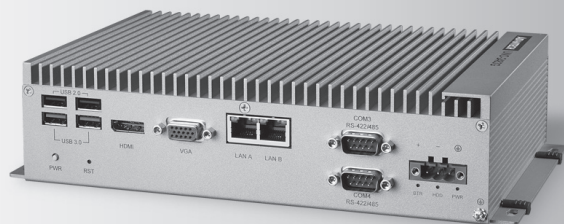


# UNO-2473G

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

**Preliminary**



## Introduction

Advantech's UNO-2000 series of Embedded Automation Computers are Fanless with highly ruggedised with an embedded operating system (Windows CE, Windows XPE, 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)
- **Weight (Net)** 1.6kg (3.5lbs)
- **Power Requirement** 24V<sub>DC</sub> ± 20%
- **Power Consumption** 28W (Typical), 72W(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
- **System Chip** Intel Atom SoC integrated
- **Memory** On-board 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

### I/O Interfaces

- **Serial Ports** 2x RS-232, DB9, 50-115.2kbps  
2x RS-422/485, DB9, auto flow control, 50-115.2kbps
- **LAN Ports** 4x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000Base-T Fast Ethernet
- **USB Ports** 4x USB Ports (3 x USB2.0, 1 x USB3.0 compliant)
- **Displays** 1x VGA, supports 1920x1200@60Hz 24bpp  
1x HDMI 1.4a, supports 1920x1080P @ 60Hz 24bpp
- **Audio** Line-In, Line-Out
- **Power Connector** 1x 3 Pins, Terminal Block
- **Grounding Protection** Chassis Grounding

## Features

- 4th Generation Intel® Atom™ Processor up to 1.91GHz with 4GB DDR3L Memory
- 4 x GbE, 4 x USB 2.0/3.0, 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
- Dual HDD/SSD support with RAID 0/1 in regular-size
- Diverse system IO and Isolated Digital IO by iDoor Technology
- Supports Fieldbus Protocol by iDoor Technology
- 3G/GPRS/WiFi Communication by iDoor Technology
- Supports Battery-backup MRAM by iDoor Technology
- Chassis Grounding Protection
- LAN Redundancy (Teaming)
- Fault-Protected RS-485 Transceivers With Extended Common-Mode Range

