact Fan-Less System with GPU iModule

- Intel® 8th/ 9th Gen Core™ i CPU socket-type (LGA1151) with Intel® Q370/ H310 chipset
- Powerful GPU solution with dual NVIDIA 250W, 2.75-slot width, 330mm length GPU cards for new AI application
- Triple 24V<sub>DC</sub> power inputs with reliable power and OCP solution for up to 900W maximum peak power currency



### AIIS-3410 U/ P

Compact Vision System, Intel® 6th/ 7th Gen Core™ i CPU, 4-ch Camera Interface for GigE PoE or USB 3.0

- Intel® 6th/ 7th Gen Core™ i CPU (LGA1151)
- AIIS-3410P: 4-ch GbE PoE
- AIIS-3410U: 4-ch USB 3.0 w/ dedicated controller
- Supports 1 x expansion slot



### IPC-220, IPC-240

Compact Industrial Computer System with 6th/7th Gen Intel® Core™ i CPU Socket (LGA 1151)

- 2 x GigaLAN, 6 x USB 3.0 and 2 x USB 2.0
- 2 x 2.5" HDD/SSD, and 1 x mSATA
- 19 ~ 24 V<sub>DC</sub> input power range
- 2/4 PCIe/PCI slot expansions
- Supports power out 12V/5V - 2A
- Supports MB: PCE-2029/2129



### MIC-7420

Compact Fanless System with Intel® 6th Gen Core™ i CPU

- Intel® 6th Gen Core™ i7/i3 (BGA type) processor w/ Intel® QM170 chipset
- 8 GB of DDR4 on board memory (up to 24 GB)
- 2 x DVI, 2 x GbE LAN, 8 x USB ports
- 2 x PCIe x4/ 2 x PCI expansion slots
- 2 x 3.5"/ 2.5" HDD and 1 x M.2

## Industrial Computers



### ACP-2020

2U Rackmount Short Depth Intelligent Chassis for ATX/ uATX Motherboards

- 398-mm short-depth 2U rackmount chassis
- Supports ATX/uATX single-processor motherboards
- 350W single or 500W redundant power supply
- Optional dual 2.5" or hot-swap drive bays
- Intelligent system module for smart fan, self-diagnosis, and remote management



### IPC-631

4U Front I/O Short Depth Rackmount Chassis for ATX/ uATX Motherboards

- 350mm short-depth rackmount chassis
- Supports ATX/uATX single-processor motherboards, CPU TDP up to 120 W
- 500W single power supply
- All I/O ports, buttons, LEDs, drive bays, and AC inlet on the same side
- PWM-controlled smart fan for minimal noise



### ACP-4340

4U Rackmount Intelligent Chassis with 4 Hot-Swap Drive Bays

- Supports 14-slot PICMG backplane or ATX/uATX motherboard
- Built-in 4 hot swap drive bays supporting 3.5"/2.5" HDD/SSD
- Front-accessible, easy-maintenance system fans
- Intelligent system module for smart fan control, self-diagnosis, and remote management

## Industrial Motherboards

NEW



### AIMB-786

8th/ 9th Gen Intel® Core™ i ATX Motherboard

- Intel® 8<sup>th</sup>/ 9<sup>th</sup> generation Core™ i7/i5/i3 LGA1151 processor with Q370 chipset
- Up to 128 GB of dual-channel (non-ECC) DDR4 2400/2666 MHz
- 1 x PCIe x16, 4 x PCIe x4 Gen 3.0, 2 x PCI slots, USB 3.1, SATA 3.0 (RAID 0, 1, 5, 10)
- Triple displays: 1 x VGA, 1 x DVI, 1 x DP

NEW



### AIMB-706

8th/ 9th Gen Intel® Core™ i ATX Motherboard

- Intel® 8<sup>th</sup>/ 9<sup>th</sup> generation Core™ i7/i5/i3 LGA1151 processor with H310 chipset
- Up to 64 GB of dual-channel (non-ECC) DDR4 2400/2666 MHz
- 1 x PCIe x16 Gen 3.0, 1 x PCIe x4 Gen 2.0, 5 x PCI slots, USB 3.1, SATA 3.0
- Dual displays -1 x VGA, 1 x DVI

