

UNO-2484G

Intel® Core™ i7/i5/i3 Regular-Size
Modular Box Platform (MBP) with
4 x GbE, 1 x mPCIe, HDMI, DP

NEW



Features

- Intel® Core™ i7/i5/i3 Processor with 8GB DDR4 built-in memory
- 4 x GbE, 4 x USB 3.0, 1 x HDMI, 1 x DP, 4 x RS232/422/485
- Stackable 2nd layer for up to 4 iDoor extension or customize for domain applications
- Compact fanless design
- Ruggedized by zero cable and lockable I/O design
- Dedicated TPM2.0 microcontroller designed for hardware security
- Diverse system I/O and isolated digital I/O by iDoor technology
- Supports Fieldbus protocol by iDoor technology
- 3G/GPS/GPRS/Wi-Fi communication by iDoor technology
- Supports 30+ iDOOR combination with four main categories

Introduction

Advantech's new generation UNO-2000 series of Embedded Automation Computers are fanless and highly ruggedized with embedded OS. New UNO-2000 series are modular designs which provide flexible and time-to-market support in variety of applications. The series also includes iDOOR technology which supports automation feature-extensions such as multiple I/O peripherals, Industrial Fieldbus, and smart I/O Communication. New UNO-2000 series including pocket, small, and regular-size form-factors for smart factory applications such as Equipment Connectivity (EC), Process Visualization (PV), Environment Management (EM), and Dispatch Management (DM) solutions.

Specifications

General

- Certification** CE, FCC, UL, CCC, BSMI
- Dimensions (W x D x H)** 200 x 140 x 40 (7.8" x 5.6" x 1.6") for single stack
UNO-2484G version
200 x 140 x 70 (7.8" x 5.6" x 2.8") for double stack
UNO-2484G version
- Form Factor** Regular Size with stackable design
- Enclosure** Aluminum Housing
- Mounting** Stand, Wall, VESA (Optional), DIN-rail (Optional)
- Weight (Net)** Single stack: 1.4kg (3.09lbs)
Double stack: 1.8kg (3.97lbs)
- Power Requirement** 10 ~ 36 V_{DC}
- Power Consumption** 55W (Typical), 95.2W (Max)
- OS Support** Microsoft® Windows 7, 10, Advantech Linux (UNO-2484G-6 series)
Microsoft® Windows 10, Advantech Linux (UNO-2484G-7 series)

System Hardware

- BIOS** AMI EFI64 Mbit
- Watchdog Timer** Programmable 255 levels timer interval, from 1 to 255 sec
- Hardware Security** TPM2.0
- Processor** 6th Gen Intel Core i7-6600U, 2.6GHz
i5-6300U, 2.4GHz
i3-6100U, 2.3GHz
7th Gen Intel Core i7-7600U, 2.8GHz
i5-7300U, 2.6GHz
i3-7100U, 2.4GHz
- Memory** Built-in 8GB DDR4 2133 MHz
- Graphics Engine** Intel® HD Graphics 620
- Ethernet** LAN A: Intel i219-IT GbE, 802.1Qav, IEEE1588/802.1AS, 802
LAN B-D: Intel i210-IT GbE, 802.1Qav, IEEE1588/802.1AS, 802
- LED Indicators** LEDs for Power, HDD, LAN (Active, Status), RTC Battery low
- Storage** One mSATA (slot shared with mPCIe slot)
Two drive bay for SATA 2.5" SSD/HDD (Support RAID 0/1)
- Expansion** 1 x full-size mPCIe slot for single stack version (only support wireless iDOOR)
4 x full-size mPCIe slots for double stack version (1 slot for wireless iDOOR, 3 slots for all iDOOR modules)

I/O Interfaces

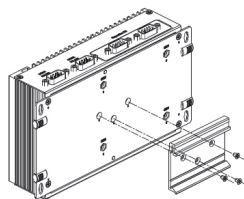
- Serial Ports** 4 x RS 232/422/485
- LAN Ports** 4 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast Ethernet
- USB Ports** 4 x USB3.0
- Displays** 1 x HDMI supports 1920 x 1080 @60Hz,
1 x DP supports 3840 x 2160 @30Hz
- Audio** Line-out
- Power Connector** 1 x 2 Pins, Terminal Block

Environment

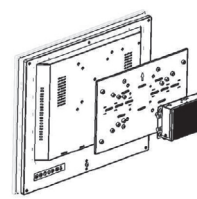
- Operating Temperature** -20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7 m/s airflow
- Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11 ms
- Vibration Protection** Operating, IEC 60068-2-64, 3 Grms, random, 5 ~ 500 Hz, 1hr/axis (mSATA)
- Ingress Protection** IP40

