

UNO-2174G/GL

UNO-2184G

Intel® Celeron® Automation Computers
with 4 x GbE, 2 x Mini PCIe, DVI/DP/HDMI

Intel® Core™ i7 Automation Computer
with 4 x GbE, 2 x Mini PCIe, DVI/DP/HDMI



Features

- Onboard Intel Celeron 847E 1.1GHz/807UE 1.0GHz/Core i7-2655LE 2.2GHz/i7-3555LE 2.5GHz processors
- 2 x RS-232 and 2 x RS-232/422/485 ports with automatic flow control
- 4 x 10/100/1000Base-T Ethernet
- DVI-I, DP, HDMI support 2 x independent displays
- Audio with Mic in, Line in, Line out
- 6 x USB ports
- Supports 2 x PCI-104 plug-in card with daughterboard expansion
- Windows® WES 2009, WES 7 ready solution
- External accessible CFast slot
- Onboard system status LED indicators
- Supports wake on LAN and boot from LAN function
- Supports Power eSATA
- Isolation between chassis and power ground
- IP40 ingress protection

Introduction

The UNO-2184G & 2174G/GL are high-performance Intel 3rd generation Core i7-3555LE/Intel 2nd generation core i7-2655LE/847E/807UE grade controllers that support PCI-104 with daughterboard expansion, 3 x display, 6 x USB, and 2 x Mini PCIe socket. They also feature WLAN, 3G expansion and compatibility with Windows 7. The 4 x Gigabit LANs on the UNO-2184G support teaming function with fault tolerance, link aggregation, and load balance features. The UNO-2184G & 2174G/GL are high end computing platforms designed to support applications with tremendous data volume and 3D content.

Specifications

General

- Certification** CE, UL, CCC, FCC, C-Tick, BSMI
- Dimensions (W x D x H)** 255 x 152 x 69 mm (10" x 6.0" x 2.7")
- Enclosure** Aluminum
- Mounting** Stand, Wall mount, VESA (Optional)
- Power Consumption** UNO-2174G/GL: 30 W/ 20 W (Typical), 89W (Maximum)
UNO-2184G: 40 W (Typical), 101W (Maximum)
- Power Input** 9 ~ 36 V_{dc}
- Weight** 3.0 kg
- OS Support** Windows XP/7, WES7, WES-2009, Linux
- System Design** Fanless with no internal cabling (except COM3/COM4)

System Hardware

- CPU** UNO-2174G: Intel Celeron 847E 1.1GHz
UNO-2174GL: Intel Celeron 807UE 1.0GHz
UNO-2184G: Intel Core i7-3555LE 2.5GHz/i7-2655LE 2.2GHz
- Memory** UNO-2174G/GL: Built-in 4GB DDR3 SO-DIMM
UNO-2184G: Built-in 4/8GB DDR3 SO-DIMM
- Indicators** LEDs for Power, battery, LAN (Active, Status) and COM (Tx, Rx)
- Keyboard/Mouse** 1 x PS/2
- PC/104 Slot** PCI-104 slot, supports +5 & 3.3V power
- Storage** 1 x CFast slot
HDD: One built-in 2.5" SATA HDD bracket (Optional 2 x HDD Bracket Kit)
- Display** 1 x DVI-I, 1 x HDMI, 1 x DP (2 x independent displays)
- Audio** Mic in, Line in, Line out
- Watchdog Timer** Programmable 255 levels timer interval, from 1 to 255 sec
- Mini PCIe Expansion** 2 x Mini PCIe slots with 1 x SIM card

Daughterboard (Additional purchase required)

- Expansion Slot** PCI-104 support (+5 & 3.3V power)

I/O Interfaces

- Serial Ports** 2 x RS-232, 2 x RS-232/422/485 with DB9 connectors; automatic RS-485 data flow control
- Serial Port Speed** RS-232: 50 ~ 115.2 kbps
RS-422/485: 50 ~ 115.2 kbps (Max.)

- LAN** 4 x 10/100/1000Base-T RJ-45 ports
Supports AMT (UNO-2184G only), wake on LAN and built-in boot ROM in flash BIOS
- USB Ports** 6 x USB (only UNO-2184G-D64E supports 2 x USB3.0)

Environment

- Humidity** 95% @ 40°C (non-condensing)
- Operating Temperature UNO-2174/2184** -10 ~ 60°C (14 ~ 140°F) @ 5 ~ 85% RH. (with air flow)
- Storage Temperature** -40 ~ 60°C (-40~140°F)
- Shock Protection** IEC 60068-2-27
CompactFlash: 50 G @ wall mount, half sine, 11 ms
HDD: 20 G @ wall mount, half sine, 11 ms
- Vibration Protection** IEC 60068-2-64 (Random 1 Oct./min, 1hr/axis.)
CompactFlash: 2 Grms @ 5 ~ 500 Hz,
HDD: 1 Grms @ 5 ~ 500 Hz

Ordering Information

- UNO-2184G-D44E** Intel Core i7-2655LE 2.2 GHz, 4 GB RAM Automation Computer
- UNO-2184G-D45E** Intel Core i7-2655LE 2.2 GHz, 8 GB RAM Automation Computer
- UNO-2184G-D64E** Intel Core i7-3555LE 2.5GHz, 4 GB RAM Automation Computer
- UNO-2174G-C54E** Intel Celeron 847 1.1 GHz, 4 GB RAM Automation Computer
- UNO-2174GL-C44E** Intel Celeron 807UE 1.0 GHz, 4 GB RAM Automation Computer

Accessories

- UNO-2000G-VMKAE** UNO & FPM integration VESA Mount kit
- 1750006043** Wi-Fi cable 15CM
- 1750002842** Antenna for Wi-Fi
- PCLS-DIAGAW10** Advantech Remote Monitoring & Diagnosis Utility
- UNO-PCM24-AE** 2 x PCI-104 expansion board
- 9656EWMG00E** Half size to full size Mini PCIe bracket
- UNO-2184HD-AE** 2 x HDD Bracket accessory kit for UNO-2184G/2174G

UNO-2174G/GL UNO-2184G

Intel® Celeron® Automation Computers
with 4 x GbE, 2 x Mini PCIe, DVI/DP/HDMI

Intel® Core™ i7 Automation Computer
with 4 x GbE, 2 x Mini PCIe, DVI/DP/HDMI



Features

- Onboard Intel Celeron 847E 1.1GHz/807UE 1.0GHz/Core i7-2655LE 2.2GHz/i7-3555LE 2.5GHz processors
- 2 x RS-232 and 2 x RS-232/422/485 ports with automatic flow control
- 4 x 10/100/1000Base-T Ethernet
- DVI-I, DP, HDMI support 2 x independent displays
- Audio with Mic in, Line in, Line out
- 6 x USB ports
- Supports 2 x PCI-104 plug-in card with daughterboard expansion
- Windows® WES 2009, WES 7 ready solution
- External accessible CFast slot
- Onboard system status LED indicators
- Supports wake on LAN and boot from LAN function
- Supports Power eSATA
- Isolation between chassis and power ground
- IP40 ingress protection

Introduction

The UNO-2184G & 2174G/GL are high-performance Intel 3rd generation Core i7-3555LE/Intel 2nd generation core i7-2655LE/847E/807UE grade controllers that support PCI-104 with daughterboard expansion, 3 x display, 6 x USB, and 2 x Mini PCIe socket. They also feature WLAN, 3G expansion and compatibility with Windows 7. The 4 x Gigabit LANs on the UNO-2184G support teaming function with fault tolerance, link aggregation, and load balance features. The UNO-2184G & 2174G/GL are high end computing platforms designed to support applications with tremendous data volume and 3D content.