NEW



### PCE-5131

8th/ 9th Gen Intel® Core™ i System Host Board

- Intel® 8<sup>th</sup>/ 9<sup>th</sup> Gen. Core™ i7/i5/i3 LGA1151 processor with Q370 chipset
- Up to 64 GB of dual-channel (non-ECC) DDR4 2400/2666 MHz
- PCIe Gen. 3.0, M.2, USB 3.1, SATA 3.0 (RAID 0, 1, 5, 10), dual GbEs
- Triple displays: 1 x VGA, 2 x DVI or DP

## Industrial GPU Cards (Bundle Sale)

NEW



### SKY-MXM-P1000/P2000

NVIDIA® Quadro® Embedded MXM Module

- MXM 3.1 Type A form factor
- 512/768 CUDA cores
- 4GB GDDR5 memory
- 96GB/s maximum memory bandwidth
- Bundle sale with Advantech IPC

NEW



### SKY-QUAD-P1000/P2200

NVIDIA® Quadro® PCI Express Graphic Card

- P1000: 4 x Mini display port 1.4; P2200: 4 x Display port 1.4
- DisplayPort with audio
- 4/5GB GDDR5 memory
- HDCP 2.2 support
- Bundle sale with Advantech IPC

NEW

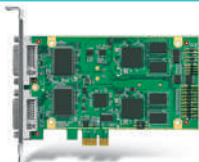


### SKY-TESL-V100-32P/T4-16P

NVIDIA® Tesla® PCI Express Graphic Card

- Tesla V100 32GB PCIe x16 HS
- Tesla T4 16GB PCIe x16
- Bundle sale with Advantech IPC

## Video Capture Cards



### DVP-7621HE

2-ch Full HD Capture Card

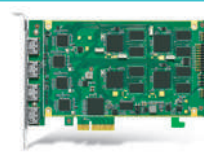
- 2-channel HDMI/DVI/VGA/S-Video/YpPr video inputs with H.264/MPEG4 hardware compression
- 60/50 fps (NTSC/PAL) at up to 1920 x 1080p resolution for recording and display for each channel
- PCIe x1 host interface
- Supports watchdog function



### DVP-7636HE

4-ch SDI Full HD H.264 PCIe Capture Card

- 4-channel SDI video input with H.264 hardware compression
- 60/50 fps (NTSC/PAL) at up to 1080p resolution for display and recording
- PCIe x4 host interface
- Windows/Linux OS supported



### DVP-7637HE

4-ch HDMI Full HD H.264 PCIe Capture Card

- 4-channel HDMI video input with H.264 hardware compression
- 60/50 fps (NTSC/PAL) at up to 1080p resolution for display and recording
- PCIe x4 host interface
- Windows/Linux OS supported





## Seamless Connection and Transmission for Edge IoT Applications

# Embedded Automation Computers

To meet the needs of Industry 4.0, UNO series embedded automation box PCs are ideal for edge computing, bridging the gap between IT and OT. The UNO series serve as flexible IoT gateways coming in different sizes and versatile mountings. Plus, they also support Advantech iDoor Technology that gives them the flexibility to configure various I/O requirements, includes wireless communication, industrial I/O and peripherals, and industrial fieldbus, based on different applications.

## Industrial Controllers



WISE-PaaS/EdgeLink



### UNO-1372G-J

Intel® Celeron® J1900 Small-Size DIN-rail Control PC

- Intel® Celeron® J1900 2.0GHz processor with 4GB DDR3L Memory
- 2 x GbE, 2 x mPCIe, 3 x USB 2.0, 1 x USB 3.0, 4 x RS-232/ 422/ 485, 1 x DP, 1 x HDMI, 4 x DI/O, 1 x iDoor
- Dedicated TPM2.0 onboard for hardware security

### UNO-3272G

Intel® Celeron J1900 Automation Computer

- Intel® Celeron® J1900 2.0GHz processor with 4GB DDR3L memory
- 3 x USB 2.0, 1 x USB 3.0, 2 x RS-232/ 422/ 485, 2 x RS232, 2 x 10/100/1000BASE-T Ethernet, 2 x PCIe1 (or 2 x PCI)
- Supports 2 x independent displays (VGA, HDMI)
- Dedicated TPM2.0 microcontroller designed for hardware security
- Optional digital 4DI/4DO board

