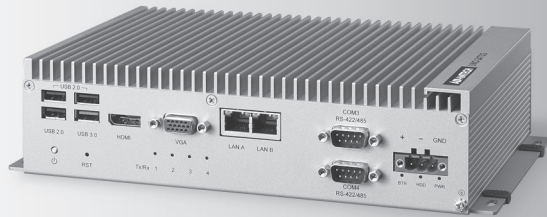


# UNO-2473G

## Intel® Atom™/Celeron J1900 Processor Regular-Size Automation Computer w/ 4 x GbE, 3 x mPCIe, HDMI/VGA

**NEW**



iDoor susiAccess



## Introduction

Advantech's UNO-2000 series of Embedded Automation Computers are fanless with highly ruggedized with an embedded operating system (Linux-Embedded). It also includes 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.

## Specifications

### General

- **Certification** CE, FCC, UL, CCC, BSMI
- **Dimensions (W x D x H)** 252 x 149 x 62 mm (9.9" x 5.9" x 2.4")
- **Form Factor** Regular Size
- **Enclosure** Aluminum Housing
- **Mounting** Stand, Wall, VESA (Optional), Din-rail (Optional)
- **Weight (Net)** 1.6kg (3.5lbs)
- **Power Requirements** 24V<sub>DC</sub> ± 20% / 9 ~ 36 V<sub>DC</sub> (e.g +12V @ 1.16A)
- **Power Consumption** 28W (Typical), 48W (Max) / 10W (Typical), 14W(Max)
- **OS Support** Microsoft® Windows 7/8

### System Hardware

- **BIOS** AMI UEFI 128Mbit Flash BIOS
- **Watchdog Timer** Programmable 256 levels timer interval, from 1 to 255 sec
- **Processor** Intel® Atom™ Processor E3845 1.91 GHz Quad Core, 2MB L2  
Intel® Celeron™ Processor J1900 2.42 GHz Quad Core, 2MB L2
- **System Chip** Intel Atom™/Celeron J1900 Processor SoC integrated
- **Memory** On-board 4GB DDR3L 1600 MHz / 4GB DDR3L 1333 MHz
- **Graphics Engine** Intel® HD Graphics: Gen7 with 4EU
- **Ethernet** Intel® i210-IT GbE, 802.1Qav, IEEE1588/802.1AS, 802.3az
- **LED Indicators** LEDs for Power, battery, LAN (Active, Status), Tx/Rx and HDD
- **Storage** One mSATA  
One drive bay for SATA 2.5" HDD (Compatible with 9.5mm height HDD)  
CFAST drive by iDoor Technology (Optional)
- **Expansion** 3 x Full-size mPCIe slot, mPCIe 2.0 for UNO-2473G-E3AE  
1 x Full-size mPCIe slot, mPCIe 2.0 for UNO-2473G-J3AE

### I/O Interfaces

- **Serial Ports** 2 x RS-232, DB9, 50~115.2kbps  
2 x RS-422/485, DB9, auto flow control, 50~115.2kbps
- **LAN Ports** 4/2 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000Base-T Fast Ethernet
- **USB Ports** 4 x USB Ports (3 x USB2.0, 1 x USB3.0 compliant)  
5 x USB Ports (4 x USB 2.0, 1 x USB 3.0 compliant)
- **Displays** 1 x VGA, supports 2560 x 1600 at 60Hz  
1 x HDMI, supports 1920 x 1080 at 60Hz  
eDP is supported on a project basis **audio** Line-In, Line-Out
- **Power Connector** 1 x 3 Pins, Terminal Block
- **Grounding Protection** Chassis Grounding

## Features

- 4<sup>th</sup> Generation Intel® Atom™/Celeron J1900 Processor up to 1.91 GHz with 4GB DDR3L Memory
- 4/2 x GbE, 3 x USB 2.0 and 1 x USB 3.0/4 x USB 2.0 and 1 x USB 3.0, 2 x RS-232, 2 x RS-422/485, 1 x VGA, 1 x HDMI, Audio
- Comprehensive Palm, Small, Regular-size form-factor
- Compact with Fanless Design
- Rubber Stopper Design with Captive Screw
- Diverse system I/O and Isolated Digital I/O by iDoor Technology
- 3G/GPRS/GPRS/Wi-Fi Communication by iDoor Technology
- Supports MRAM by iDoor Technology
- Chassis Grounding Protection
- LAN Redundancy (Teaming)
- Fault-Protected RS-485 Transceivers With Extended Common-Mode Range