Specifications

General

- Certification** CE, UL, CCC, FCC, C-Tick, BSMI
- Dimensions (W x D x H)** 255 x 152 x 69 mm (10" x 6.0" x 2.7")
- Enclosure** Aluminum
- Mounting** Stand, Wall mount, VESA (Optional)
- Power Consumption** UNO-2174G/GL: 30 W/ 20 W (Typical), 89W (Maximum)
UNO-2184G: 40 W (Typical), 101W (Maximum)
- Power Input** 9 ~ 36 V_{dc}
- Weight** 3.0 kg
- OS Support** Windows XP/7, WES7, WES-2009, Linux
- System Design** Fanless with no internal cabling (except COM3/COM4)

System Hardware

- CPU** UNO-2174G: Intel Celeron 847E 1.1GHz
UNO-2174GL: Intel Celeron 807UE 1.0GHz
UNO-2184G: Intel Core i7-3555LE 2.5GHz/i7-2655LE 2.2GHz
- Memory** UNO-2174G/GL: Built-in 4GB DDR3 SO-DIMM
UNO-2184G: Built-in 4/8GB DDR3 SO-DIMM
- Indicators** LEDs for Power, battery, LAN (Active, Status) and COM (Tx, Rx)
- Keyboard/Mouse** 1 x PS/2
- PC/104 Slot** PCI-104 slot, supports +5 & 3.3V power
- Storage** 1 x CFast slot
HDD: One built-in 2.5" SATA HDD bracket (Optional 2 x HDD Bracket Kit)
- Display** 1 x DVI-I, 1 x HDMI, 1 x DP (2 x independent displays)
- Audio** Mic in, Line in, Line out
- Watchdog Timer** Programmable 255 levels timer interval, from 1 to 255 sec
- Mini PCIe Expansion** 2 x Mini PCIe slots with 1 x SIM card

Daughterboard (Additional purchase required)

- Expansion Slot** PCI-104 support (+5 & 3.3V power)

I/O Interfaces

- Serial Ports** 2 x RS-232, 2 x RS-232/422/485 with DB9 connectors; automatic RS-485 data flow control
- Serial Port Speed** RS-232: 50 ~ 115.2 kbps
RS-422/485: 50 ~ 115.2 kbps (Max.)

- LAN** 4 x 10/100/1000Base-T RJ-45 ports
Supports AMT (UNO-2184G only), wake on LAN and built-in boot ROM in flash BIOS
- USB Ports** 6 x USB (only UNO-2184G-D64E supports 2 x USB3.0)

Environment

- Humidity** 95% @ 40°C (non-condensing)
- Operating Temperature UNO-2174/2184** -10 ~ 60°C (14 ~ 140°F) @ 5 ~ 85% RH. (with air flow)
- Storage Temperature** -40 ~ 60°C (-40~140°F)
- Shock Protection** IEC 60068-2-27
CompactFlash: 50 G @ wall mount, half sine, 11 ms
HDD: 20 G @ wall mount, half sine, 11 ms
- Vibration Protection** IEC 60068-2-64 (Random 1 Oct./min, 1hr/axis.)
CompactFlash: 2 Grms @ 5 ~ 500 Hz,
HDD: 1 Grms @ 5 ~ 500 Hz

Ordering Information

- UNO-2184G-D44E** Intel Core i7-2655LE 2.2 GHz, 4 GB RAM Automation Computer
- UNO-2184G-D45E** Intel Core i7-2655LE 2.2 GHz, 8 GB RAM Automation Computer
- UNO-2184G-D64E** Intel Core i7-3555LE 2.5GHz, 4 GB RAM Automation Computer
- UNO-2174G-C54E** Intel Celeron 847 1.1 GHz, 4 GB RAM Automation Computer
- UNO-2174GL-C44E** Intel Celeron 807UE 1.0 GHz, 4 GB RAM Automation Computer

Accessories

- UNO-2000G-VMKAE** UNO & FPM integration VESA Mount kit
- 1750006043** Wi-Fi cable 15CM
- 1750002842** Antenna for Wi-Fi
- PCLS-DIAGAW10** Advantech Remote Monitoring & Diagnosis Utility
- UNO-PCM24-AE** 2 x PCI-104 expansion board
- 9656EWMG00E** Half size to full size Mini PCIe bracket
- UNO-2184HD-AE** 2 x HDD Bracket accessory kit for UNO-2184G/2174G

UNO-2174A/2178A

Intel® Atom™ N450/ D510
Automation Computers
with 6 x USB, 8 x COM,
2 x Mini PCIe



UNO-2178A

UNO-2174A



Features

- Onboard Intel Atom N450/D510 processors
- 2 x 10/100/1000Base-T RJ-45 ports, 6 x USB 2.0 ports
- Windows® CE 6.0, WES 2009, WES 7 and Advantech Linux ready solution
- Onboard system status LED indicators
- Front-accessible CF slot
- Supports Boot from LAN function
- 2 x Mini PCIe slots with 1 x SIM slot support
- Fanless design with no internal cabling
- Isolation between chassis and power ground
- Supports wide operating temperatures from -10 ~ 70°C
- IP40 ingress protection
- Windows 7 32 bit supported
- Supports plug-in cards (1 x PCI-104 and 1 x PC/104+) with additional daughterboard expansion
- Supports 8 x COM ports (UNO-2178A)
- Supports arbitrary baud rates

Introduction

The UNO-2174A and UNO-2178A are Embedded Automation Computers equipped with Intel Atom N450/D510 CPUs, Gigabit Ethernet ports, rich I/O, and 2 x Mini PCIe socket. They also feature WLAN, 3G expansion and compatibility with Windows 7. Both products have Energy Star certification, IP40 anti-dust ingress protection and wide operating temperatures (-10 ~ 70°C), providing high performance and high versatility with low power consumption. The UNO-2174A and UNO-2178A are economic new computing platforms for manufacturing executing systems, facility automation, and industrial thin client applications. With an additional daughterboard, the UNO-2174A and UNO-2178A support 1 x PC/104+ and 1 x PCI-104 plug-in cards for further expansion.

Specifications

General

- Certification** Energy Star, CE, FCC Class A, UL, CCC, C-Tick Class A, BSMI
- Dimensions (W x D x H)** UNO-2174A-A23E: 255 x 152 x 50 mm (10" x 6.0" x 2.0")
UNO-2174A-A33E: 255 x 152 x 59mm(10"x6.0"x2.3")
UNO-2178A: 255 x 152 x 59 mm (10" x 6.0" x 2.3")
- Enclosure** Aluminum +SECC
- Mounting** DIN-rail, Wallmount, VESA
- Industrial Grounding** Isolation between chassis and power ground
- Power Consumption** UNO-2174A: 12 W (Typical)
UNO-2178A: 16 W (Typical)
- Power Requirements** 9 ~ 36 V_{DC} (e.g. +24 V @ 1.5 A) (Min. 36 W), ATX
- Power Suspend Mode** S3, S4
- Weight** 2.5 kg
- OS Support** Windows XP/7, WES7, WES-2009, CE 6.0, Advantech Linux, QNX
- System Design** Fanless design with no internal cabling
- Remote Management** Built-in Advantech DiagAnywhere agent on Windows CE, WES2009, WES7

System Hardware

- CPU** UNO-2178A: Intel Atom D510 Dual Core 1.66 GHz
UNO-2174A: Intel Atom N450 1.6 GHz /D510 1.66GHz
- Memory** 2 GB DDR2 SDRAM built-in
- Indicators** LEDs for Power, CF, LAN (Active, Status), Serial (Tx, Rx)
- Keyboard/Mouse** 1 x PS/2
- Storage** CF: 1 x rear type I/II CompactFlash® slot
HDD: 1 x built-in 2.5" SATA HDD/SSD bracket (Not available when PCI-104 expansion is being used)
- Display** DB15 VGA connector, UNO-2174A supports up to 1400 x 1050, UNO-2178A supports up to 2048 x 1536
- Watchdog Timer** Programmable 256 levels timer interval, from 1 to 255 sec
- Expansion** 2 x Mini PCIe
1 x SIM card slot
- Printer Port** 1 x Printer port (UNO-2174A)

Daughterboard (Additional purchase required)

- Expansion Slot** PC/104+ and PCI-104 support (+5 & 3.3V power) (HDD slot is not available when PCI-104 slot is being used)
2 x Mini PCIe card slots and 1 x SIM card slot