### UNO-3283G/3285G

Intel® Core™ i Wall Mount Automation Computer

- 6th Gen Intel® Core™ i3/i5/i7 processor w/ 8 GB of DDR4 RAM
- 2 x GbE, 6 x USB 3.0, 2 x RS-232/ 422/ 485, 1 x DVI-I, 1 x HDMI, 1 x CFast 1 x iDoor, 2 x mPCIe (UNO-3283G: 2 x PCI/ PCIe, UNO-3285G: 4 x PCI/ PCIe)
- Dual hot-swappable HDD/ SSD slots with thumb screws
- Redundant power input

### UNO-3285C

- 6th Gen Core™ i7-6822EQ w/ 8GB DDR4 RAM & Celeron G3902E with 4GB DDR4 RAM
- 2 x GbE, 6 x USB 3.0, 2 x RS-232/ 422/ 485, 1 x DVI-I, 1 x HDMI, 1 x CFast 1 x iDoor, 2 x mPCIe x8 + 2 x PCI
- Dual internal HDD/ SSD support
- Redundant power input

## Communication Gateways

WISE-PaaS/EdgeLink



### WISE-710

ARM Cortex™-A9 Industrial Gateway

- NXP® ARM® Cortex™-A9 i.MX6 dual-core 1.0 GHz processor
- 2 x GbE, 3 x COM, 4 x DI/O, 1 x Micro USB, and 1 x Micro SD Slot
- 1 x full-size mPCIe slot with USB signal
- Embedded security chip for data security
- ESRP Package: Support WISE-PaaS/Edgelink

NEW



### UNO-220

Raspberry Pi Industrial Kit

- Tiny size for RPI-based IoT solution (100 x 70 x 33mm)
- Industrial grade I/O board for the Raspberry Pi
- Battery-backed RTC chip for keeping the track of time
- The inclusion of OS allows the RPI to identify UNO-220 and automatically configure the GPIOs and drivers for the board

NEW

WISE-PaaS/DeviceOn



### UNO-247

Intel® Celeron J3455E Edge Gateway

- Intel® Celeron® J3455E processor
- 2 x GbE, 2 x USB 3.0, 2 x USB 2.0, 4 x RS232, 2 x RS485, 1 x HDMI, 1 x VGA
- Threaded DC Jack design for more steady power supply
- ESRP Package: supports WISE-PaaS/DeviceOn

## Modular Automation Box PCs

### Pocket-Size Modular Box PCs

- Intel® Atom™ E3815/E3825 processor
- Built-in 4GB DDR3L memory & 32G eMMC

#### WISE-PaaS/EdgeLink



#### UNO-2271G

##### Basic Unit

- 2 x GbE, 1 x USB 3.0, 1 x HDMI
- ESRP Package: Support Azure IoT Edge, WISE-PaaS/ EdgeLink



#### UNO-2271G-EKBE

##### Expansion Kit

- Supports up to 1 x iDoor installation

### Small-Size Modular Box PCs

- Intel Atom E3845/Celeron® J1900 Quad-Core Processors w/ 4GB of DDR3L RAM
- TPM 2.0 technology for cyber security

#### WISE-PaaS/EdgeLink



#### UNO-2372G

##### Basic Unit

- 2 x GbE, 1 x USB 3.0, 3 x USB 2.0, 1 x HDMI, 1 x DP
- ESRP Package: Support Azure IoT Edge, WISE-PaaS/ EdgeLink



#### UNO-2372G-EKBE

##### Expansion Kit

- Supports up to 2 x iDoor installation

### Regular-Size High-Performance Modular Box PCs

- Intel® Core™ i7/i5/i3 processor w/ 8 GB of DDR4 RAM
- Cable-less & fan-less design ensure highest reliability
- TPM 2.0 technology for cyber security

#### WISE-PaaS/EdgeLink



#### UNO-2484G

##### Basic Unit

- 4 x GbE, 4 x USB 3.0, 1 x HDMI, 1 x DP, 4 x RS-232/ 422/ 485
- ESRP Package: Support Azure IoT Edge, WISE-PaaS/ EdgeLink



