

UNO-2473G

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



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_{DC} ± 20% (UNO-2473G-E3AE)
12/24V_{DC} ± 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

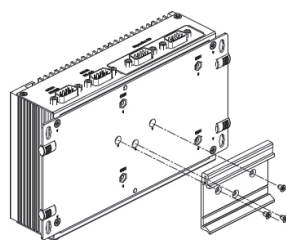
- USB Ports** UNO-2473G-E3AE: 4 x USB Ports (3 x USB 2.0, 1 x USB 3.0 compliant)
UNO-2473G-J3AE: 5 x USB Ports (4 x USB 2.0, 1 x USB 3.0 compliant)
- Displays** 1 x VGA, supports 1920 x 1080 at 60Hz
1 x HDMI, supports 1920 x 1080 at 60Hz
- Audio** Line-in, Line-out
- Power Connector** 1 x 3 Pins, Terminal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

Environment

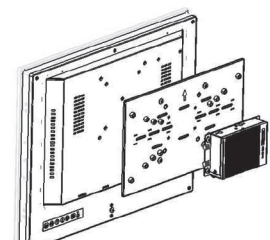
- Operating Temperature** UNO-2473G-E3AE: -20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow
UNO-2473G-J3AE: -10 ~ 60°C (14 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow
- Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- Shock Protection** Operating,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



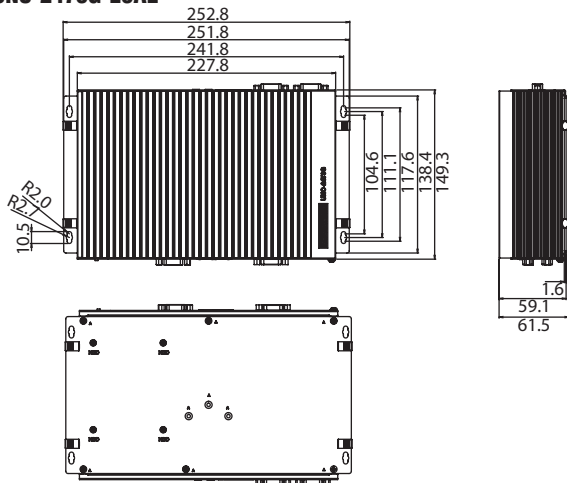
VESA Mount Illustration



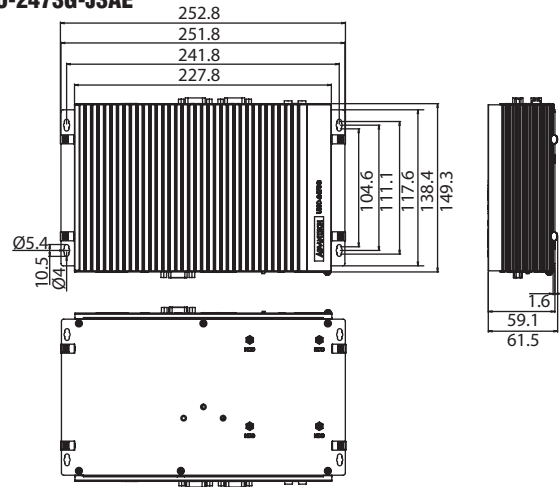
Dimensions

Unit: mm

UNO-2473G-E3AE

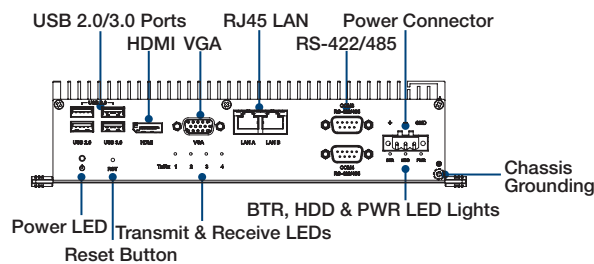


UNO-2473G-J3AE



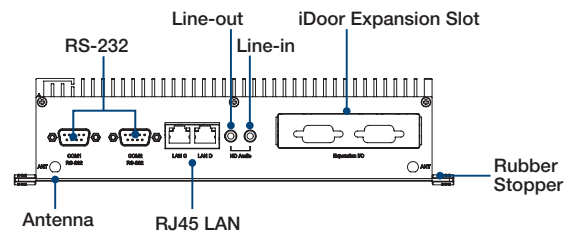
Front I/O View

UNO-2473G-E3AE

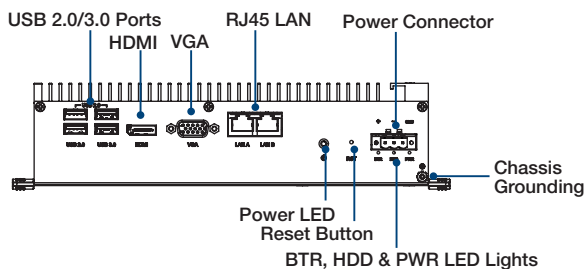


Rear I/O View

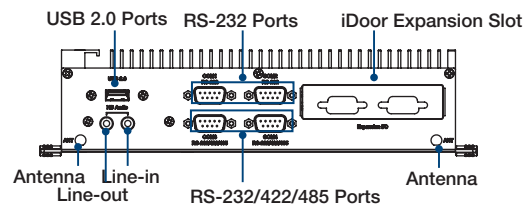
UNO-2473G-E3AE



UNO-2473G-J3AE



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-VMKCE 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

Please note: If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries. Please contact Advantech for certificate compliance.