I/O Interface

- Serial Ports** UNO-2174A: 2 x RS-232/485 (COM1-2),
2 x RS-232/422/485 w/ 128kB FIFO (COM A-B)
UNO-2178A: 2 x RS-232/485 (COM1-2),
2 x RS-232/422/485 w/ 128kB FIFO (COM A-B),
4 x RS-232/485 from DB25 connector (COM3-6)
- Serial Port Speed** 50-115.2 kbps (COM 1-6 in RS-232/485 mode)
50-115.2 kbps (COM A/B in RS-232 mode, 921.6kbps peak performance)
50-921.6 kbps (COM A/B in RS-422/485 mode)
- LAN** 2 x 10/100/1000Base-T RJ-45 ports (Built-in boot ROM in flash BIOS)
- USB Ports** 6 x USB 2.0
- Audio** Line in, Line out, Mic in (5.1 channel HD audio)

Environment

- Humidity** 95% @ 40°C (non-condensing)
- Operating Temperature** IEC 60068-2-2 with 100% CPU/ I/O loading
-10 ~ 70°C (14 ~ 158°F)
- Ingress Protection** IP40
- Shock Protection** IEC 60068-2-27
CompactFlash: 50 G @ wall mount, half sine, 11 ms
HDD: 20 G @ wall mount, half sine, 11 ms
- Vibration Protection** IEC 60068-2-64 (Random 1 Oct./min, 1hr/axis.)
CompactFlash: 2 Grms @ 5 ~ 500 Hz,
HDD: 1 Grms @ 5 ~ 500 Hz

Ordering Information

- UNO-2174A-A23E** Intel Atom N450 1.6 GHz, 2 GB RAM, 4 x COM ports Automation Computer
- UNO-2178A-A33E** Intel Atom D510 1.66 GHz, 2 GB RAM, 8 x COM ports Automation Computer
- UNO-2174A-A33E** Intel Atom D510 1.66 GHz, 2GB RAM, 4 x COM ports Automation Computer

Accessories

- UNO-FPM21-AE** UNO-2000 series VESA mount kit
- EWM-W138H01E** Mini PCIe card for WLAN
- 1750006043** Wi-Fi cable 15CM
- 1750002842** Antenna for Wi-Fi
- 9656EWMG00E** Half-size miniPCIe to miniPCIe bracket set
- PCLS-DIAGAW10** Advantech Remote Monitoring & Diagnosis Utility
- UNO-PCM23-AE** 1 x PCI-104 and 1 x PC/104+ Expansion board

UNO-2271G

Intel® Atom™ Pocket-Size Smart Factory Edge Gateway with 2 x GbE, 1 x mPCIe, HDMI, eMMC

NEW



Introduction

Advantech's new generation UNO-2000 series of embedded automation computers are highly ruggedized, fanless, and modular designs. New UNO-2000 series includes pocket, small, and regular-sized form-factors for different kinds of smart factory applications such as Equipment Connectivity (EC), Process Visualization (PV), Environment Management (EM), and Dispatch Management (DM). The modular design of UNO-2271G features optimized I/O and offers three different configurations. It also supports Advantech's iDoor technology via a second expansion stack. UNO-2000 series provide flexible and time-to-market support for a variety of applications.

Specifications

General

- Certification** CE, FCC, UL, CCC, BSMI
- Dimensions (W x D x H)** 100 x 70 x 30 mm (3.9" x 2.8" x 1.2"), UNO-2271G-E21BE/E021AE
100 x 70 x 60 mm (3.9" x 2.8" x 2.6"), UNO-2271G-E22BE/E23BE/E022AE/E023AE
- Form Factor** Pocket Size, same dimension as standard 2.5" SSD/HDD
- Enclosure** Aluminum Housing
- Mounting** Stand, Wall, VESA (Optional), DIN-rail (Optional), Pole (Optional)
- Weight (Net)** 0.5 kg (1.1lbs) for UNO-2271G-E21BE/E021AE
0.6 kg (1.2lbs) for UNO-2271G-E22BE/ E022AE and E23BE/ E023BE
- Power Requirement** 10 ~ 30V_{DC}
- Power Consumption** 12W (Typical), 24W (Max)
- OS Support** For mSATA storage: Windows7, Windows10 LTSB, Advantech Linux
For eMMC storage: Advantech embedded customized Windows7 64bits, Windows 10 LTSB, Advantech Linux

System Hardware

- BIOS** AMI EFI64 Mbit
- Watchdog Timer** Programmable 255 levels timer interval, from 1 to 255 sec
- Processor** Intel Atom E3815 Single Core 1.46GHz
Intel Atom E3825 Dual Core 1.33GHz
- System Chip** Intel Atom SoC integrated
- Memory** Onboard 4GB DDR3L 1066 MHz
- Graphics Engine** Intel® HD Graphics
- Ethernet** Realtek RTL8111E GbE, 802.10av
- LED Indicators** LEDs for Power, HDD, LAN (Active, Status)
- Storage** Onboard 32GB eMMC (Option mSATA shared with mPCIe slot)
- Expansion** 1 x Full-size mPCIe slot

I/O Interfaces

- Serial Ports** 2 x RS 232/422/485 for UNO-2271G-E23BE/ E023AE
- LAN Ports** 2 x RJ45, 10/100/1000 Mbps IEEE 802.3u

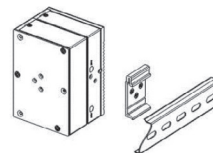
Features

- Intel® Atom™ E3815/E3825 processor with 4GB DDR3L onboard memory
- 2 x GbE, 1 x USB 3.0, 1 x HDMI, option 2 x RS-232/422/485 or 3 x USB2.0
- Compact fanless design
- Rubber stopper design with internal reserved screws for 2nd layer assembly
- Diverse system I/O and isolated digital I/O by iDoor technology
- Supports Fieldbus protocol by iDoor technology
- 3G/GPRS/GPRS/Wi-Fi communication by iDoor technology
- Supports 30+ iDoor combination with four main categories of smart factory applications
- 32GB eMMC storage onboard

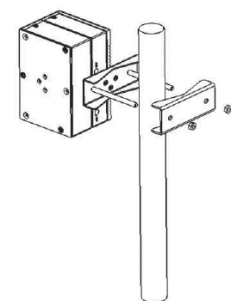
- USB Ports** 1000BASE-T Fast Ethernet
1 x USB 3.0 for UNO-2271G-E21BE/E021AE
3 x USB 2.0 and 1 x USB 3.0 for UNO-2271G-E22BE/ E022AE
1 x USB 3.0 for UNO-2271G-E23BE/E023AE
- Displays** 1 x HDMI, supports 1920 x 1080 @ 60Hz
- Power Connector** 1 x 2 Pins, Terminal Block
- Environment**
 - Operating Temperature** 0 ~ 50°C (32 ~ 122°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, 2 Grms, random, 5 ~ 500 Hz, 1hr/axis (mSATA)
- Ingress Protection** IP30