#### UNO-2484G-EKBE

#### UNO-2484G-S2AE

##### Expansion Kit

- Supports up to 4 x iDoor installation or external swappable HDD/SSD

## Domain-Focused Edge Gateways

NEW



#### UNO-430

##### Intel® Atom™ IP66 Ruggedized Outdoor Gateway

- Intel® ATOM™ E3950 Quad-core processor with 8G DDR3L memory
- Supports wireless extension with M.2 module
- 2 x GbE, 2 x RS-422/485 (isolated), 1 x RS-232 (console), M.2 2242 key B, TPM2.0
- IP66 water proof design for outdoor environment
- C1D2 + IEC-ATEX standalone type certified PC

#### WISE-PaaS/EdgeLink



#### UNO-420

##### Intel® Atom™ PoE Powered Device Sensing Gateway

- Intel® Atom™ E3815 Processor with 2GB DDR3L onboard memory
- 2 x GbE (1 x PoE-IN), 1 x USB 3.0, 1 x HDMI, 1 x RS-485, 2 x RS-232/422/485, and 8 x Programmable GPIO
- 32GB eMMC storage onboard
- ESRP Package: supports WISE-PaaS/ EdgeLink



#### WISE-PaaS/EdgeLink



#### UNO-1372GH

##### Intel® Atom™ Quad-Core Control DIN-rail PC

- Intel® Atom™ E3845 1.91GHz processor with 4GB DDR3L Memory
- 3 x GbE, 3 x USB, 2 x COM, 1 x VGA, 1 x HDMI, Audio, iDoor, mSATA, 2 x mPCIe, 1 x SATA, 4 x DI, 4 x DO, 1 x Power Terminal
- Spark-free design with lockable I/O kit
- Dual power input for avoiding power down time
- UL listed for hazardous locations: Class I, Division 2

## iDoor Modules

CANopen

EtherCAT

PROFIBUS  
PROFINET



Wi-Fi

3G LTE



GiGE VISION

USB VISION PoE



### Industrial Fieldbus PCM-26 Series

Industrial Fieldbus iDoor modules support common automation protocols

- CANOpen
- PROFIBUS
- PROFINET
- EtherCAT
- EtherNet/IP
- Sercos 3
- POWERLINK

### Wireless Communication PCM-24S Series

Wireless communication iDoor modules enhance connectivity for industrial IoT

- Wi-Fi/ Bluetooth
- 3G/ GPS
- LTE/ GPS

### Industrial I/O and Peripherals PCM-23/ 24/ 27/ 29 Series

Industrial I/O and peripheral modules enable flexible I/O expansion

- RS232/ 422/ 485
- MRAM
- USB 3.0
- Audio
- Digital I/O
- CFast slot
- PoE
- Power Drop Protection
- GigaLAN
- USB dongle
- TPM

## Leading HMI Innovations for Smart Factories

# Intelligent HMI and Industrial Monitor

Advantech offers a diverse range of general as well as domain-focused HMI products equipped with iDoor technology, including high performance control panels, industrial thin clients, web browser terminals, and industrial monitors. In response to Industry 4.0, Advantech has developed a new generation of modular solutions for a diverse range of configurations to meet specific usage requirements, offering customers a quick time to market and high level of expandability.



### Modular Industrial Panel PCs

#### Preconfigured Systems



##### TPC-5000 Series

Modular 12"/ 15"/ 15.6"/ 18.5"/ 21.5"/ 23.8" LED LCD Intel® Core™ i7/ i3/ i5/ Celeron® Industrial Control Panel

- 6th generation Intel® Celeron® 3955U/Core™ i3-6100U/ Core™ i5-6300U/ Core™ i7-6600U processor with 4/8 GB DDR4
- iDOOR, PCIe, removable SSD, and M.2 for flexible expansion
- TPM2.0, 3 x GbE, and isolation power design for control software compatibility



##### TPC-2000 Series

Modular 12"/ 15"/ 15.6"/ 18.5"/ 21.5"/ 23.8" LED LCD Intel® Celeron®/Atom™ Industrial Thin Client

- Intel® Celeron® J3455 / Intel® Atom™ E3940 processor with 4GB DDR3L
- Compact, universal design with low power consumption
- Industrial-grade, wide operating temperature range (-20 ~ 60 °C)
- Supports iDoor, mPCIe, M.2 storage, and 2.5" SSD for expansion