### Environment

- **Operating Temperature** UNO-2473G-E3AE: -20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow  
UNO-24873G-J3AE: -10 ~ 60°C (14 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- **Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11ms
- **Vibration Protection** Operating, IEC 60068-2-64, 2Grms, random, 5 ~ 500Hz, 1hr/axis (mSATA)  
Operating, IEC 60068-2-64, 0.7Grms, random, 5 ~ 500Hz, 1hr/axis (HDD)
- **Ingress Protection** IP40

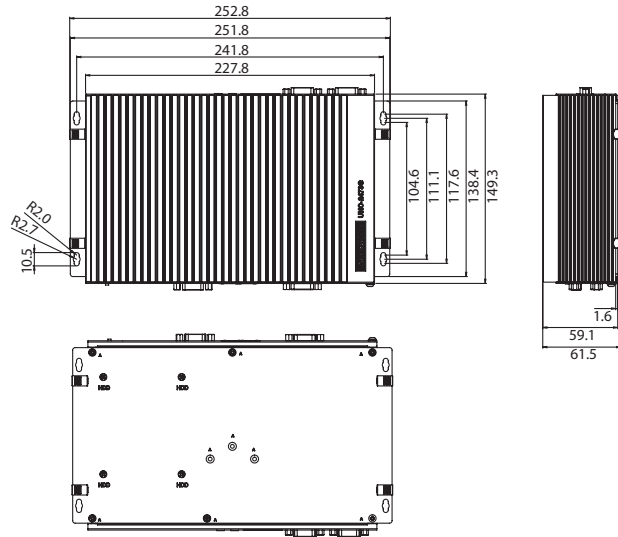
## Application Software

	Version : V2.1 or above An innovative remote device management software, allowing efficient remote monitoring, quick recovery & backup, and real-time remote configuration, to create a more intelligent and interconnected embedded computing solution.
	Version : V7.1 or above WebAccess, as the core of Advantech's IoT solution, is full web browser-based software package for HMI and SCADA software. All HMI and SCADA software features including: Animated Graphics Displays, Real-time Data, Control, Trends, Alarms and Logs, are available in a standard web browser. WebAccess is built around the latest internet technologies. With its open architecture, vertical domain applications can easily be integrated.
	Version : V2.0.3.8 or above Panel Express, a windows based HMI mini SCADA, realizes the cross platform flexibility offered by WebOP Designer to switch hardware for the consideration of cost and performance become an easy job. Panel Express software provides the best economic and express solution for data intensive high-end HMI applications.
	Version : V2.0.3.8 or above An easy to use integrated development tool featuring solution-oriented screen objects, high-end graphics, Windows fonts for multi-language applications. WebOP runtime, a part of WebOP Designer, guarantees reliability and performance because of the minimum system overhead, high communication data rates, and sub-second screen switching.