Installation Scenario

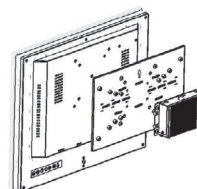
DIN-rail Mount Illustration



Pole Mount Illustration



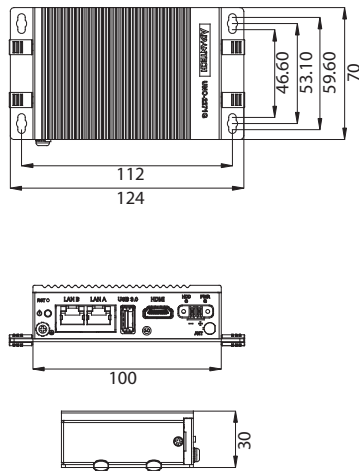
VESA Mount Illustration



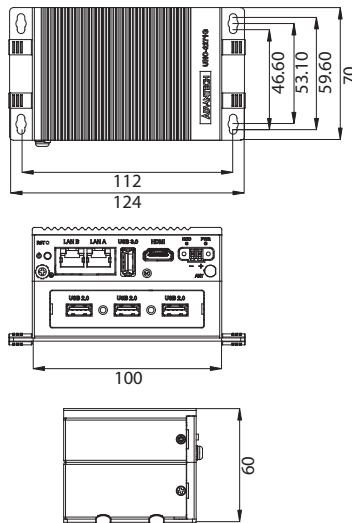
Dimensions

Unit: mm

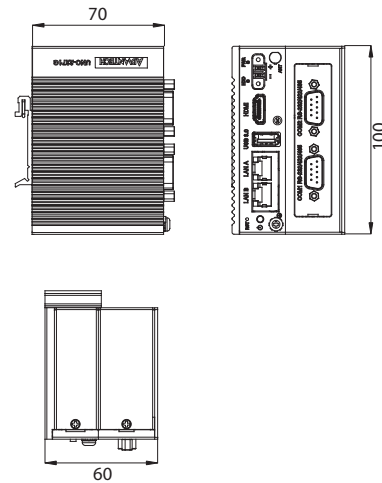
UNO-2271G-E21BE/E021AE



UNO-2271G-E22BE/E022AE

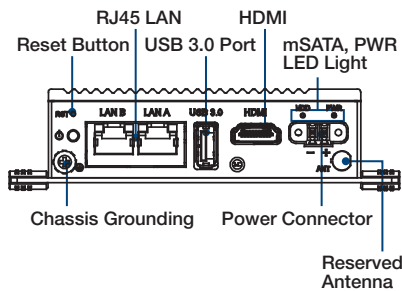


UNO-2271G-E23BE/E023AE

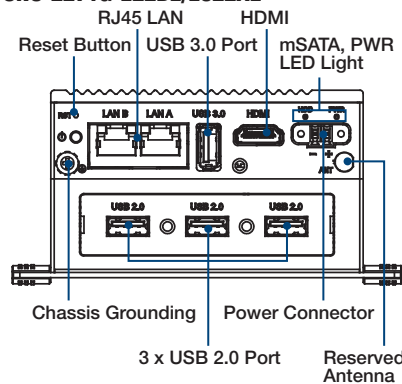


Front I/O View

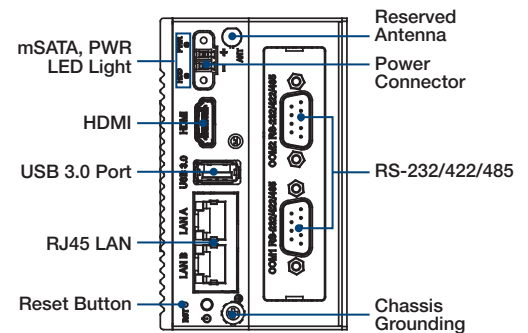
UNO-2271G-E21BE/E021AE



UNO-2271G-E22BE/E022AE



UNO-2271G-E23BE/E023AE



Ordering Information

	CPU	Ordering Part Number	USB2.0	RS-232/422/485	LAN	USB3.0	HDMI	mPCIe
Single Stack	Single Core E3815	UNO-2271G-E21BE	x	x	2	1	1	1
Double Stack		UNO-2271G-E22BE	3	x				
		UNO-2271G-E23BE	x	2				
Single Stack	Dual Core E3825	UNO-2271G-E021AE	x	x	2	1	1	1
Double Stack		UNO-2271G-E022AE	3	x				
		UNO-2271G-E023AE	x	2				

iDoor Modules

- PCM-23U1DG-BE Internal locked USB Slot for USB Dongle
- PCM-24R2GL-AE 2-Port Gigabit Ethernet, mPCIe, RJ45
- 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

Embedded O/S

- 2070015327 Advantech Linux (AdvLinuxTu V1.0.3) image for UNO-2271G-ExxBE/E0xxAE
- 20703WE7PS0018 WS7P X64 MUI V4.19 B006 image
- 20703W6E0S0002 WIN10 LTSB v6.03 B010 image

Optional Accessories

Adapters & Power cords

- PWR-247-CE 60W AC to DC UNO series power adapter
- 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

Mounting Kits

- UNO-2271G-DMKAE UNO-2271G DIN RAIL Mount Kit
- UNO-2000G-VMKAE UNO-2000 VESA Mount Kit
- UNO-2000G-PMKAE UNO-2000 Pole Mount Kit

Others

- UNO-2000-LKAE Cable lockable kit 10 units/ per pack
- Wi-Fi module & antenna
- EWM-W157H01E Wifi 802.11 a/b/g/n/ac, w/ Bluetooth 4.0
- 1750006043 Coaxial cable for antenna
- 1750008717-01 Antenna L=10.9 cm 50 Ohm

Contact Advantech for more compatible iDoor solutions.

Extended Module

UNO-2271G-EKBE

2nd stack expansion module for support 1 x iDOOR on UNO-2271G-E21BE/ UNO-2271G-E021AE



Specifications

General	
Ports	1 x iDOOR (Chassis only)
Dimensions	100 x 70 x 30 mm
Weight	100g
Environment	
Operating Temperature	0 ~ 50 °C

Ordering Information

P/N	Description
UNO-2271G-EKBE	UNO-2271G 2nd stack extension kit for iDoor

UNO-2271G-U3BE

2nd stack expansion module for support 3 USB2.0 ports on UNO-2271G-E21BE/ UNO-2271G-E021AE



Specifications

General	
Ports	3 x USB2.0 ports
Dimensions	100 x 70 x 30 mm
Weight	120g
Environment	
Operating Temperature	0 ~ 50 °C

Ordering Information

P/N	Description
UNO-2271G-U3BE	UNO-2271G 2nd stack with 3 USB2.0 ports

UNO-2271G-R2BE

2nd stack expansion module for support 2 RS-232/422/485 ports on UNO-2271G-E21BE/ UNO-2271G-E021AE



Specifications

General	
Ports	2 x RS-232/422/485 ports
Dimensions	100 x 70 x 30 mm
Weight	120g
Environment	
Operating Temperature	0 ~ 50 °C

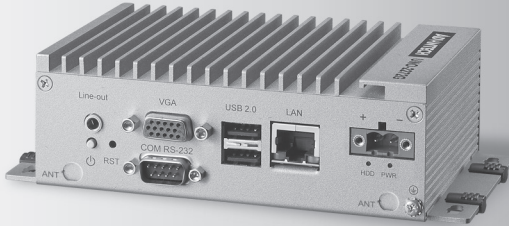
Ordering Information

P/N	Description
UNO-2271G-R2BE	UNO-2271G 2nd stack with 2 COM ports

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

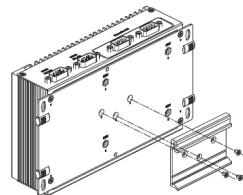
- **Serial Ports** 1 x RS-232, DB9, 50 ~ 115.2kbps for UNO-2272G-N2AE
1 x RS-232 (RS-422/485 by BIOS option), DB9, 50 ~ 115.2kbps for UNO-2272G-J2AE
- **LAN Ports** 1 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000Base-T Fast Ethernet
- **USB Ports** 3 x USB 2.0 for UNO-2272G-N2AE
2 x USB 2.0 and 1 x USB 3.0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

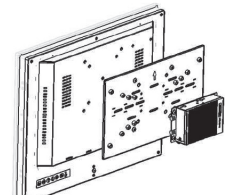
- **Operating Temperature** -20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7 m/s airflow for UNO-2272G-N2AE
-10 ~ 55°C (14 ~ 131) @ 5 ~ 85% RH with 0.7 m/s airflow for UNO-2272G-J2AE
- **Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- **Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- **Shock Protection** 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

