Advantech Embedded Automation PC

New Generation of Automated Industrial Applications Controllers

ADVANTECH

Enabling an Intelligent Planet

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Selection Guide

Model Name	UNO-2272G	UNO-2362G	UNO-2483G / UNO-2473G
Form-Factor	Palm-Size	Small-Size	Regular-Size
CPU	Intel® Atom™ N2800 1.86GHz Dual Core Intel® Atom™ E3825 1.33GHz Dual Core	AMD G-Series APU T40E 1.0GHz Dual Core	Intel® Core™ i7-4650U ULT 1.7GHz Dual Core Intel® Core™ i3-4010U ULT 1.7GHz Dual Core Intel® Celeron® 2980U ULT 1.6GHz Dual Core Intel® Atom™ E3845 1.91GHz Quad Core
Onboard RAM	2G DDR3/DDR3L SDRAM	2G DDR3 SDRAM	8G/4G DDR3L SDRAM
Display	N2800:VGA E3825:HDMI	HDMI/DP	HDMI/VGA
Audio	Yes	-	Yes
Serial Ports	1 x RS-232	1 x RS-232, 1 x RS-485	2 x RS-232, 2 x RS-422 / 485
Ethernet Ports	1 x 10/100/1000Base-T	2 x 10/100/1000Base-T, (1 x Giga Ethernet switch with daisy chain technology)	4 x 10/100/1000Base-T
USB Ports	3 external (E3825 w/ 1xUSB3.0)	4 external	4 external (2 x USB3.0) / 4 external (1 x USB3.0)
Storage	1 x mSATA	1x mSATA, 1x SATA(Optional)	2 x SATA (1 x SATA for UNO-2473G) 1 x mSATA
Expansion	N2800:1 x Full-Size, 1x Half-Size mPCIe Slot, PCIe 2.0 E3825:2 x Full-Size mPCIe Slot, PCIe 2.0	1 x Full-size mPCIe slot, (supports mSATA / SIM card)	UNO-2483G: 2 x Full-Size, 1x Half-Size mPCIe Slot, PCIe 2.0 UNO-2473G: 3 x Full-Size mPCIe Slot, PCIe 2.0
Watchdog Timer	Programmable 256 levels timer interval, from 1 to 255 sec		
Operating System	Windows 7/8 WES7/WES8, Fedora Linux	Windows XP/7/8 WES7/WES8, WES 2009, Fedora Linux	Windows 7/8 WES7/WES8, Fedora Linux
Operating Temperature	- 20 ~ 60°C (-4 ~ 140°F)	- 10 ~ 60°C (14 ~ 140°F)	- 20 ~ 60°C (-4 ~ 140°F)
Dimensions	157 x 88 x 88 mm (W x D x H)	190 x 107 x 47 mm (W x D x H)	252 x 149 x 62 mm (W x D x H)
Ordering Information	**UNO-2272G-N2AE** Intel Atom Processor N2800 1.86Ghz, 2GB, 1xGbE, 2xmPCIe **UNO-2272G-E2AE** Intel Atom Processor E3825 1.33Ghz, 2GB, 1xGbE, 2xmPCIe	**UNO-2362G-T2AE** AMD G-series T40E 1.0GHz, 2GB, 1 x GbE, 1 x mPCIe, HDMI/DP	**UNO-2483G-4C3AE** Intel® Celeron® 2980U ULT 1.6GHz, 4GB, 4 x LANs, 3 x mPCIe **UNO-2483G-434AE** Intel® Core™ i3-4010U ULT 1.7GHz, 8GB, 4 x LANs, 3 x mPCIe **UNO-2483G-474AE** Intel® Core™ i7-4650U ULT 1.7GHz, 8GB, 4 x LANs, 3 x mPCIe **UNO-2473G-E3AE** Intel® Atom™ E3845 1.91GHz, 8GB, 4 x LANs, 3 x mPCIe