Installation Scenario

DIN-rail Mount Illustration



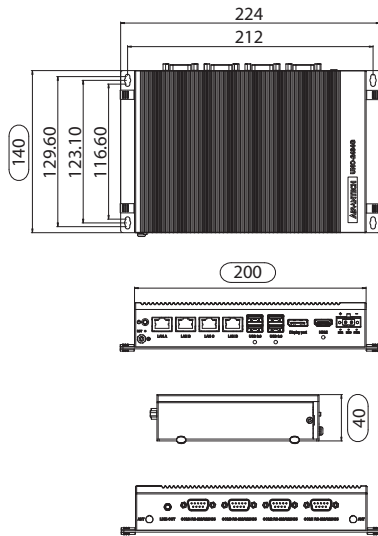
VESA Mount Illustration



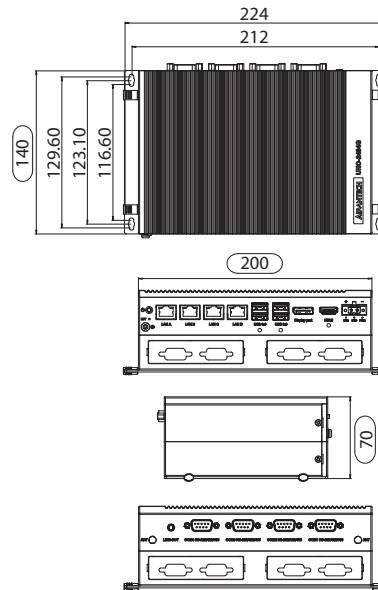
Dimensions

Unit: mm

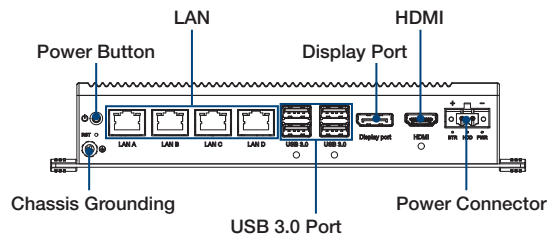
UNO-2484G Single stack version



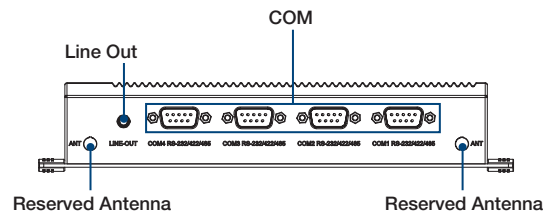
UNO-2484G double stack version



Front I/O View



Rear I/O View



Ordering Information

	Ordering Part Number	CPU generation	CPU	mPCIe slot	iDoor	USB	COM	LAN
Single Stack	UNO-2484G-7731AE	7 Gen.	i7-7600U	1	x	4	4	4
	UNO-2484G-7531AE		i5-7300U					
	UNO-2484G-7331AE		i3-7100U					
	UNO-2484G-6731AE	6 Gen.	i7-6600U					
	UNO-2484G-6531AE		i5-6300U					
	UNO-2484G-6331AE		i3-6100U					
Double Stack	UNO-2484G-7732AE	7 Gen.	i7-7600U	4	v	4	4	4
	UNO-2484G-7532AE		i5-7300U					
	UNO-2484G-7332AE		i3-7100U					
	UNO-2484G-6732AE	6 Gen.	i7-6600U					
	UNO-2484G-6532AE		i5-6300U					
	UNO-2484G-6332AE		i3-6100U					

iDoor Modules

- PCM-24S2WF-BE 802.11 a/b/g/n 2T2R w/ Bluetooth 4.0, Half-size mPCIe, 2-port SMA
- PCM-24S23G-AE 6-band HSPA Cellular Module, GPS, SIM holder, SMAx2
- PCM-24R2GL-AE 2-Port Gigabit Ethernet, mPCIe, RJ45
- PCM-24D2R2-BE 2-Port Isolated RS-232 mPCIe, DB9
- PCM-24D4R4-BE 4-Port Non-Isolated RS-422/485 mPCIe, DB37
- PCM-24R1TP-AE 1-Port Gigabit Ethernet, Intel® 82574L, mPCIe, RJ45
- PCM-27D24DI-AE 24-Channel Isolated Digital I/O w/ counter mPCIe, DB37

Contact Advantech for all compatible iDoor lists

Optional Accessories

- 96PSA-A150W24T2 Power Adapter 150W
- 96PSA-A120W24T2 Power Adapter 120W
- 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-VMKAE UNO-2000 VESA Mount Kit
- UNO-2000G-DMKAE UNO-2484G DIN RAIL Kit
- UNO-2000-LKAE Cable lockable kit 10 units/per pack

Operating System

UNO-2484G-6 series:

- 20703WE7PS0009 WIN10 LTSC V6.04 for i7 version
- 20703WX9HS0001 WIN10 LTSC V6.04 for i5/ i3 version
- 20703WX9VS0001

UNO-2484G-7 series:

- 20703WX9HS0000 WIN10 LTSC V6.04 for i7 version
- 20703WX9VS0000 WIN10 LTSC V6.04 for i5/ i3 version

Power Cable EU Plug 1.8 M (Industrial Grade)
Power Cable UK Plug 1.8 M (Industrial Grade)
Power Cable China/Australia Plug 1.8 M (Industrial Grade)
UNO-2000 VESA Mount Kit
UNO-2484G DIN RAIL Kit
Cable lockable kit 10 units/per pack

WS7P X64 MUI V4.18 B023 Image
WIN10 LTSC V6.04 for i7 version
WIN10 LTSC V6.04 for i5/ i3 version

WIN10 LTSC V6.04 for i7 version
WIN10 LTSC V6.04 for i5/ i3 version

Extended Module

UNO-2484G-EKBE

2nd stack expansion module for support 4 x iDOOR (3 mPCIe slot) on UNO-2484G-xx31AE



Specifications

General	
Ports	4 x iDOOR (3 x mPCIe only)
Dimensions	200 x 140 x 40 mm
Weight	400g
Environment	
Operating Temperature	-20 ~ 60 °C

Ordering Information

P/N	Description
UNO-2484G-EKBE	UNO-2484G 2nd stack expansion module for 4 iDoor

UNO-2484G-S2AE

2nd stack expansion module for support 2 external swappable HDD/SSD Storage on UNO-2484G-xx31AE



Specifications

General	
Ports	2 x external swappable HDD/SSD Storage
Dimensions	200 x 140 x 40 mm
Weight	400g
Environment	
Operating Temperature	-20 ~ 60 °C

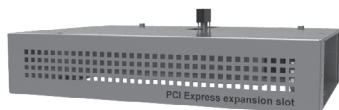
Ordering Information

P/N	Description
UNO-2484G-S2AE	UNO-2484G external swappable HDD extension kit

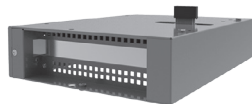
UNO-2484G-PCIEAE

2nd stack expansion module for support 1 PCIe4 card

Front view



Side View



Specifications

General	
Ports	1 x PCIe4 slot for half-length PCIe card (W167 x H111 mm)
Dimensions	200 x 140 x 40 mm
Weight	400g
Power consumption	15W (Max)
Environment	
Operating Temperature	0 ~ 50 °C (Depends on expansion card)

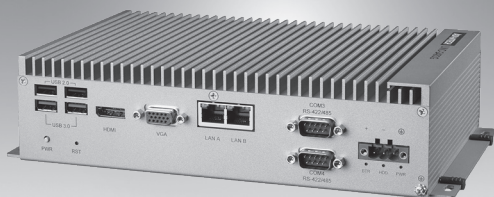
Ordering Information

P/N	Description
UNO-2484G-PCIEAE	UNO-2484G second stack PCIe4 expansion module

UNO-2483G

Intel® Core™ i7/i3/Celeron®
Regular-Size Automation Computer w/
4 x GbE, 3 x mPCIe, HDMI, VGA

NEW



Introduction

Advantech's new generation UNO-2000 series of Embedded Automation Computers are a highly ruggedized fanless and modular design. It includes iDoor technology which supports automation feature extensions such as industry fieldbus communication, Wi-Fi/3G, Digital I/O. There are various form factor offering from Pocket-size, Palm, and Regular-size 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** 24Vdc \pm 20%
- Power Consumption** 44W (Typical), 87W (Max)
- OS Support** Microsoft® Windows 7/8, Windows 10, Advantech Linux