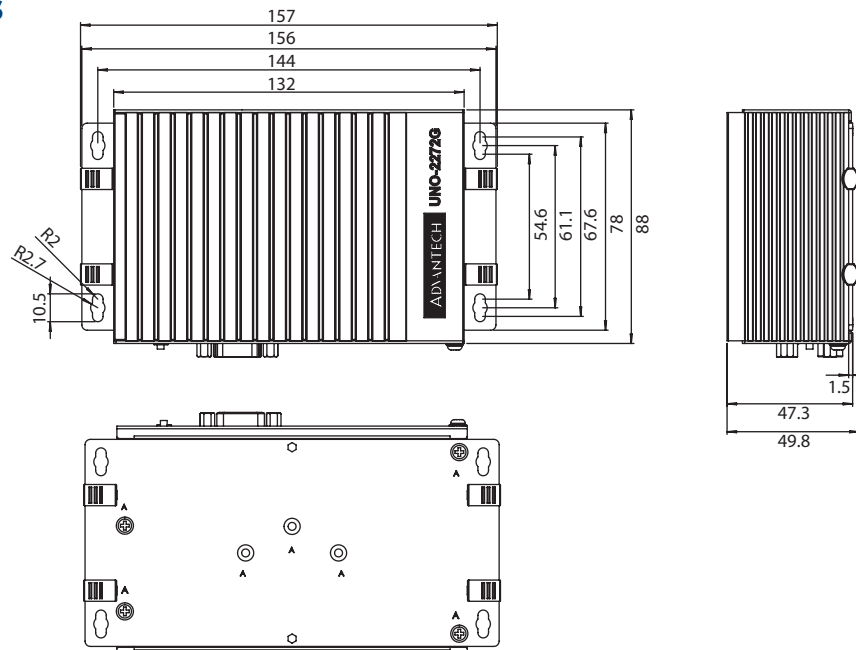


VESA Mount Illustration



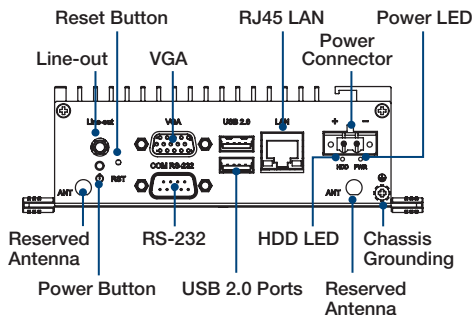
Dimensions

Unit: mm

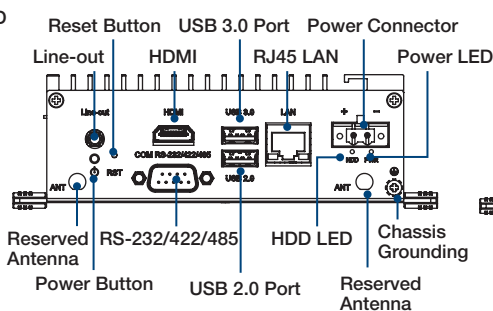


Front I/O View

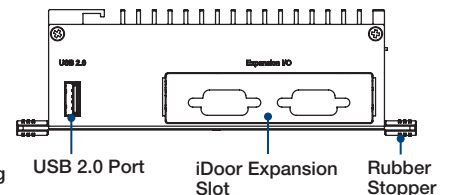
UNO-2272G-N2AE



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

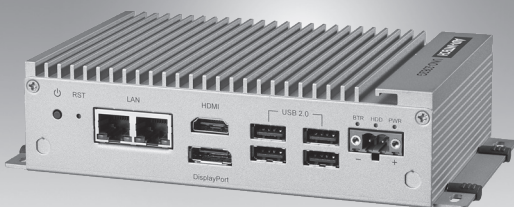
UNO-2272G-J2AE

- 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

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 ±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

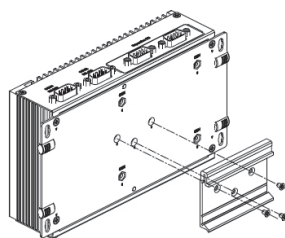
- Serial Ports** 1 x RS-232, DB9, 50 ~ 115.2kbps
1 x RS-485, DB9, auto flow control, 50 ~ 115.2kbps
- LAN Ports** 2 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast Ethernet
- USB Ports** 4 x USB 2.0 Compliant
- Displays** 1 x DisplayPort 1.1, supports 1920 x 1080 @ 60Hz
1 x HDMI v1.3, supports 1920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

Environment

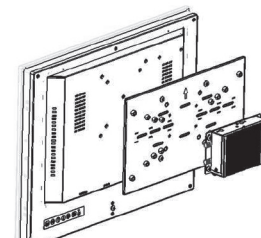
- Operating Temperature** - 10 ~ 60°C (14 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow
- Storage Temperature** - 40 ~ 85°C (-40 ~ 185°F)
- Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11ms
- Vibration Protection** Operating, IEC 60068-2-64,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

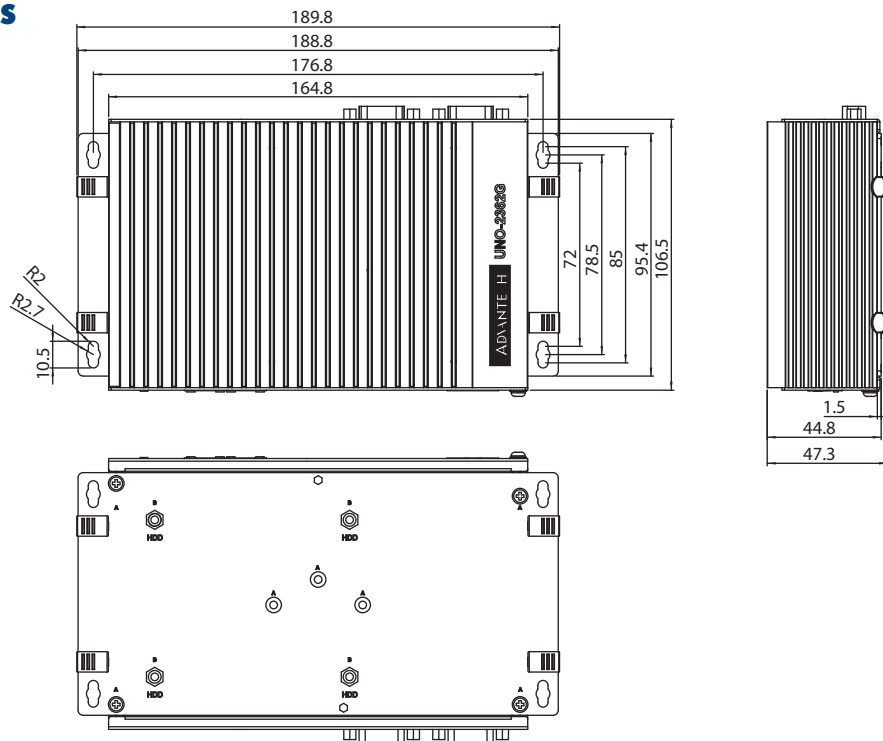


VESA Mount Illustration

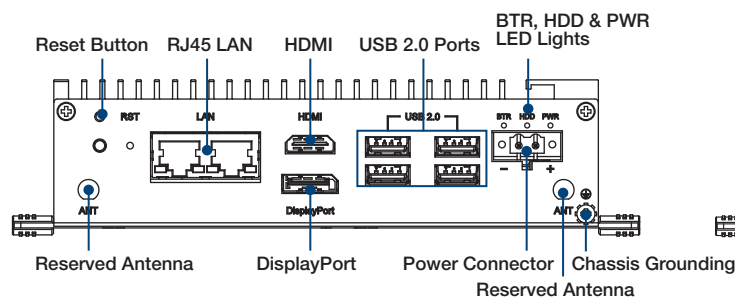


Dimensions

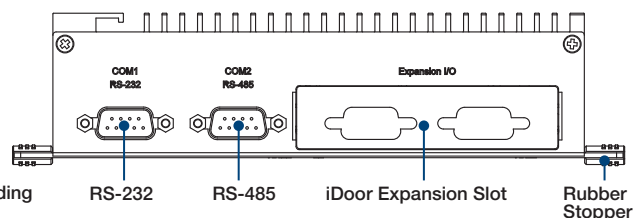
Unit: mm



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-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
- Memory** Built-in 4GB DDR3L 1333MHz (Up to 8GB)
- Graphics Engine** Intel HD Graphics
- Ethernet** 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

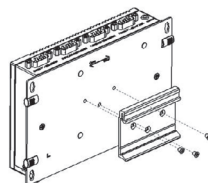
- Serial Ports** 4 x RS232/422/485, DB9, 50 ~ 115.2kpbs
- LAN Ports** 2 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast Ethernet
- USB Ports** 1 x USB 3.0, 3 x USB 2.0 Compliant
- Displays** 1 x DisplayPort 1.2, supports 2560 x 1440p
1 x HDMI v1.4, supports 1920 x 1080p @60Hz
- Power Connector**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

Environment

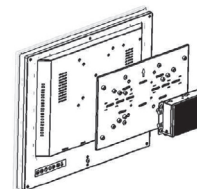
- Operating Temperature** -20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow
- Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11ms
- Vibration Protection** Operating, IEC 60068-2-64,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