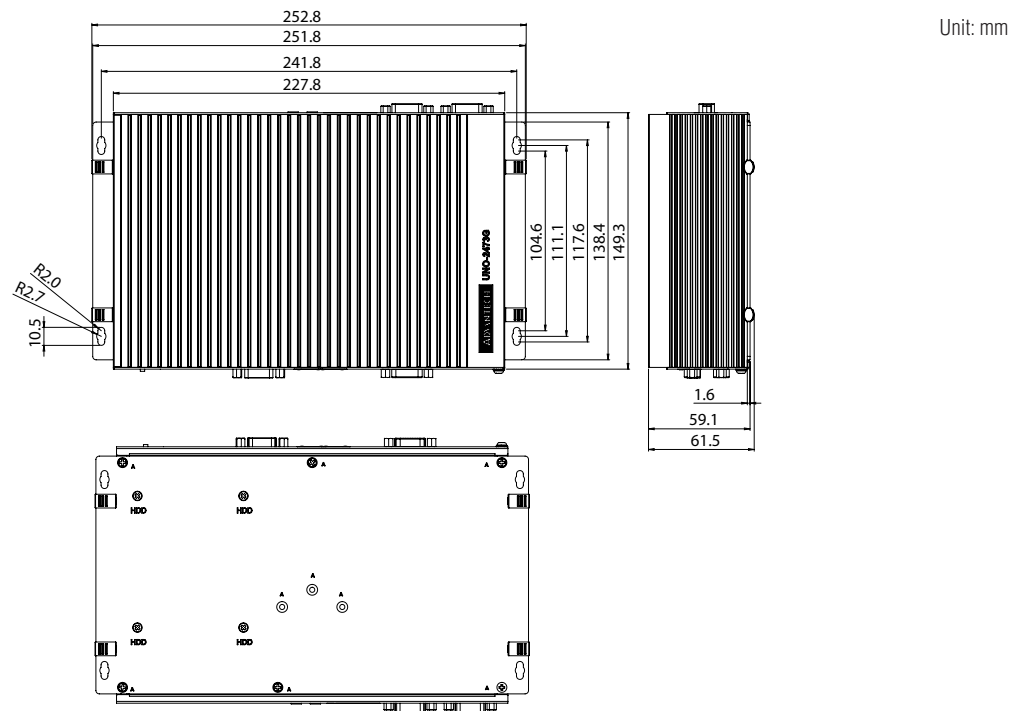
### Environment

- **Operating Temperature** UNO-2473G-E2AE: -20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow  
UNO-2473XXXXX: -40 ~ 60°C (-40 ~ 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,

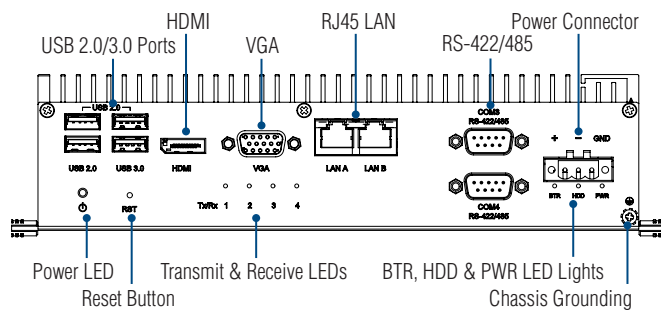
## Application Software

	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.

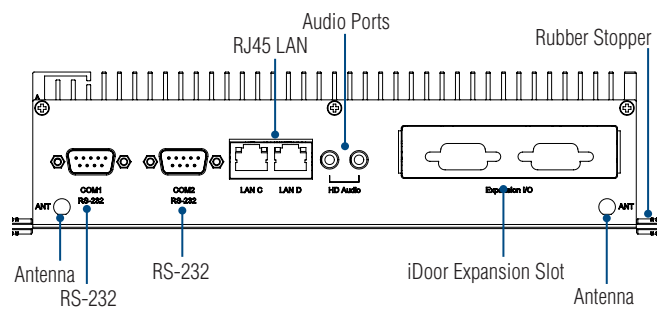
## Dimensions



## Front IO View



## Rear IO View



- Ingress Protection 1hr/axis (HDD) IP40

## Ordering Information

- **UNO-2473G-E3AE** Intel® Atom E3845 1.91GHz, 4GB, 4 x LANs, 2 x mPCIe

## iDoor Modules

- **PCM-2300MR-AE** MR4A16B, 2MByte
- **PCM-26D1PB-AE** Hilscher netX100 FieldBus, ProfiBus, DB9 x 1
- **PCM-26D2CA-AE** SJA1000 CANBus, CANOpen, DB9 x 2
- **PCM-24D2R4-AE** OXPcie-952 UART, Isolated RS-422/485, DB9 x 2
- **PCM-24D2R2-AE** OXPcie-952 UART, Isolated RS-232, DB9 x 2
- **PCM-24D4R4-AE** OXPcie-954 UART, Non-Isolated RS-422/485, DB37 x 1

- **PCM-24D4R2-AE** OXPcie-954, UART, Non-Isolated RS-232, DB37 x 1
- **PCM-27D24DI-AE** Digital I/O, 16DI / 8DO, DB37 x 1

## Accessories

- **1757002321** 63W, AC-DC, 100-240V, 24VDC 2.62A Power Supply
- **1702002600** Power Cable US Plug 1.8 M
- **1702002605** Power Cable EU Plug 1.8 M
- **1702031801** Power Cable UK Plug 1.8 M
- **1700000596** Power Cable China/Australia Plug 1.8 M

## Embedded OS & Automation Software

- **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