System Hardware

- BIOS** AMI UEFI 128Mbit Flash BIOS
- Watchdog Timer** Programmable 255 levels timer interval, from 1 to 255 sec
- Processor** 4th Gen Intel® Core™ i7-4650U ULT 1.7 GHz Dual Core
4th Gen Intel® Core™ i3-4010U ULT 1.7 GHz Dual Core
4th Gen Intel® Celeron® 2980U ULT 1.6 GHz Dual Core
- System Chip** Integrated Intel SoC Chipset
- Memory** Built-in 4GB DDR3L 1600 MHz for UNO-2483G-4C3AE
Built-in 8GB DDR3L 1600 MHz for UNO-2483G-434AE and UNO-2483G-474AE
- Graphics Engine** Intel® HD Graphics
- Ethernet** LAN A: Intel® i218-LM GbE, Intel® AMT (for UNO-2483G-474AE), IEEE1588/802.1AS, 802.3az
LAN B-D: Intel® i210-IT GbE, 802.1Qav, IEEE1588/802.1AS, 802.3az
- LED Indicators** LEDs for Power, battery, LAN (Active, Status), COM (Tx/Rx) and HDD
- Storage** One mSATA
Two drive bays for SATA 2.5" HDD (Compatible with 9.5mm height HDD)
- Expansion** 2 x Full-size mPCIe slot; 1 x Half-size mPCIe slot, mPCIe 2.0

Features

- 4th generation Intel® Core™ i7/i3/Celeron® processors up to 1.9GHz with 4GB/8GB 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
- Compact, with fanless design
- Rubber stopper design with captive screws
- Dual HDD/SSD support with RAID 0/1 in regular-size
- 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
- LAN redundancy (teaming)

I/O Interfaces

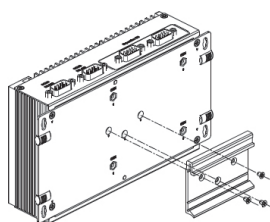
- Serial Ports** 2 x RS-232, DB9, 50 ~ 115.2kbps
2 x RS-422/485, DB9, auto flow control, 50 ~ 115.2kbps
- LAN Ports** 4 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast Ethernet
- USB Ports** 4 x USB Ports (2 x USB 2.0, 2 x USB 3.0 compliant)
- Displays** 1 x VGA, supports 1920 x 1080 @ 60Hz 24bpp
1 x HDMI 1.4a, supports 3840 x 2160 @ 30Hz 24bpp & 1920 x 1080 @ 60Hz, 24bpp
- Audio** Line-In, Line-Out
- Power Connector** 1 x 3 Pins, Terminal Block

Environment

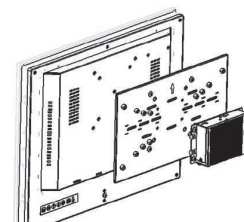
- Operating Temperature** -20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow
- Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11ms
- Vibration Protection** Operating, IEC 60068-2-64, 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



Technical drawing of the 15.5 inch LCD module showing front and side views with dimensions.

Front View Dimensions:

- Overall width: 252.8
- Width of the main display area: 241.8
- Width of the bezel: 227.8
- Height of the main display area: 104.6
- Height of the bezel: 111.1
- Height of the module: 117.6
- Height of the bezel: 138.4
- Height of the module: 149.3
- Radius of the top corners: R2.0
- Radius of the bottom corners: R2.7
- Distance from the bottom edge to the bottom bezel: 10.5

Side View Dimensions:

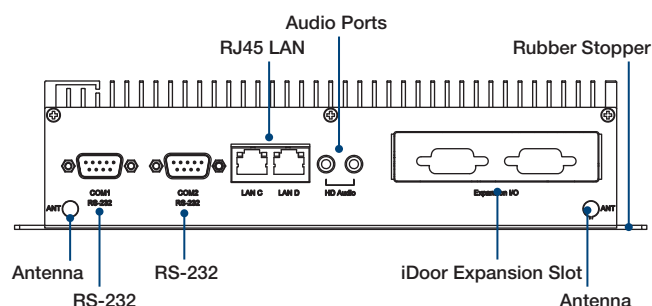
- Thickness of the module: 1.6
- Width of the main display area: 59.1
- Width of the bezel: 61.5

Front View Labels:

- HD0
- A
- B
- HD0
- A
- B
- A
- B

The diagram illustrates the rear panel of the HP Z440 Workstation, featuring the following components and labels:

- USB 2.0/3.0 Ports:** Two USB 3.0 ports (blue) and four USB 2.0 ports (black).
- HDMI:** One HDMI port.
- VGA:** One VGA port.
- RJ45 LAN:** Two LAN ports labeled LAN A and LAN B.
- Power Connector:** A power input connector.
- RS-422/485:** Two RS-422/485 ports labeled COMA and COMB.
- Power LED:** A power indicator LED.
- Reset Button:** A small circular reset button.
- Transmit & Receive LEDs:** Two LEDs for LAN activity.
- Chassis Grounding:** A grounding screw.
- BTR, HDD & PWR LED Lights:** Three status LEDs labeled BTR, HDD, and PWR.



- **UNO-2483G-4C3AE** Intel® Celeron 2980U ULT 1.6GHz, 4GB, 4 x LANs, 2 x mPCIe
- **UNO-2483G-434AE** Intel® Core™ i3-4010U ULT 1.7GHz, 8GB, 4 x LANs, 2 x mPCIe
- **UNO-2483G-474AE** Intel® Core™ i7-4650U ULT 1.7GHz, 8GB, 4 x LANs, 2 x mPCIe

- **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-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

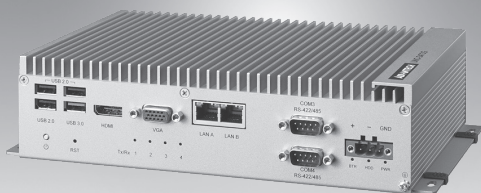
- **96PSA-A150W2412** 150WC to DC UNO series power adapter (Industrial Grade)
- **96PSA-A120W24T2** 120WC to DC UNO series power adapter (Industrial Grade)
- **1702002600** Power Cable US Plug 1.8 M (Industrial Grade)
- **1702002605** Power Cable EU Plug 1.8 M (Industrial Grade)
- **1702031801** Power Cable UK Plug 1.8 M (Industrial Grade)
- **1700000596** Power Cable China/Australia Plug 1.8 M (Industrial Grade)
- **UNO-2000G-DMKAE** UNO-2000 DIN Rail Kit
- **UNO-2000G-VMKAE** UNO-2000 VESA Mount Kit

- **2070015070** WIN10 Enterprise 2016 LTSB v6.01 B042 image for UNO-2483G-474AE
- **20703WX6VS0000** WIN10 Enterprise 2016 LTSB v6.01 B042 image for UNO-2483G-434AE & 2483G-4C3AE
- **2070013459** WESTP X64 MUL.V4.12 B003 image

UNO-2473G

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

NEW



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)
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 RS-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