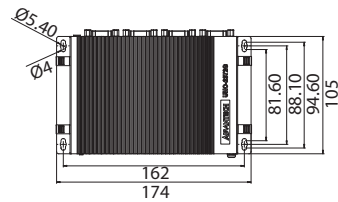
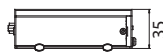


Ordering Information

- 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)

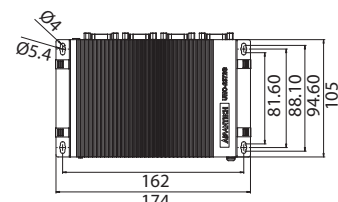
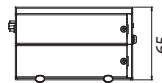
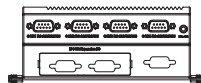
Dimensions

Single Stack



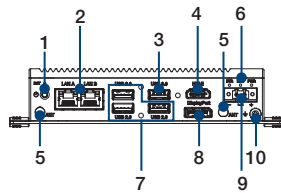
Unit: mm

Dual Stack

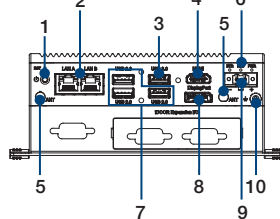


Front I/O View

Single Stack



Dual Stack

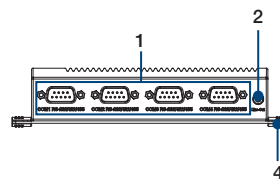


1. Power Button
2. RJ45 LAN
3. USB 3.0
4. HDMI
5. Reserved Antenna

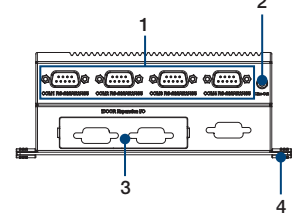
6. BTR, HDD & PWR LED Lights
7. USB 2.0
8. DisplayPort
9. Power Connector
10. Chassis Grounding

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-2372G-J1

Compact Modular Box Platform with Intel® Celeron® Processor, 2 x GbE, 4 x USB 3.0, 4 x COM, 2 x mPCIe, 1 x HDMI 1.4b, 1 x DP 1.2

NEW



UNO-2372G-J121AE

UNO-2372G-J122AE



Features

- Intel® Celeron® J3455E quad-core processor with 4G DDR3L memory
- Compact, robust, fanless and cable-free system with high stability
- 2 x GbE, 4 x USB 3.0, 4 x RS-232/422/485, 1 x HDMI 1.4b, 1 x DP 1.2
- Modular design with optional second stack for increased functionality
- Stand mount with rubber stopper
- Optional kit for DIN-rail and VESA mounting
- Optional Wi-Fi/Bluetooth/cellular connectivity
- Built-in TPM2.0 for hardware-based security

Introduction

Advantech's UNO-2000 series of embedded automation computers are highly ruggedized, fanless systems. The modular design offers numerous performance and cost-saving advantages, including eliminating 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 features optimized I/O and can be equipped with an optional second expansion stack that supports Advantech's iDoor technology. With the integration of various iDoor modules, including industrial fieldbus, wireless communication, I/O, and peripheral modules, the system functionalities can be easily extended 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)** Single-stack model: 150 x 105 x 35 mm (5.8 x 4.2 x 1.4 in)
Double-stack model: 150 x 105 x 65 mm (5.8 x 4.2 x 2.6 in)
- **Form Factor** Small
- **Enclosure** Aluminum housing
- **Mount Options** Stand, wall, VESA (optional), DIN rail (optional)
- **Weight (Net)** Single-stack model: 0.8 kg (1.8 lb)
Double-stack model: 1.0 kg (2.2 lb)
- **Power Requirement** 10 ~ 36 V_{DC}
- **Power Consumption** 18.36W (typical)
- **OS Support** Microsoft® Windows 10, Advantech Linux (Ubuntu 18.04)

Hardware

- **BIOS** AMI UEFI (64 Mbit)
- **Watchdog Timer** Programmable timer with 255 intervals (1 ~ 255 sec)
- **Hardware Security** TPM2.0
- **Processor** Intel® Celeron® J3455E quad-core, 1.5 GHz (max. turbo 2.3 GHz)
- **Memory** Built-in 4 GB DDR3L, 1866 MHz (supports up to 8 GB)
- **Graphics Engine** Intel® HD Graphics 500
- **Ethernet** Intel® i210 GbE, 802.3Qav, 802.1AS, 802.3az
- **LED Indicators** Power, RTC battery, LAN (active, status), and HDD
- **Storage** 1 x mSATA shared with mPCIe socket
1 x 2.5" SATA HDD drive bay (max. height 9.5 mm)
- **Expansion** 2 x Full-size mPCIe sockets

I/O

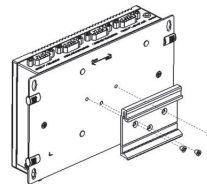
- **Serial Ports** 4 x RS-232/422/485, DB9, 50 ~ 115.2kbps
- **LAN** 2 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast Ethernet
- **USB** 4 x USB 3.0
- **Displays** 1 x HDMI 1.4b (3840 x 2160 @30 Hz)
1 x DP 1.2 (3840 x 2160 @60 Hz)
- **Power Connector** 1 x 2-pin terminal block

Environment

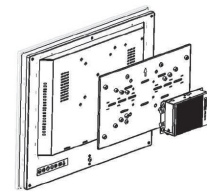
- **Operating Temperature** -20 ~ 60 °C/-4 ~ 140 °F @ 5 ~ 85% RH with 0.7m/s airflow
- **Storage Temperature** -40 ~ 85 °C/-40 ~ 185 °F
- **Relative Humidity** 10 ~ 95% RH @ 40 °C/104 °F, non-condensing
- **Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11ms
- **Vibration Protection** 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



VESA Mount

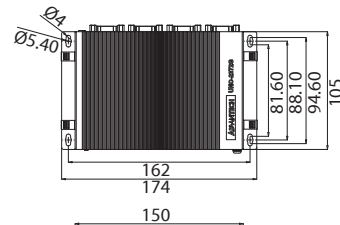


Ordering Information

- **UNO-2372G-J121AE** Intel® Celeron® J3455E 1.5 GHz CPU, 4 GB DDR3L, 2 x GbE, 2 x mPCIe, 1 x HDMI 1.4b/DP++ 1.2 (single stack)
- **UNO-2372G-J122AE** Intel® Celeron® J3455E 1.5 GHz CPU, 4 GB DDR3L, 2 x GbE, 2 x mPCIe, 1 x HDMI 1.4b/DP++ 1.2 (double stack for iDoor expansion)
- **UNO-2372G-J121AU (For US only)** Intel® Celeron® J3455E 1.5 GHz CPU, 4 GB DDR3L, 2 x GbE, 2 x mPCIe, 1 x HDMI 1.4b/DP++ 1.2 (single stack)

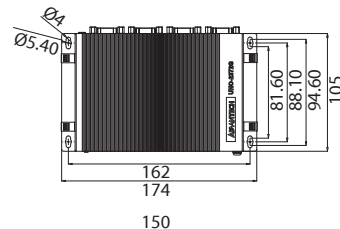
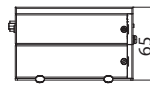
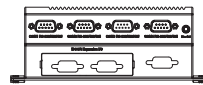
Dimensions

Single Stack



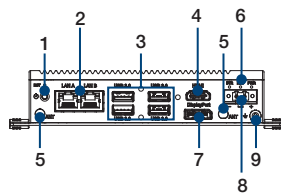
Unit: mm

Double Stack



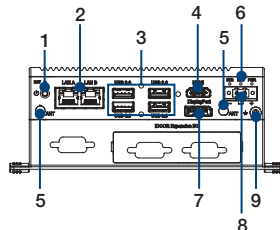
Front I/O

Single Stack



1. Power button
2. RJ45 LAN
3. USB 3.0
4. HDMI
5. Reserved antenna

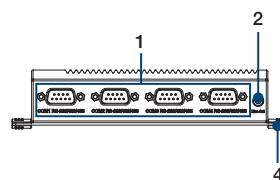
Double Stack



6. Power, Battery, HDD LEDs
7. DisplayPort
8. Power connector
9. Chassis grounding

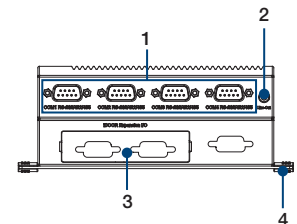
Rear I/O

Single Stack



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

Double Stack



3. iDoor expansion slot
4. Rubber stopper

iDoor Modules

UNO-2372G-J122AE supports iDoor modules (UNO-2372G-J121AE can also support iDoor modules with the addition of the UNO-2372G-EKBE second-stack extension kit).

