

# UNO-2473G

## Intel® Atom™ E3845/Celeron® J1900 Processor Regular-Size Automation Computer

NEW



### Features

- 4th Generation Intel® Atom™/Celeron® J1900 Processor up to 1.91/2.0 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 (E3AE), 2 x RS-232/422/485 (J3AE), 1 x VGA, 1 x HDMI, Audio
- Compact with fanless design
- Rubber stopper design with captive screws
- Diverse system I/O and isolated digital I/O by iDoor technology
- 3G/GPS/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

### Introduction

Advantech's UNO-2000 series of Embedded Automation Computers are a fanless and highly ruggedized design for industrial application. The series 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% (UNO-2473G-E3AE)  
12/24V<sub>DC</sub> ± 20% (UNO-2473G-J3AE)
- **Power Consumption** UNO-2473G-E3AE: 15W (Typical), 68W (Max)  
UNO-2473G-J3AE: 15W (Typical), 55W (Max)
- **OS Support** Microsoft® Windows 7/8, Windows 10, Windows Embedded Compact 7, Advantech Linux

#### System Hardware

- **BIOS** AMI UEFI 128Mbit Flash BIOS
- **Watchdog Timer** Programmable 255 levels timer interval, from 1 to 255 sec
- **Processor** Intel® Atom™ Processor E3845 1.91 GHz Quad Core  
Intel® Celeron™ Processor J1900 2.0 GHz Quad Core
- **System Chip** Integrated Intel SoC Chipset
- **Memory** Built-in 4GB DDR3L 1600MHz
- **Graphics Engine** Intel® HD Graphics
- **Ethernet** Intel® i210-IT GbE, 802.1Qav, 802.1AS, 802.3az
- **LED Indicators** LEDs for Power, battery, LAN (Active, Status), COM (Tx/Rx) (UNO-2473G-E3AE only) and HDD
- **Storage** One mSATA slot  
One drive bay for SATA 2.5" HDD
- **Expansion** UNO-2473G-E3AE : 3 x Full-size mPCIe slot, mPCIe 2.0  
UNO-2473G-J3AE: 1 x Full-size mPCIe slot, mPCIe 2.0

#### I/O Interfaces

- **Serial Ports** UNO-2473G-E3AE: 2 x RS-232, DB9, 50 ~ 115.2kbps,  
2 x RS-422/485, DB9, auto flow control, 50 ~ 115.2kbps  
UNO-2473G-J3AE: 2 x RS-232, DB9, 50 ~ 115.2kbps,  
2 x 232/422/485, DB9, auto flow control, 50 ~ 115.2kbps
- **LAN Ports** UNO-2473G-E3AE: 4 x RJ45, 10/100/1000 Mbps IEEE 802.3u  
1000BASE-T Fast Ethernet  
UNO-2473G-J3AE: 2 x RJ45, 10/100/1000 Mbps IEEE 802.3u  
1000BASE-T Fast Ethernet

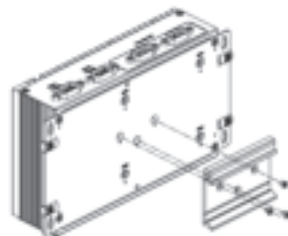
- **USB Ports** UNO-2473G-E3AE: 4 x USB Ports (3 x USB 2.0, 1 x USB 3.0 compliant)  
UNO-2473G-J3AE: 5 x USB Ports (4 x USB 2.0, 1 x USB 3.0 compliant)
- **Displays** 1 x VGA, supports 1920 x 1080 at 60Hz  
1 x HDMI, supports 1920 x 1080 at 60Hz
- **Audio** Line-in, Line-out
- **Power Connector** 1 x 3 Pins, Terminal Block
- **Grounding Protection** Chassis Grounding

#### Environment

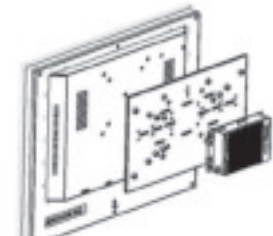
- **Operating Temperature** UNO-2473G-E3AE: -20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow  
UNO-2473G-J3AE: -10 ~ 60°C (14 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- **Shock Protection** 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