##### FPM-7002 Series

Modular 12"/ 15"/ 15.6"/ 18.5"/ 21.5"/ 23.8" LED LCD Industrial Monitor

- Supports both 4:3 and 16:9 display ratios
- Supports dual displays and control with Picture-in-Picture functionality
- Module-in-Module design with customizable I/O
- iLINK technology enables long-distance (up to 100 m) one-to-one/one-to-many (up to 4) data transmissions

#### Configurable Modules

##### Box Modules



##### TPC-B500-6C2AE

Intel® Celeron® 3955U, 4 GB of DDR4 RAM

##### TPC-B500-633AE

Intel® i3-6100U, 8 GB of DDR4 RAM



##### TPC-B500-653AE

Intel® i5-6300U, 8 GB of DDR4 RAM

##### TPC-B500-673AE

Intel® i7-6600U, 8 GB of DDR4 RAM



##### TPC-B200-J12AE

Intel® Celeron® J3455 1.50 GHz, 4G of DDR3L RAM

##### TPC-B200-E12AE

Intel® Atom® E3940 1.60 GHz, 4G of DDR3L RAM



##### FPM-B700-AE

Modular monitor box w/ 2 x I/O slots for FPM-M700 I/O modules

##### Panel Modules



##### FPM-D12T-BE

12.1" XGA



##### FPM-D15T-BE

15" XGA



##### FPM-D15W-FBE

15.6" FHD



##### FPM-D17T-BE

17" SXGA



##### FPM-D18W-BE

18.5" HD



##### FPM-D21W-BE

21.5" FHD



##### FPM-D24W-BE

23.8" FHD



## High Performance Control Panels

NEW



### TPC-315/ TPC-324W

15"/24" TFT LED LCD Intel® Core™ i3/ i7 Touch Panel Computer

- 8th Gen Intel® Core™ i3-8145UE/ i7-8665UE Processor with 8G DDR4 SDRAM
- 1x USB 2.0, 4 x USB 3.0, 1 x RS-232/422/485, 1 x DP
- Default supports digital I/O via iDoor technology
- Supports M.2 NVMe high speed storage



### TPC-1x81WP Series/ 1x82 Series

12"/ 15"/ 15.6"/ 17"/ 18.5" TFT LED LCD Intel® Core™ i7/ i3 Touch Panel Computer

- Intel® Core™ i3-4010U/ i7-4650U 1.7GHz Processor with 4G/ 8G DDR3L SDRAM (TPC-1x81WP)
- Intel Core i3-5010U/ 4010U (1.7/ 2.1GHz) w/ 4G of DDR3L SDRAM (TPC-1x82)
- 7H surface hardness glass widescreen with PCT multi-touch control, IP66 rating and true-flat design (TPC-1x81WP)
- Expandable system I/O, isolated digital I/O, Fieldbus and communication via iDoor technology



### TPC-1881WPH

C1D2 Certified 18.5" TFT LED LCD Intel® Core™ i5 Touch Panel Computer

- Intel® Core™ i5-4300U with 4GB/ 8GB DDR3L SDRAM
- Certified with UL CID2 for hazardous environments
- Expandable system I/O, isolated digital I/O, Fieldbus, and communication via iDoor technology
- Supports USB 3.0 and HDMI for independent displays

## Industrial Thin Clients



### TPC-125H/ 815H

C1D2 Certified 12.1"/15" TFT LED LCD Intel® Atom™ Quad-Core Industrial Thin Client

- Intel® Atom™ Quad-core E3845 1.9GHz w/ 4GB of DDR3L SDRAM (optional Intel® Celeron quad-core J1900 processor)
- UL C1D2 certified for hazardous environments
- IP66-rated front panel with durable true-flat 5-wire resistive touchscreen
- Supports iDoor technology and HDD

NEW



### TPC-xx51A Series/ TPC-xx51B Series

5.7"/ 6.5"/ 12.1"/ 15"/ 17" TFT LED LCD Intel® Atom™ Dual-/ Quad-Core Industrial Thin Client

- Intel® Atom™ dual-core E3827/ E3845 DDR3L SDRAM / Celeron quad-core J1900 (TPC-xx51A Series)
- IP66-rated front panel with durable true-flat 5-wire resistive touchscreen
- Wide operating temperature (-20~60°C)
- Supports iDoor technology and VESA mounting (B Series)