Advantech iDoor Module

Memory/Storage/External I/O | Communication | FieldBus | Digital / Analog I/O

PCM-2300MR
MR4A16B, MRAM, 2MByte

PCM-2300TP
TPM Compliant with TCG 1.2

PCM-23C1CF
CFast, Ejection Type I, CFast x 1

PCM-23U1DG
Locked USB Slot for USB Dongle, USB x 1

PCM-24D2R2/24D2R4
OXPCIe-952 UART, Isolated RS-232, 422/485, DB9 x 2

PCM-24D4R2/24D4R4
OXPCIe-954 UART, Non-Isolated RS-232, 422/485, DB37 x 1

PCM-24R2PE
Intel i350, GbE, PoE IEEE 802.3af, PD, RJ45 x 2

PCM-24R2GL
Intel i350 PCIe, GbE, LAN Mini Card, RJ45 x 2

PCM-24R1TP
Intel 82574L, GbE, IEEE 1588 PTP, RJ45 x 1

PCM-24U2U3
USB 3.0 Mini Card, USB x 2

PCM-24S2WF
802.11 a/b/g/n 2T2R w/ BT4.0, Atheros AR9462, SMA x 2

PCM-24S23G
6-band HSPA Cellular Module, SIM Holder+ GPS, SMA x 2

PCM-24S24G
LTE Bands, UMTS/HSPA Bands, GPS/GPRS Bands, SMA x 2

PCM-26D2CA
SJA1000 CANBus, CANOpen, DB9 x 2

PCM-26D1PB
Hilscher netX100 FieldBus, ProfiBus, DB9 x 1

PCM-27D24DI
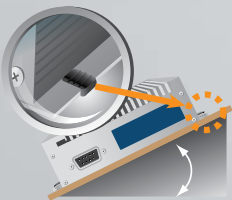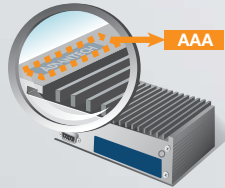Digital I/O, 16 DI / 8 DO, Isolation, DB37 x 1

Product Features

Customization Service

For different vertical markets, Advantech's new UNO-2000 series can be customized as such:
- Re-labeling, and changing colors or packing
- Minor customization, re-configuring the system
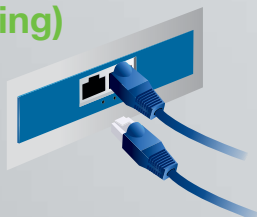- Full customization, request for changing the design process

Rubber Stopper Design with Captive Screw

The new UNO-2000 series includes a rubber stopper to ensure the system is more stable, and provides easy and efficient handling and installation.

LAN Redundancy (Teaming)

LAN Redundancy (Teaming) Embedded Automation Computers support the teaming function. When one Ethernet port is not working, another port will immediately take over.

Fault-Protected RS-485

The new UNO-2000 series are designed to survive overvoltage faults such as direct shorts to power supplies, miswiring faults, connector failures, cable crushes, tool mis-applications, and also ESD events.

Dual HDD/SSD Support with RAID 0/1

With an additional RAID controller or optional onboard RAID functionality, data can be completely backed up using the mirror function.
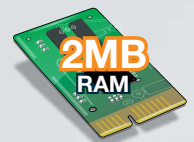
Daisy Chain for Ethernet

UNO real-time Ethernet modules are equipped with daisy chain capabilities making it the easiest way to add more controllers into an existing network. Data acquisition modules are connected in series to the next and then bounce the signal in a sequence until it reaches the destination, helping improve scalability and improving resistance against the sort of interference that's common in factories.

Non-Volatile RAM

Advantech's industrial MRAM with Mini PCIe card provides 2MB memory making them suitable for frequent data access and fast writing speed. It provides data retention for over 20 years whilst eliminating reliability concerns, functional disadvantages, and the system design complexities of SRAM.