### Installation Scenario

#### DIN-rail Mount Illustration



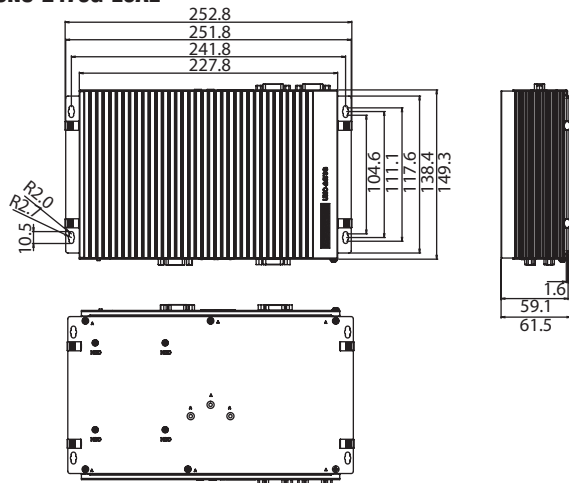
#### VESA Mount Illustration



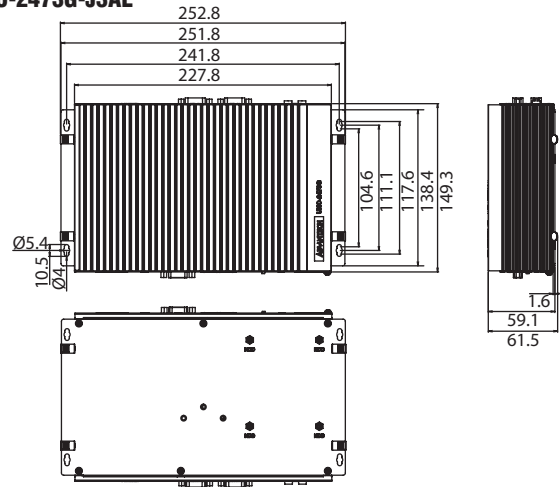
Unit: mm

## Dimensions

UNO-2473G-E3AE

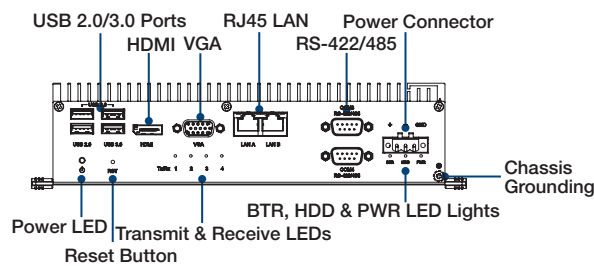


UNO-2473G-J3AE

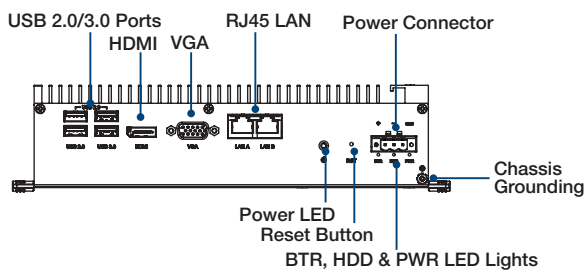


## Front I/O View

UNO-2473G-E3AE

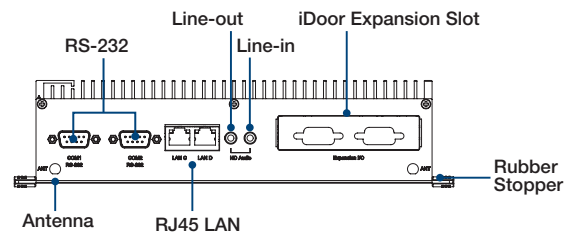


UNO-2473G-J3AE

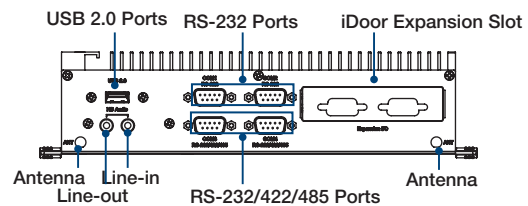


## Rear I/O View

UNO-2473G-E3AE



UNO-2473G-J3AE



## Ordering Information

- UNO-2473G-E3AE Intel® Atom™ E3845 1.91GHz, 4GB, 4 x LANs, 3 x mPCIe
- UNO-2473G-J3AE Intel® Celeron J1900 2.0GHz, 4GB, 2 x LANs, 1 x mPCIe

## iDoor Modules

- \* PCM-23C1CF-BE 1 CFast Slot with Cover Protection
- \* PCM-23U1DG-BE Internal locked USB Slot for USB Dongle
- \* PCM-24R2GL-AE 2-Port Gigabit Ethernet, mPCIe, RJ45
- \* PCM-24U2U3-AE 2-Port USB 3.0, mPCIe, USB-A type
- \* PCM-24D2R2-BE 2-Port Isolated RS-232 mPCIe, DB9
- \* PCM-24D4R2-BE 4-Port Non-Isolated RS-232 mPCIe, DB37
- \* PCM-24S2WF-BE WiFi 802.11 ac/a/b/g/n 2T2R w/Bluetooth 4.1
- \* PCM-24S33G-AE Wide-Temp 3.75G HSPA and GPS, Redundant SIM Card holder
- \* PCM-2300MR-AE MR4A16B, MRAM, 2 MByte, mPCIe
- \* PCM-27D24DI-AE 24-Channel Isolated Digital I/O w/ counter mPCIe, DB37

## Optional Accessories

- 96PSA-A60W24T2 ADP A/D 100-240V 60W 24V C14 Cord End Terminal
- 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)
- UNO-2000G-DMKAE UNO-2000 DIN Rail Kit
- UNO-2000G-VMKAE UNO-2000 VESA Mount Kit

## Embedded O/S

- 2070014934 WIN10 ENT 2016 LTSB V6.01 B022
- 2070014322 WS7P X64 MUI. V4.14B001
- 2070015315 WEC7 MUI V4.01 B093