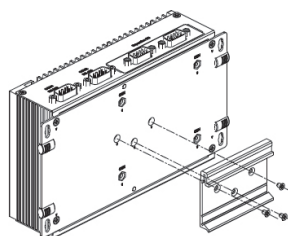
Features

- 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/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

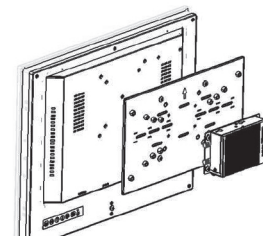
- USB Ports** UNO-2473G-E3AE: 4 x USB Ports (3 x USB 2.0, 1 x USB 3.0 compliant)
UNO-2473G-J3AE: 5 x USB Ports (4 x USB 2.0, 1 x USB 3.0 compliant)
- Displays** 1 x VGA, supports 1920 x 1080 at 60Hz
1 x HDMI, supports 1920 x 1080 at 60Hz
- Audio** Line-in, Line-out
- Power Connector** 1 x 3 Pins, Terminal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



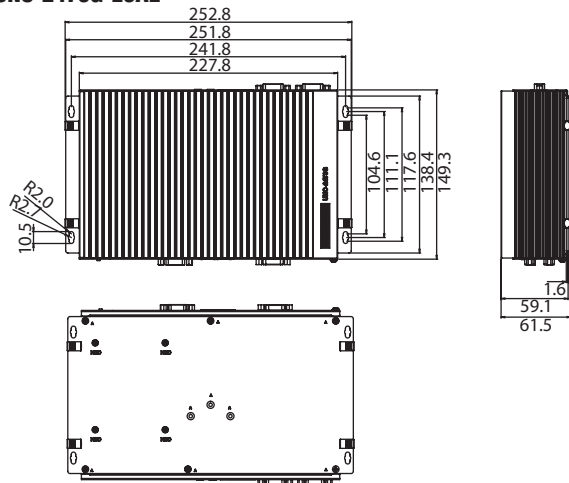
VESA Mount Illustration



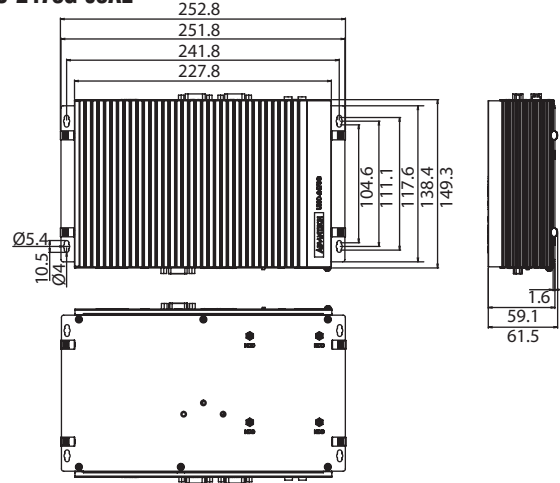
Dimensions

Unit: mm

UNO-2473G-E3AE

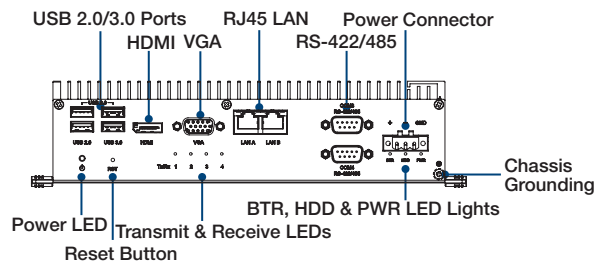


UNO-2473G-J3AE

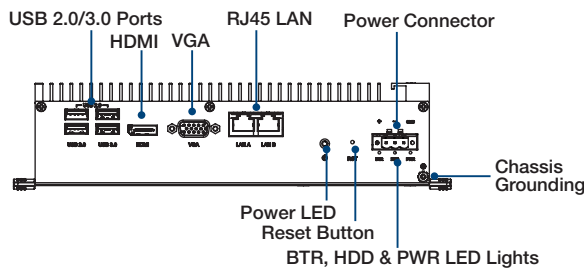


Front I/O View

UNO-2473G-E3AE

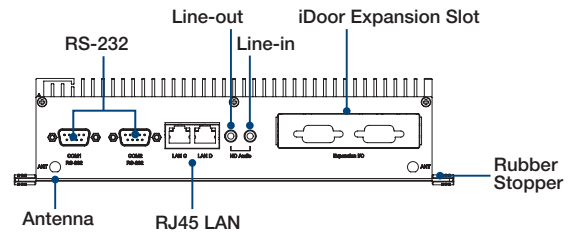


UNO-2473G-J3AE

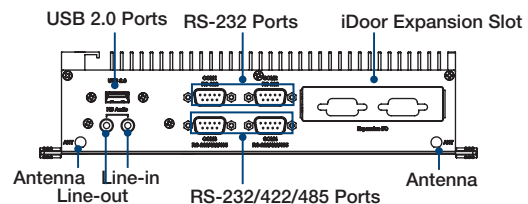


Rear I/O View

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

UNO-2372G

Intel Atom/Celeron Small-Size Modular
Box Platform with 2 GbE, 4 USB, 4 COM,
2 mPCIe, HDMI, DP

NEW



UNO-2372G-E021AE

UNO-2372G-E022AE



Features

- Intel Atom E3845/Celeron® J1900 Quad-Core processors with 4G DDR3L memory
- Robust and cableless design with high stability
- 2 x GbE, 4 x USB, 4 x RS-232/422/485, 1 x HDMI, 1 x DP
- Modular design with flexibility to extend second stack for function enhancement
- Compact size with fanless design
- Rubber stopper design for stand mount and optional kit for DIN-rail mount, and VESA mount
- Optional 3G/GPS/GPRS/Wi-Fi communication

Introduction

Advantech's new generation UNO-2000 series of Embedded Automation Computers are a highly ruggedized fanless and modular design. The incredible modularity of UNO-2372G offers numerous performance and cost-saving advantages, including elimination of unnecessary features and expenses, accelerated production and delivery, rapid deployment and integration, reduced system downtime and maintenance costs, and support for future upgrades and expansion. The UNO-2372G's modular design features optimized I/O and an optional second expansion stack that support Advantech's iDoor technology. This allows the platform functionalities to be easily extended and customized with the integration of various iDoor modules, including industrial Fieldbus, wireless communication, I/O and peripheral module, to provide purpose-built, future-proof solutions that satisfy specific application requirements.