### TPC-xx51WP/xx40WP series

10.1"/ 15.6"/ 18.5"/ 21.5" TFT LCD Intel® Atom™ Dual-Core or AMD Dual-Core Industrial Thin Client

- Intel® Atom™ dual-core E3827, 1.75 GHz processor (10.1" & 15.6")
- AMD dual-core T56E (1.65 GHz) w/ independent GPU (18.5" & 21.5")
- 16:9 WXGA/ FHD TFT LED LCD display with PCT multi-touch control
- Built-in function and home key buttons

## Web Browser Terminals



### TPC-71W

7" Cortex™-A9 Web Browser

- Cortex™-A9 Dual/Quad 1.0GHz Processor
- Supports Linux Ubuntu, Windows Embedded Compact 7 and Android 6
- Wide operating temperature range (-20~60 °C)
- Flat-sealed front multi-touch panel with IP66 rating



### SPC-115W/121W

15.6"/ 21.5" Cortex™-A72 Web Browser

- Supports Android 8.1
- Supports 16:9 1920 x 1080 resolution wide display
- Dual Ethernet Lan port with 10/100/1000 Mbps
- 4K HDMI Video Output



### WebOP-2000 Series

4.3"/ 7"/ 10.1" WSVGA Operator Panel

- 65,536 colors TFT LCD, Arm9-based CPUs
- Front panel flat-sealed with IP66 rating
- Low power consumption (10 W)
- Supports over 400 PLC communication protocols

## Domain-Focused Panel PCs



### SPC-200 Series

All-Around IP66-Rated 18.5"/ 21.5" Intel® i3/ i5/i7 Dual-Core Encapsulated Touch Panel Computer

- Intel® Core™ i3-4010U/ i3-6100U processor
- 7H surface hardness glass widescreen with true-flat design, and all-around IP66 rating VESA mount support
- Waterproof M12 I/O: 1 x RS-232, 1 x USB, and 2 x LAN (customization is allowed)
- Winner of the 2013 IF product design award



### SPC-500 Series

All-around IP69k-Rated 15" TFT LEC LCD Intel® Core™ i3/ Celeron® Stainless Steel Touch Panel Computer

- Intel® Skylake-U Celeron-3955U CPU/ i3-6100U CPU
- All-round 304L stainless steel housing with IP69k & M12 connectors
- VESA mount supported
- EN 1672-2 Compliance
- Shatter protection film



### SPC-800 Series

All-Around IP66-Rated 15.6"/ 21.5" arm-mounted HMI with Intel® i3/ i5/ i7 or Industrial Monitors

- Intel® Skylake-U Celeron / i3/ i5/ i7 processor or pure monitor
- All-Around IP66-rated protection
- Supports Rittal and Bernstein arm system dimension for mounting
- Supports RAFI FS22+ push button dimension for integration maintenance
- Flexible configuration with integrated customizable extension unit

## Configurable



### PPC-6000C Series

15"/ 17"/ 19" 6th/7th/8th/9th Gen Intel® Core™ i7/i5/i3 Panel PC w/ Selectable Mini-ITX Motherboard

- 6th/7th/8th/9th Gen Intel® Core™ i, up to 65W TDP (socket type)
- True-flat, IP65-rated, front bezel with resistive or optional PCAP touchscreen
- Selectable mini-ITX motherboard for diverse requirements
- 2 x expansion slots (1 x PCIe x 4 or 2 x PCI)
- Supports TPM 2.0

## Multiple Function



### PPC-3001 Series

12"/15"/15.6"/21.5" 6th/ 7th Gen Intel® Core™ i5/i3 Fanless Panel PC

- Intel® Core™ i5-6300U/7300U or i3-7100U processor
- True-flat, IP65-rated front bezel w/ PCAP or resistive touchscreen
- Wide input voltage range (9~32V<sub>DC</sub>, 12~32V<sub>DC</sub>) and built-in isolated RS-422/485
- Supports PCIe/PCI expansion and TPM 2.0
- Supports triple display (1 x DP, 1 x VGA)



### PPC-3000 Series

10.4"/ 12.1"/ 15"/ 17"/ 19" Intel® Atom™ Quad-Core Fanless Panel PC

- Intel® Atom™ quad-core E3940/ E3845 processor
- Wide operating temperature range (-20~60°C)
- Wide input voltage range (9~32V<sub>DC</sub>) and built-in isolated RS-422/485
- Supports 1 x PCI/ PCIe bus expansion
- Optional expansion for CF/ CFast, USB dongle, RS232 and GPIO