Advantech Embedded Automation Computers

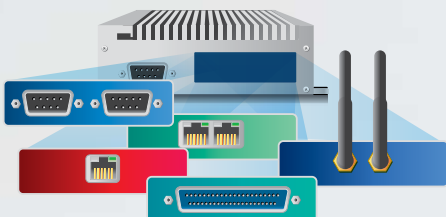## Compact Design with Wide Range of Product Form-Factor

Advantech's UNO-2000 series of fanless highly ruggedized Embedded Automation Computers include an embedded operating system (Windows CE, Windows XPE, WES7, WES8, Linux- Embedded). They also include Advantech iDoor technology which supports automation feature extensions such as industry fieldbus communication, Wi-Fi/3G, digital I/O, including Palm, Small, and Regular-size form-factors with indicated market segments in terms of entry, value and performance product positioning. Both entry and value Embedded Automation Computers feature specific functions and they are suitable for data gateway, concentrator and data server applications. The performance model can shorten your development time and offer multiple networking interfaces to fulfill a diverse range of requirements.

Advantech iDoor Technology

Diverse System I/O and Digital I/O

From isolated digital I/O lines to RS-232/422/485, the UNO-2000 series are ideal solutions for gateway, protocol conversion and data server applications. For industrial data transmission the UNO-2000 also includes digital IO.
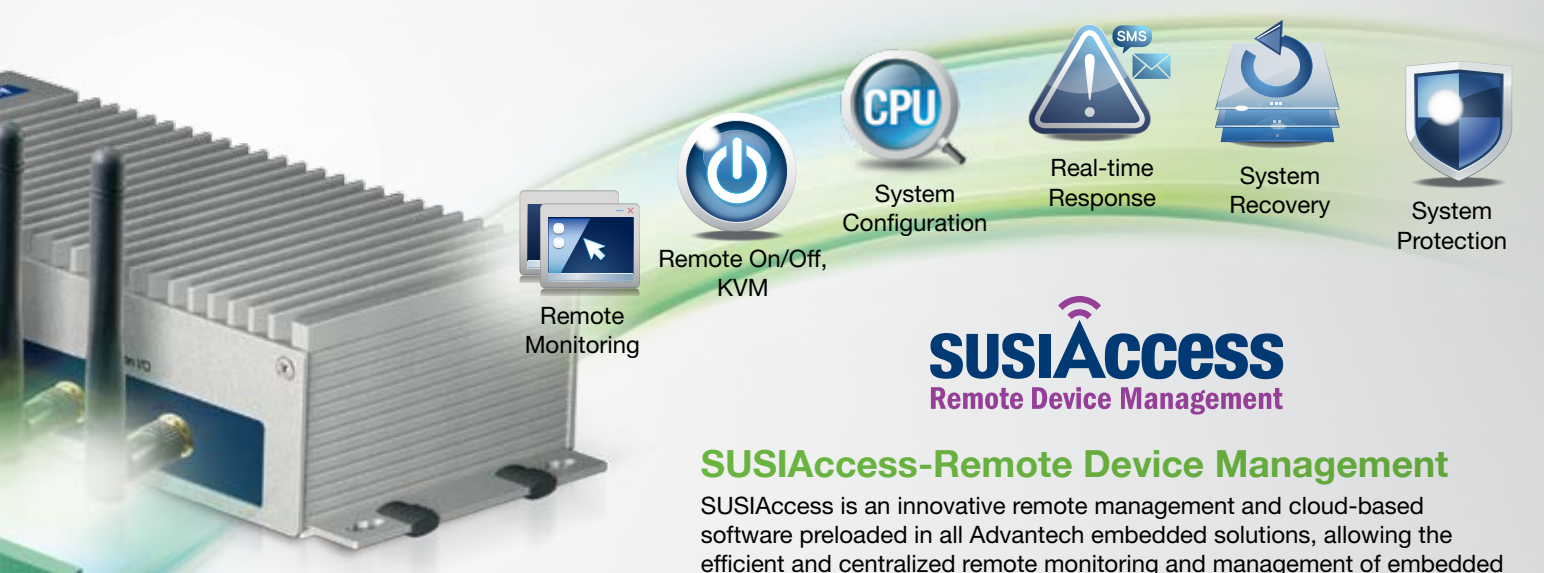
Fieldbus Support

The new UNO series, act as reliable data gateways, SCADA nodes or PC-base control nodes in industrial automation systems. However, in some scenarios, users may need faster real-time communication and reliability. PCM module which support PROFIBUS, PROFINET, CANopen, EtherCAT, and EtherNet/IP which comes from Advantech iDoor technology.