Specifications

General

- Certification** CE, FCC, UL, CCC, BSMI
- Dimensions (W x D x H)** 150 x 105 x 35mm (5.8" x 4.2" x 1.4")
- Form Factor** Small Size
- Enclosure** Aluminum Housing
- Mounting** Stand, Wall, VESA (Optional), DIN-rail (Optional)
- Weight (Net)** 1.0kg (2.2lbs)
- Power Requirement** 10 ~ 36V_{dc}
- Power Consumption** 30W (Typical), 42W (Max)
- OS Support** Microsoft® Windows 7, Windows 10, Advantech Linux

System Hardware

- BIOS** AMI UEFI64 Mbit
- Watchdog Timer** Programmable 255 levels timer interval, from 1 to 255 sec
- Hardware Security** TPM2.0 (UNO-2372G-J Series)
- Processor** Intel® Atom Quad Core E3845 1.91GHz / Intel® Celeron® Quad Core J1900, 2GHz
Built-in 4GB DDR3L 1333MHz (Up to 8GB)
Intel HD Graphics
Intel® i210-IT GbE, 802.1Qav, 802.1AS, 802.3az
- LED Indicators** LEDs for Power, RTC battery, LAN (Active, Status) and HDD
- Storage** 1 x mSATA shared with mPCIe slot
1 x drive bay for SATA 2.5" HDD (Compatible with 9.5mm height HDD)
- Expansion** 2 x Full size mPCIe slots

I/O Interfaces

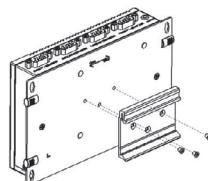
- Serial Ports** 4 x RS232/422/485, DB9, 50 ~ 115.2kbps
- LAN Ports** 2 x RJ45, 10/100/1000 Mbps IEEE 802.3u
1000BASE-T Fast Ethernet
- USB Ports** 1 x USB 3.0, 3 x USB 2.0 Compliant
- Displays** 1 x DisplayPort 1.2, supports 2560 x 1440p
1 x HDMI v1.4, supports 1920 x 1080p @60Hz
- Power Connector** 1 x 2 Pins, Terminal Block

Environment

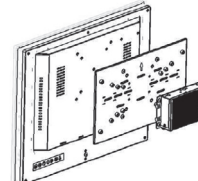
- Operating Temperature** -20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow
- Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11ms
- Vibration Protection** Operating, IEC 60068-2-64, 2Grms, random, 5 ~ 500Hz, 1hr/axis (mSATA)
Operating, IEC 60068-2-64, 0.75Grms, random, 5 ~ 500Hz, 1hr/axis (HDD)
- Ingress Protection** IP40

Installation Scenario

DIN-rail Mount Illustration



VESA Mount Illustration



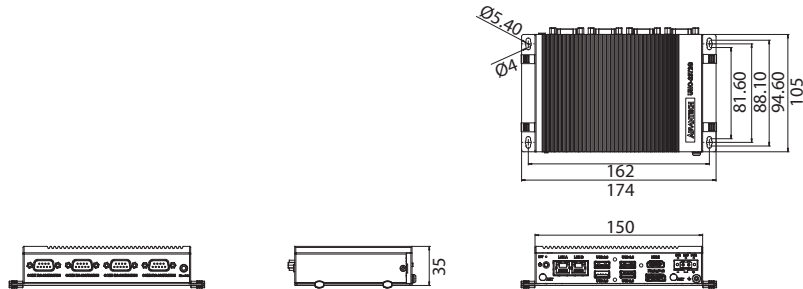
Ordering Information

- UNO-2372G-E021AE** Intel Atom E3845 1.91GHz, 4GB, 2 x GbE, 2 x mPCIe, HDMI/DP (Single Stack)
- UNO-2372G-E022AE** Intel Atom E3845 1.91GHz, 4GB, 2 x GbE, 2 x mPCIe, HDMI/DP (Dual Stack for iDOOR expansion)
- UNO-2372G-J021AE** Intel Celeron J1900 2.0GHz, 4GB, 2 x GbE, 2 x mPCIe, HDMI/DP (Single Stack)
- UNO-2372G-J022AE** Intel Celeron J1900 2.0GHz, 4GB, 2 x GbE, 2 x mPCIe, HDMI/DP (Dual Stack for iDOOR expansion)

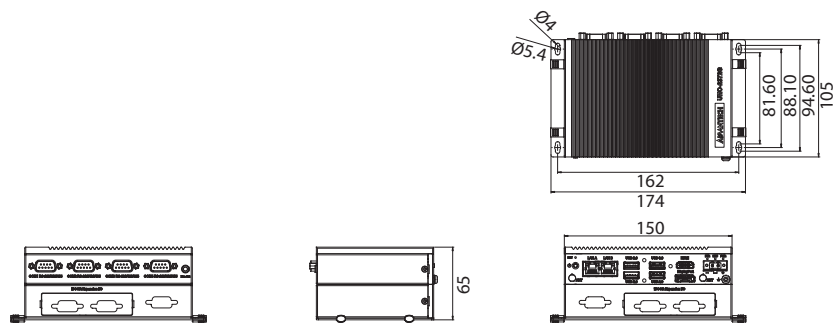
Dimensions

Single Stack

Unit: mm

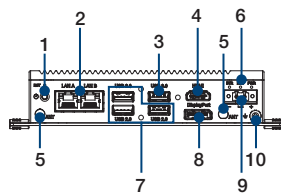


Dual Stack

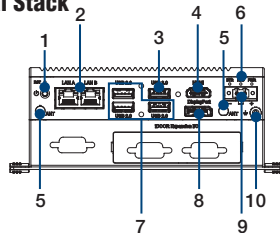


Front I/O View

Single Stack



Dual Stack

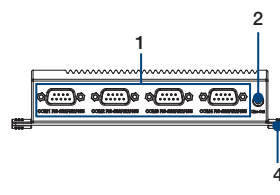


1. Power Button
2. RJ45 LAN
3. USB 3.0
4. HDMI
5. Reserved Antenna

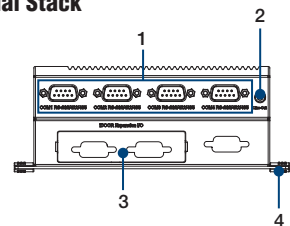
6. BTR, HDD & PWR LED Lights
7. USB 2.0
8. DisplayPort
9. Power Connector
10. Chassis Grounding

Rear I/O View

Single Stack



Dual Stack



1. RS-232/422/485
2. Line Out

3. iDoor Expansion Slot
4. Rubber Stopper

iDoor Modules

iDoor modules are supported by UNO-2372G-E022AE & UNO-2372G-J022AE. (UNO-2372G-E021AE & UNO-2372G-J021AE can also support iDoor modules by adding 2nd stack extension kit UNO-2372G-EKBE)