## General Purpose



### PPC-3001S Series

15.6"/18.5"/21.5"/23.8" 6th Gen Intel® Core™ i5/i3 Fanless Panel PC

- Intel® Core™ i5-6300U/i3-6100U processor
- True-flat, IP65-rated front bezel with PCAP touchscreen
- Compact fanless design with solid aluminum alloy enclosure
- Wide input voltage range (12~24 V<sub>DC</sub>)
- Supports TPM 2.0



### PPC-3000S Series

6.5"/10.4"/12.1"/15"/15.6"/18.5"/21.5"/23.8" Intel® Celeron Dual/Quad-Core Fanless Panel PC

- Intel® Celeron quad-core N2930/ N4200 processor
- True-flat, IP65-rated front bezel with resistive or PCAP touchscreen
- Compact fanless design with solid aluminum alloy enclosure
- Wide input voltage range (12 ~ 24 V<sub>DC</sub>)

# Industrial Monitors



### FPM-7000/ 200 Series

General Industrial Monitor

- 6.5" / 12" / 15" / 15.6" / 18.5" / 21.5"
- Robust design with IP65/66 aluminum bezel
- Elegant true flat design
- Supports panel, wall, desktop, and VESA arm mounting



### FPM-5000 Series

Featured Industrial Monitor

- 15" / 17" / 19"
- Robust design with IP65/66 aluminum bezel
- Front USB extension for diverse applications
- Supports panel, rack, wall, desktop, and VESA arm mounting



### FPM-3000 Series

Extreme Rugged Industrial Monitor

- 12" / 15" / 17" / 19"
- Robust design with IP65/66 hardened anodized front bezel & SS rear cover
- Supports -20~60°C operation temperature
- Supports panel, rack, wall, desktop, and VESA arm mounting



Supports On-Site Management, Manufacturing and Inspections

## Industrial Mobile Solutions

The AIM-65/68 tablets are designed for mobile workers in onsite factory inspections. Application oriented peripherals are built for rough handling in extreme environments, which have been drop-tested at 4ft, and IP65 certified. With extension modules: barcode scanner, RJ45+COM and UHF Reader, they can satisfy customized requirements and be easily removed from the docking station with just one-hand. In addition, a hand strap/shoulder strap enable hands-free carrying options.

### Industrial-Grade Wearables and Tablets

#### Wearable



NEW



#### LEO-W

##### Wearable Barcode Scanner Ring

- Lightweight (33 g) and ergonomic wearable ring design
- Rugged industrial design with IP54 rating and 1 m drop protection
- Can be worn on either the left or right hand Physical button avoids trigger errors and power waste
- Interchangeable ring available in 5 sizes to ensure flexible wear (supports both gloved and non-gloved operation)
- Magnetic connector enables easy battery recharging and eliminates cable bending issues typical of traditional micro-USB connectors

#### Fully Rugged Tablets



Universal Cover



Vehicle Docking Station



Desk Docking Station



Active Pen



Multi Charger & External Battery



Extension Modules



Screen Protection Film

#### PWS-872

##### 10.1" Industrial-Grade Tablet with 7th Gen Intel® Core™ i3/i5/i7/Celeron® Processor

- 10.1" WXGA LED display with scratch-resistant Corning® Gorilla® Glass 3 panel
- Multi-touch PCAP touchscreen with support for gloved operation
- Rugged design with MIL-STD-810G certification, IP65 rating, and 4-ft. drop tolerance
- 4G LTE, WLAN (802.11 a/b/g/n/ac), Bluetooth 4.1, and GPS modules with BeiDou/GLONASS support
- Built-in front and rear cameras, 1D/ 2D barcode scanner, and NFC reader