- **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 with counter mPCIe, DB37
- **PCM-24R2GL-AE** 2-port Gigabit Ethernet, mPCIe, RJ45
- **PCM-24S34G-ABE** LTE/HSPA+/GPRS, mPCIe, antennas for EMEA/APAC
- **PCM-24S34G-EBE** LTE/HSPA+/GPRS, mPCIe, antennas for US
- **C-PCM-24S24G-4AV-1** MultiTECH iDOOR, LTE Cat 4 (AT&T/Verizon), antenna

Contact Advantech for more compatible iDoor solutions

Optional Accessories

- **96PSA-A60W24T2-3** 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 locking kit, 10 units per pack
- **UNO-REPWR-AE** Remote power and reset control kit for UNO
- **UNO-2372G-VEGA330** UNO-2372G 1st stack bottom plate for VEGA-330

Embedded OS

- **20703WX9ES0030** Img W10LTSC V6.05 B028 UNO-2372G-J1xxAE Entry

Extended Module

UNO-2372G-J1

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

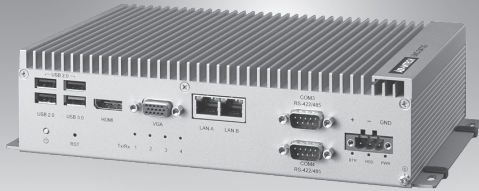
Ordering Information

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

UNO-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_{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)
- Power Consumption**
- 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

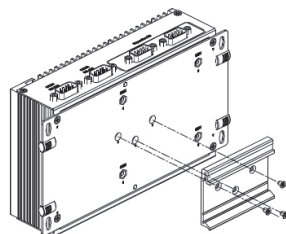
- USB Ports** UNO-2473G-E3AE: 4 x USB Ports (3 x USB 2.0, 1 x USB 3.0 compliant)
UNO-2473G-J3AE: 5 x USB Ports (4 x USB 2.0, 1 x USB 3.0 compliant)
- Displays** 1 x VGA, supports 1920 x 1080 at 60Hz
1 x HDMI, supports 1920 x 1080 at 60Hz
- Audio** Line-in, Line-out
- Power Connector** 1 x 3 Pins, Terminal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

Environment

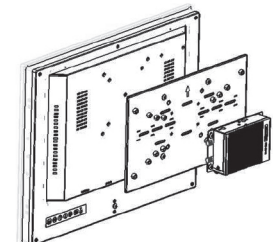
- Operating Temperature** UNO-2473G-E3AE: -20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow
UNO-2473G-J3AE: -10 ~ 60°C (14 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow
- Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- Shock Protection** Operating,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



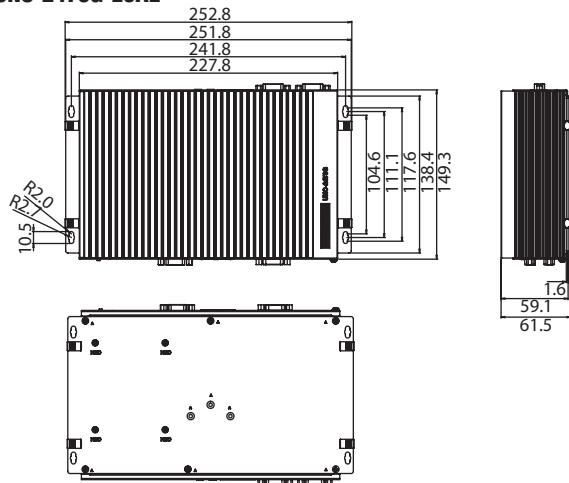
VESA Mount Illustration



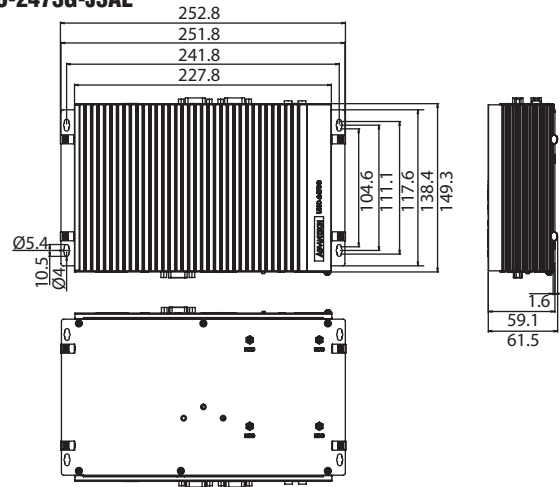
Unit: mm

Dimensions

UNO-2473G-E3AE

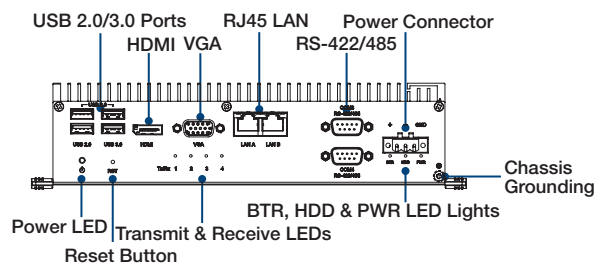


UNO-2473G-J3AE

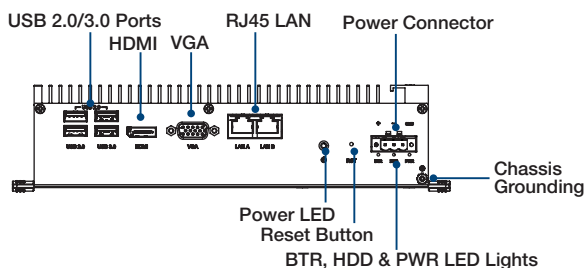


Front I/O View

UNO-2473G-E3AE

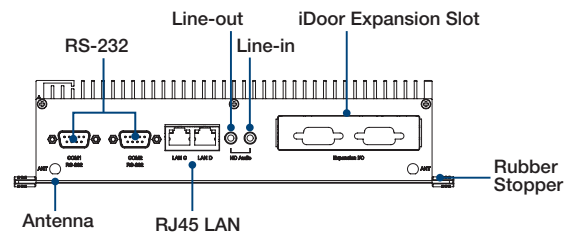


UNO-2473G-J3AE

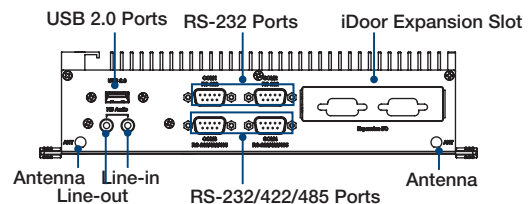


Rear I/O View

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

UNO-2483G

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

NEW



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)

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 ± 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
Integrated Intel SoC Chipset
- System Chip** Built-in 4GB DDR3L 1600 MHz for UNO-2483G-4C3AE
- Memory** 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

I/O Interfaces

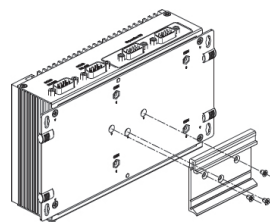
- Serial Ports** 2 x RS-232, DB9, 50 ~ 115.2kbps
2 x RS-422/485, DB9, auto flow control, 50 ~ 115.2kbps
- LAN Ports** 4 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast Ethernet
- USB Ports** 4 x USB Ports (2 x USB 2.0, 2 x USB 3.0 compliant)
- Displays** 1 x VGA, supports 1920 x 1080 @ 60Hz 24bpp
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