- **PCM-24D2R2-BE** 2-Port Isolated RS-232 mPCIe, DB9
- **PCM-24D2R4-BE** 2-Port Isolated RS-422/485 mPCIe, DB9
- **PCM-24D4R2-BE** 4-Port Non-Isolated RS-232 mPCIe, DB37
- **PCM-24D4R4-BE** 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-24R1TP-AE** 1-Port Gigabit Ethernet, Intel® 82574L, mPCIe, RJ45
- **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, 2-in-1, Full-size mPCIe w/ Redundant SIM Card holder, 2-port SMA

Contact Advantech for more compatible iDoor solutions

Optional Accessories

- **96PSA-A60W24T2** A/D 100-240V 60W 24V C14 Cord End Terminal Power Adapter
- **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
- **UNO-2000-LKAE** Cable lockable kit 10 units/per pack

Embedded OS

UNO-2372G-E0xxAE

- **20703WE7PS0002** WS7P X64 MUI V4.18 B007 image
- **20703WX6ES0003** WIN10ENT 2016LTSB v6.02B016 image

UNO-2372G-J0xxAE

- **20703WX6ES0003** WIN10LTSB v6.02 B016 image
- **20703WC70S0034** WEC7 MUI V4.02 B116 image
- **20703WE7PS0019** WS7P x64 MUI V4.19 B009 image

Extended Module

UNO-2372G-EKBE

2nd stack expansion module for support
2 x iDOOR on UNO-2372G-xx21AE



Specifications

General	
Ports	2 x iDOOR (Chassis only)
Dimensions	150 x 155 x 35 mm
Weight	200g
Environment	
Operating Temperature	-20 – 60 °C

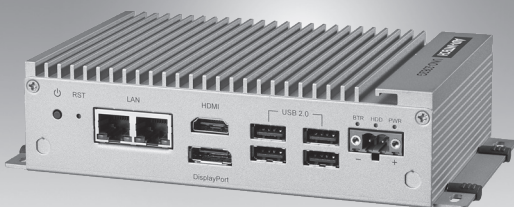
Ordering Information

P/N	Description
UNO-2372G-EKBE	UNO-2372G 2nd stack expansion module

UNO-2362G

**AMD® Dual Core T40E Small-Size
Automation Computer w/ 1 x GbE,
1 x mPCIe, HDMI, DP**

NEW



Features

- Onboard AMD® Dual Core T40E 1.0GHz processors with 2GB DDR3 SODIMM memory
- 1 x GbE, 4 x USB 2.0, 1 x RS-232, 1 x RS-485, 1 x DP, 1 x HDMI
- Compact with fanless design
- Rubber stopper design with captive screws
- Daisy-chain for Ethernet with auto-bypass protection enabled
- Diverse system I/O and isolated digital I/O by iDoor technology
- 3G/GPS/GPRS/Wi-Fi communication by iDoor technology
- Supports battery-backup MRAM by iDoor technology
- Chassis grounding protection

Introduction

Advantech's UNO-2000 series of Embedded Automation Computers are fanless, with a highly ruggedized embedded operating system (Windows CE, Windows XPE, Linux-Embedded). 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)** 190 x 107 x 47 mm (7.5" x 4.2" x 1.8")
- Form Factor** Small Size
- Enclosure** Aluminum Housing
- Mounting** Stand, Wall, DIN-rail (Optional), VESA (Optional)
- Weight (Net)** 1.0kg (2.2lbs)
- Power Requirement** 24VDC \pm 15%
- Power Consumption** 14W (Typical), 47.3W (Max)
- OS Support** Microsoft® Windows XP/7/8 WES7
Advantech Linux

System Hardware

- BIOS** AMI UEFI 32Mbit Flash BIOS
- Watchdog Timer** Programmable 255 levels timer interval, from 1 to 255 sec
- Processor** AMD® G-series T40E 1.0GHz dual core
- System Chip** AMD® A50M FCH
- Memory** On-board 2GB DDR3 1066 MHz
- Graphics Engine** AMD Radeon™ HD 6250 DirectX® 11 graphics with UVD 3.0 2D/3D Accelerator
- Ethernet** Realtek RTL8111E, Marvell 88E6172 Giga Ethernet switch with daisy chain technology
- LED Indicators** LEDs for Power, battery, LAN (Active, Status) and HDD
- Storage** One mSATA drive
One drive bay for SATA 2.5" HDD (Compatible with 9.5mm height HDD)
Note: iDoor technology isn't compatible with HDD storage
- Expansion** 1 x Full-size mPCIe slot, mPCIe 2.0 (supports SIM card)

I/O Interfaces

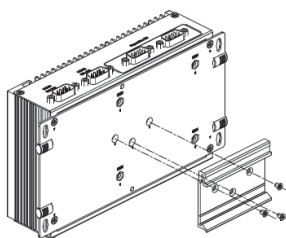
- Serial Ports** 1 x RS-232, DB9, 50 ~ 115.2kbps
1 x RS-485, DB9, auto flow control, 50 ~ 115.2kbps
- LAN Ports** 2 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast Ethernet
- USB Ports** 4 x USB 2.0 Compliant
- Displays** 1 x DisplayPort 1.1, supports 1920 x 1080 @ 60Hz
1 x HDMI v1.3, supports 1920 x 1080 @ 60Hz
- Power Connector** 1 x 2 Pins, Terminal Block
- Grounding Protection** Chassis Grounding

Environment

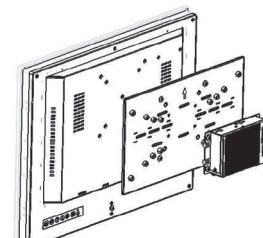
- Operating Temperature** - 10 ~ 60°C (14 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow
- Storage Temperature** - 40 ~ 85°C (-40 ~ 185°F)
- Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11ms
- Vibration Protection** Operating, IEC 60068-2-64, 2Grms, random, 5 ~ 500Hz, 1hr/axis (mSATA)
Operating, IEC 60068-2-64, 0.75Grms, random, 5 ~ 500Hz, 1hr/axis (HDD)
- Ingress Protection** IP40