#### Semi Rugged Tablets



Vehicle Docking Station



VESA Docking Station



Office Docking Station



Extension Modules



Holster



Hand Strap



Active Stylus



Multi-Battery Charging Station



Multi-Tablet Charging Station

#### AIM-68

##### 10.1" Industrial-Grade Tablet with Intel® Atom™ Processor

- Intel® Atom™ processor for Windows 10 IoT and Android 6.0
- Hot-swappable battery with capacity meter that shows the remaining power and recharge status
- Integrated barcode scanner supports data collection
- 10.1" WUXGA full HD display with scratch-resistant Corning® Gorilla® Glass 3 and multi-touch PCAP control
- WLAN, BT, NFC, 3G/4G LTE technology for seamless communications
- Optional extensions include 1D/2D barcode scanner, LAN+COM module, UHF RFID module

#### AIM-65

##### 8" Industrial-Grade Tablet with Intel® Atom™ Processor

- Intel® Atom™ processor for Windows 10 IoT and Android 6.0
- 8" WUXGA full HD display with scratch-resistant Corning® Gorilla® Glass 3 and multi-touch PCAP control
- WLAN, BT, NFC, 3G/ 4G LTE technology for seamless communications
- Optional extensions include 1D/2D barcode scanner, LAN+COM module, UHF RFID module
- Light weight design and multi-tablet charging station



## Regional Service & Customization Centers

<b>China</b>	Kunshan 86-512-5777-5666	<b>Taiwan</b>	Taipei 886-2-2792-7818	<b>Netherlands</b>	Eindhoven 31-40-267-7000	<b>Poland</b>	Warsaw 00800-2426-8080	<b>USA</b>	Milpitas, CA 1-408-519-3898
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## Worldwide Offices

### Asia

<b>Taiwan</b>	
Toll Free	0800-777-111
Taipei & IoT Campus	886-2-2792-7818
Taichung	886-4-2372-5058
Kaohsiung	886-7-392-3600

<b>China</b>	
Toll Free	800-810-0345
Beijing	86-10-6298-4346
Shanghai	86-21-3632-1616
Shenzhen	86-755-8212-4222
Chengdu	86-28-8545-0198
Hong Kong	852-2720-5118

### Asia

<b>Japan</b>	
Toll Free	0800-500-1055
Tokyo	81-3-6802-1021
Osaka	81-6-6267-1887
Nagoya	81-0800-500-1055
Nogata	81-949-22-2890

<b>Korea</b>	
Toll Free	080-363-9494/5
Seoul	82-2-3660-9255

<b>Singapore</b>	
Singapore	65-6442-1000

<b>Malaysia</b>	
Kuala Lumpur	60-3-7725-4188
Penang	60-4-537-9188

<b>Thailand</b>	
Bangkok	66-02-2488306-9

<b>Vietnam</b>	
Hanoi	84-24-3399-1155

<b>Indonesia</b>	
Jakarta	62-21-751-1939

<b>Australia</b>	
Toll Free	1300-308-531
Melbourne	61-3-9797-0100

<b>India</b>	
Bangalore	91-80-2545-0206
Pune	91-94-2260-2349

### Europe

<b>Netherlands</b>	
Eindhoven	31-40-267-7000
Breda	31-76-523-3100

<b>Germany</b>	
Toll Free	00800-2426-8080/81
Munich	49-89-12599-0
Düsseldorf	49-2103-97-855-0

<b>France</b>	
Paris	33-1-4119-4666

<b>Italy</b>	
Milan	39-02-9544-961

<b>UK</b>	
Newcastle	44-0-191-262-4844
London	44-0-870-493-1433

<b>Spain</b>	
Madrid	34-91-668-86-76

<b>Sweden</b>	
Stockholm	46-0-864-60-500

<b>Poland</b>	
Warsaw	48-22-31-51-100

<b>Russia</b>	
Moscow	8-800-555-01-50
St. Petersburg	7-812-332-5727; 7-921-575-1359

<b>Czech Republic</b>	
Ústí nad Orlicí	420-465-524-421

<b>Ireland</b>	
Galway	353-91-792444

### Americas

<b>North America</b>	
Toll Free	1-888-576-9668
Cincinnati	1-513-742-8895
Milpitas	1-408-519-3898
Irvine	1-949-420-2500
Ottawa	1-815-433-5100

<b>Brazil</b>	
Toll Free	0800-770-5355
São Paulo	55-11-5592-5367

<b>Mexico</b>	
Toll Free	1-800-467-2415
Mexico City	52-55-6275-2727

### Middle East and Africa

Israel	072-2410527
Turkey	90-212-222-0422

**ADVANTECH**

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