Intelligent Software

Advantech WebAccess

Advantech WebAccess is a 100% web browser-based software package for HMI and SCADA with private cloud software architecture. All the features found in conventional HMI and SCADA software including Animated Graphics Displays, Real-time Data, Control, Trends, Alarms and Logs, are available in an standard web browser.

WebAccess

Remote Monitoring

Remote On/Off, KVM

CPU
System Configuration

SMS
Real-time Response

System Recovery

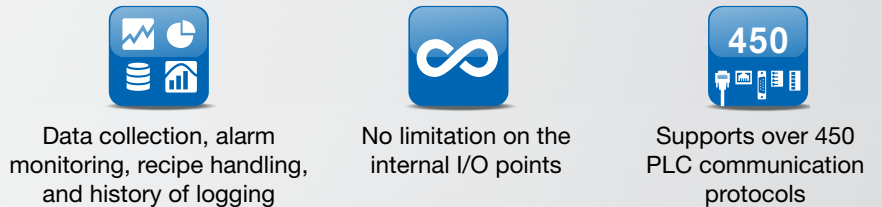System Protection

SUSIAccess
Remote Device Management

SUSIAccess-Remote Device Management

SUSIAccess is an innovative remote management and cloud-based software preloaded in all Advantech embedded solutions, allowing the efficient and centralized remote monitoring and management of embedded devices in real-time, device health status, system configuration, system protection, and recovery & backup. SUSIAccess targets the needs of creating a more intelligent and interconnected embedded computing solution.

PANELEXPRESS
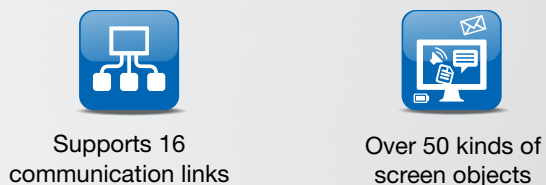Designed for Convenience

Panel Express

PanelExpress is a Windows based HMI runtime software, it enables you to utilize the resources of a PC, such as computation power, multimedia and bigger screen to realize a high-end sophisticated HMI.

Data collection, alarm monitoring, recipe handling, and history of logging

No limitation on the internal I/O points

450
Supports over 450 PLC communication protocols

Supports 16 communication links

Over 50 kinds of screen objects

Versatile Communication Capability

Due to Advantech iDoor Technology and through reserved antenna holes, it provides the following communications
• PoE
• 3G/GPS/GPRS/Wi-Fi
• Isolated COM
• ZigBee

ZigBee GPRS
Wi-Fi 3G
GPS PoE

Advantech Innovative Design Concept- Simple, Flexible, Reliable

As a leading provider of Industrial PC, Advantech devoted to innovation product/service development. To be the pioneer in intelligent automation technology, the i-concept represents the intelligent, integrated and intuitive design which covers the innovation of service model, user behavior and cutting-edge technology that opens a new era of industrial automation.

iKey

An integrated intelligent key brings simplified intuitive operation for configuring your automation panel. With a flexible software design, customized functions are easier to carry out.

iDoor

A standardized modular Interface which offers flexible expansion to increase the number of applications and expand system functions through the variety of standardized modular I/Os.

iLink

A Reliable Long Distance Transmission Technology which transfers video signals and touch control over a single Ethernet cable which overcomes interference in harsh environments not only for data connections, but also for a cost effective multiple display solution.

Regional Service & Customization Centers

China	Taiwan	Netherlands	Poland	USA/ Canada
Kunshan	Taipei	Eindhoven	Warsaw	Milpitas, CA
86-512-5777-5666	886-2-2792-7818	31-40-267-7000	48-22-33-23-740 / 41	1-408-519-3898

Worldwide Offices

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Saude-São Paulo	55-11-5592-5355

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More Information

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