Installation Scenario

DIN-rail Mount Illustration

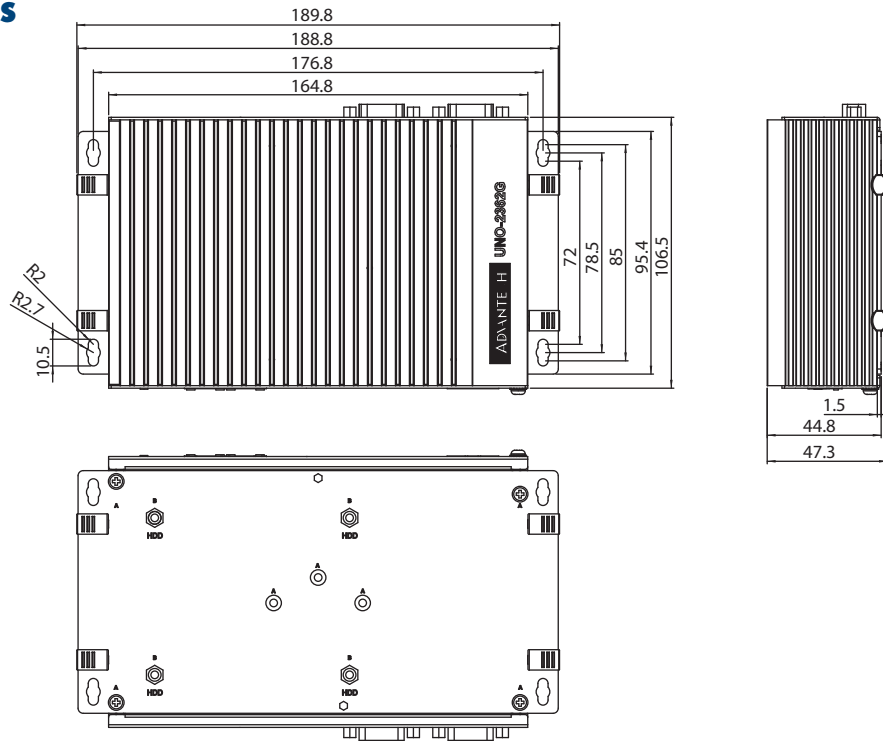


VESA Mount Illustration

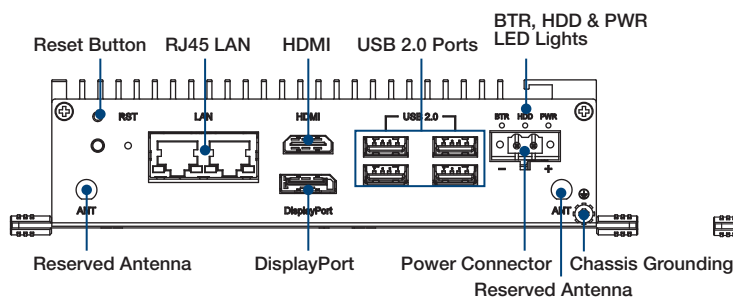


Dimensions

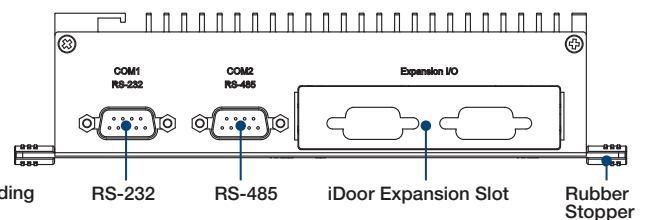
Unit: mm



Front I/O View



Rear I/O View



Ordering Information

- UNO-2362G-T2AE AMD G-series T40E 1.0GHz, 2GB, 1 x GbE, 1 x mPCIe, HDMI, DP

iDoor Modules

- PCM-24D2R2-BE 2-Port Isolated RS-232 mPCIe, DB9
- PCM-24D2R4-BE 2-Port Isolated RS-422/485 mPCIe, DB9
- PCM-24D4R2-BE 4-Port Non-Isolated RS-232 mPCIe, DB37
- PCM-24D4R4-BE 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-24R1TP-AE 1-Port Gigabit Ethernet, Intel® 82574L, mPCIe, RJ45
- 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, 2-in-1, Full-size mPCIe w/ Redundant SIM Card holder, 2-port SMA

Optional Accessories

- 96PSA-A60W24T2 60W AC to DC UNO series power adapter (Industrial 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)
- UNO-2000G-DMKAE UNO-2000 DIN Rail Kit
- UNO-2000G-VMKAE UNO-2000 VESA Mount Kit

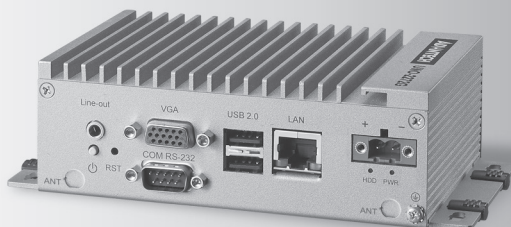
Embedded O/S

- 2070014506 Win10 LTSB X64 MUI. V6.00B002 image
- 2070013078 WEC7 MUI.V4.00 B022 image
- 2070015121 WES2009 x86 MUI v3.35 B001 image

UNO-2272G

Intel® Atom™/Celeron® Palm-Size
Automation Computer with 1 x GbE,
2 x mPCIe, VGA/HDMI

NEW



Features

- Intel® Atom™ N2800/J1900 Processors with 2GB DDR3/DDR3L Memory
- 1 x GbE, 3 x USB 2.0/3.0, 1 x COM, 1 x VGA or HDMI, Audio
- Compact with Fanless Design
- Rubber Stopper Design with Captive Screw
- Diverse system I/O and Isolated Digital I/O by iDoor Technology
- Supports Fieldbus Protocol by iDoor Technology
- 3G/GPS/GPRS/Wi-Fi Communication by iDoor Technology
- Supports MRAM by iDoor Technology

Introduction

Advantech's UNO-2000 series of Embedded Automation Computers are fanless, with a highly ruggedized embedded operating system (Linux-Embedded). 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)** 157 x 88 x 50 mm (6.2" x 3.5" x 2.0")
- Form Factor** Palm Size
- Enclosure** Aluminum Housing
- Mounting** Stand, Wall, VESA (Optional), DIN-rail (Optional)
- Weight (Net)** 0.8 kg (1.76 lbs)
- Power Requirement** 24V_{DC} ± 20%
- Power Consumption** 14W (Typical), 45.3W (Max)
- OS Support** UNO-2272G-N2AE: Microsoft® Windows 7, Advantech Linux
UNO-2272G-J2AE: Microsoft® Windows 7, Windows 10, Advantech Linux

System Hardware

- BIOS** AMI EFI64 Mbit
- Watchdog Timer** Programmable 256 levels timer interval, from 1 to 255 sec
- Processor** Intel Atom Dual Core N2800 1.86 GHz
Intel Celeron Quad Core J1900 2.0 GHz
- System Chip** Intel Atom SoC integrated
- Memory** Built-in 2GB DDR3 1066 MHz for UNO-2272G-N2AE
Built-in 2GB DDR3L 1333 MHz for UNO-2272G-J2AE, up to 8GB
- Graphics Engine** Intel® HD Graphics
- Ethernet** Intel 82583V GbE, 802.10av, IEEE1588/802.1AS, 803.3az for UNO-2272G-N2AE
Intel i210 GbE, 802.10av, IEEE1588/802.1AS, 803.3az for UNO-2272G-J2AE
- LED Indicators** LEDs for Power, HDD, LAN ((Active, Status)
- Storage** 1 x half-size mSATA for UNO-2272G-J2AE
1 x full-size mSATA for UNO-2272G-N2AE
Supports HDD/SSD by project
- Expansion** 1 x Full-size mPCIe slot, 1 x Half-size mPCIe slot for UNO-2272G-N2AE
2 x Full-size mPCIe slot for UNO-2272G-J2AE