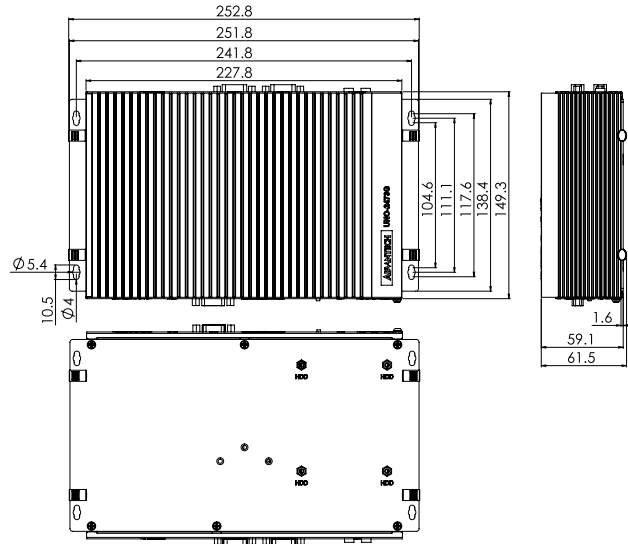
## Dimensions and I/O

Unit: mm

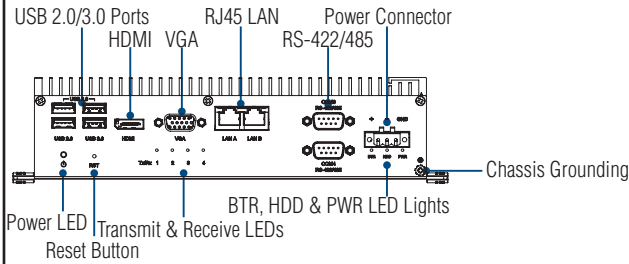
### UNO-2473G-E3AE



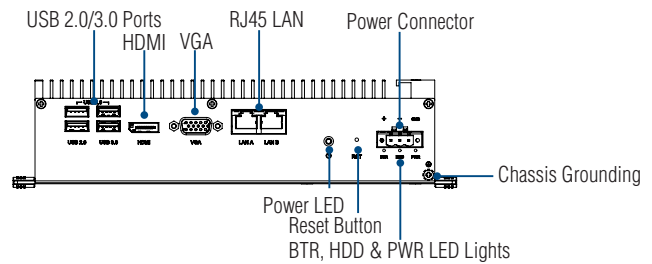
### UNO-2473G-J3AE



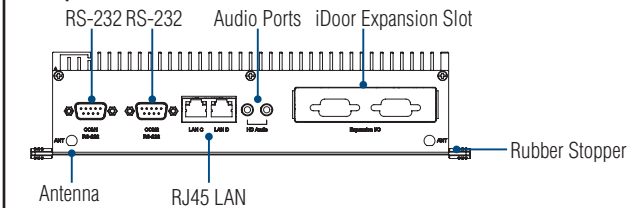
### Front I/O



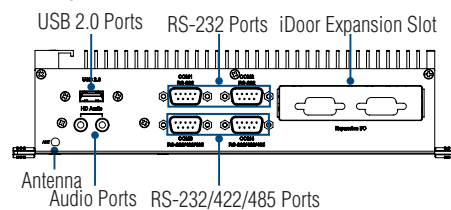
### Front I/O



### Rear I/O



### Rear I/O



## Ordering Information

- UNO-2473G-E3AE Intel® Atom™ E3845 1.91GHz, 4GB, 4 x LANs, 3 x mPCIe
- UNO-2473G-J3AE Intel® Celeron J1900 2.42GHz, 4GB, 2 x LANs, 1 x mPCIe

## iDoor Modules

- PCM-24D4R2-AE 4-Port Non-Isolated RS-232 mPCIe, DB37
- PCM-24D4R4-AE 4-Port Non-Isolated RS-422/485 mPCIe, DB37
- PCM-26D2CA-AE 2-Port Isolated CANBus mPCIe, CANOpen, DB9
- PCM-27D24DI-AE 24-Channel Isolated Digital I/O w/ counter mPCIe, DB37
- PCM-2300MR-AE MR4A16B, MRAM, 2 MByte, mPCIe
- PCM-24S2WF-AE WiFi 802.11 a/b/g/n 2T2R w/ Bluetooth4.0, Half-size mPCIe, 2-port SMA
- PCM-24U2U3-AE 2-Port USB 3.0, mPCIe, USB-A type
- PCM-24R2GL-AE 2-Port Gigabit Ethernet, mPCIe, RJ45
- PCM-24S23G-AE Wide-Temp 3.75G HSPA and GPS, 2-in-1, Full-size mPCIe w/ Redundant SIM Card holder, 2-port SMA

## Accessories

- 96PSA-A60W24T2 ADP A/D 100-240V 60W 24V C14 Cord End Terminal
- PWR-249-AE 65W AC to DC power adapter (Commercial Grade)
- 1702002600 Power Cable US Plug 1.8 M (Industrial Grade)
- 1702002605 Power Cable EU Plug 1.8 M (Industrial Grade)
- 1702031801 Power Cable UK Plug 1.8 M (Industrial Grade)
- 1700000596 Power Cable China/Australia Plug 1.8 M (Industrial Grade)
- 1700001524 Power Cable 3-pin US type 1.8 M (Commercial Grade)
- 170203183C Power Cable 3-pin EU type 1.8 M (Commercial Grade)
- 170203180A Power Cable 3-pin UK type 1.8 M (Commercial Grade)

## Embedded OS & Automation Software

- 2070013268 Image WES7P X64 MUI, V4.12.B001 for UNO-2473G-Ex
- 968WEXP003X PanelExpress V2.0 300 tags S/W license
- 968WEXP015X PanelExpress V2.0 1500 tags S/W license
- 968WEXP050X PanelExpress V2.0 5000 tags S/W license