I/O Interfaces

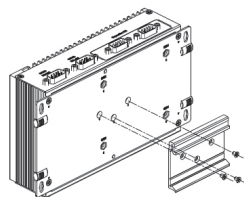
- Serial Ports** 1 x RS-232, DB9, 50 ~ 115.2kbps for UNO-2272G-N2AE
1 x RS-232 (RS-422/485 by BIOS option), DB9, 50 ~ 115.2kbps for UNO-2272G-J2AE
- LAN Ports** 1 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000Base-T Fast Ethernet
- USB Ports** 3 x USB 2.0 for UNO-2272G-N2AE
2 x USB 2.0 and 1 x USB 3.0 for UNO-2272G-J2AE
- Displays** 1 x VGA, supports 1920 x 1080 @ 60Hz 24bpp for UNO-2272G-N2AE
1 x HDMI, supports 1920 x 1080 @ 60Hz for UNO-2272G-J2AE
- Audio** Line-Out
- Power Connector** 1 x 2 Pins, Terminal Block

Environment

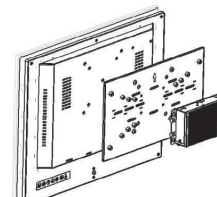
- Operating Temperature** - 20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7 m/s airflow for UNO-2272G-N2AE
- 10 ~ 55°C (14 ~ 131) @ 5 ~ 85% RH with 0.7 m/s airflow for UNO-2272G-J2AE
- Storage Temperature** - 40 ~ 85°C (-40 ~ 185°F)
- Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11 ms
- Vibration Protection** Operating, IEC 60068-2-64, 2 Grms, random, 5 ~ 500 Hz, 1hr/axis (mSATA)
- Ingress Protection** IP40

Installation Scenario

DIN-rail Mount Illustration

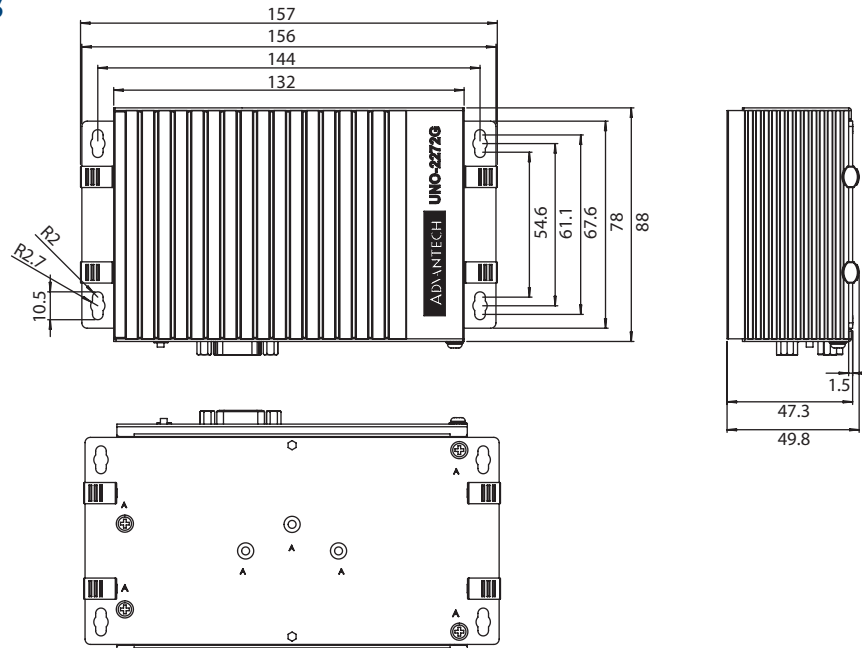


VESA Mount Illustration



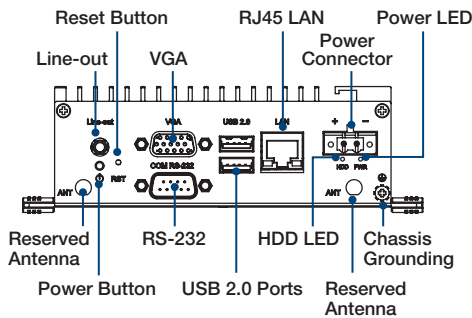
Dimensions

Unit: mm

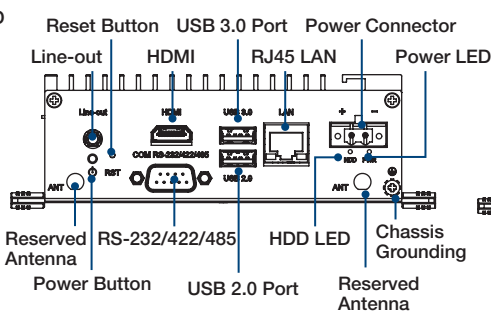


Front I/O View

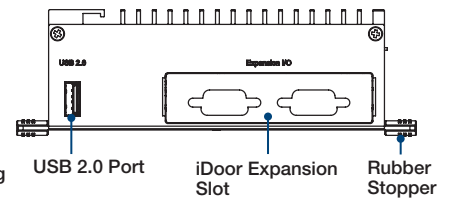
UNO-2272G-N2AE



UNO-2272G-J2AE



Rear I/O View



Ordering Information

- UNO-2272G-N2AE Intel Atom N2800 1.86GHz, 2GB, 1xLANs, 2xmPCIe
- UNO-2272G-J2AE Intel Celeron J1900 2.0GHz, 2GB, 1xLANs, 2xmPCIe

iDoor Modules

- PCM-23U1DG-BE Internal locked USB Slot for USB Dongle
- PCM-24R2GL-AE 2-Port Gigabit Ethernet, mPCIe, RJ45
- 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 60WC to DC UNO series power adapter (Industrial 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)
- UNO-2000G-DMKAE UNO-2000 DIN Rail Kit
- UNO-2000G-VMKAE UNO-2000 VESA Mount Kit

Embedded O/S

UNO-2272G-N2AE

- 2070013798 WEC7 MUI V4.00 B044 image
- 2070013098 WES7P X86 MUI V4.12 B001 image

UNO-2272G-J2AE

- 20703WE7PS0000 WES7P x64MUI v4.18 B008 image
- 2070014984 WES7P X86 MUI V4.16 B004 image
- 2070014957 WIN10ENT 2016LTSB v6.01 B023 image
- 2070014939 WEC7 MUI V4.02 B088 image