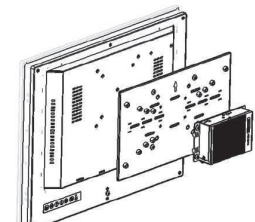
- Operating Temperature** - 20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow
- Storage Temperature** - 40 ~ 85°C (-40 ~ 185°F)
- Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11ms
- Vibration Protection** Operating, IEC 60068-2-64,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

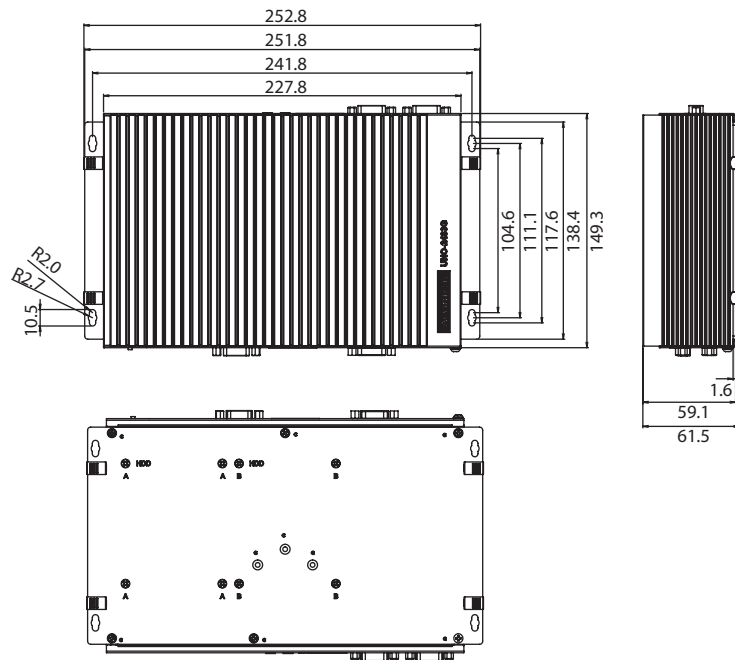


VESA Mount Illustration

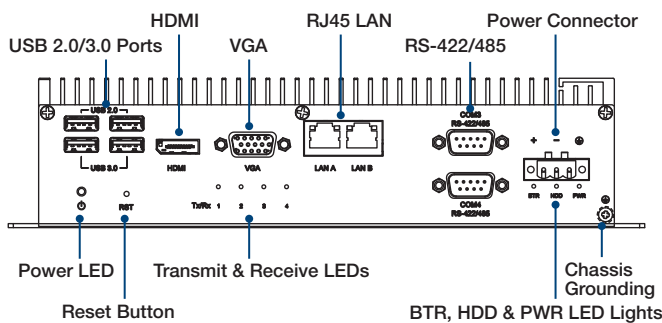


Dimensions

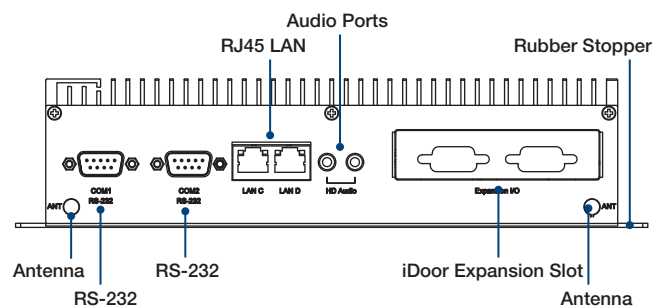
Unit: mm



Front I/O View



Rear I/O View



Ordering Information

- **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

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-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-A150W24T2** 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

Embedded O/S

- **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** WES7P X64 MUI.V4.12 B003 image

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

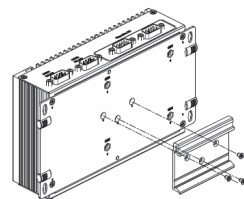
- Serial Ports** 4 x RS 232/422/485
- LAN Ports** 4 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast Ethernet
- USB Ports** 4 x USB3.0
- Displays** 1 x HDMI supports 1920 x 1080 @60Hz,
1 x DP supports 3840 x 2160 @30Hz
- Audio** Line-out
- Power Connector** 1 x 2 Pins, Terminal Block

Environment

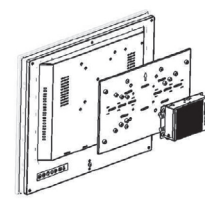
- Operating Temperature** -20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7 m/s airflow
-40 ~ 85°C (-40 ~ 185°F)
- Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11 ms
- Vibration Protection**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

Installation Scenario

DIN-rail Mount Illustration



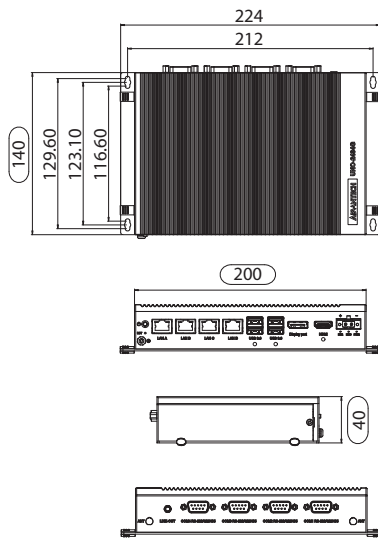
VESA Mount Illustration



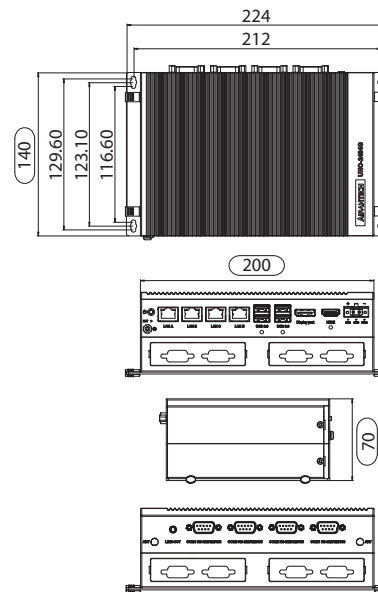
Dimensions

Unit: mm

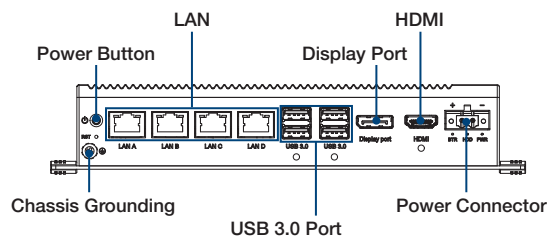
UNO-2484G Single stack version



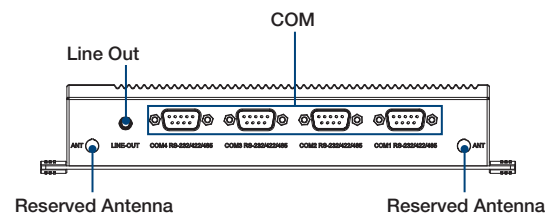
UNO-2484G double stack version



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	
	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/ Bluetooth4.0, 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 WS7P X64 MUI V4.18 BQ23 Image
 - 20703WX9HS0001 WIN10 LTSC V6.04 for i7 version
 - 20703WX9VS0001 WIN10 LTSC V6.04 for i5/i3 version
- UNO-2484G-7 series:
 - 20703WX9HS0000 WIN10 LTSC V6.04 for i7 version
 - 20703WX9VS0000 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

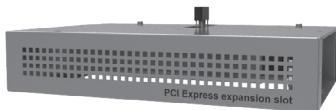
Ordering Information

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

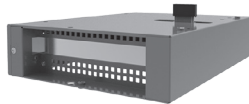
UNO-2484G-PCIEAE

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-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

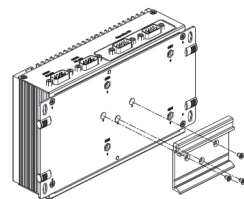
- Serial Ports** 4 x RS 232/422/485
- LAN Ports** 4 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast Ethernet
- USB Ports** 4 x USB3.0
- Displays** 1 x HDMI supports 1920 x 1080 @60Hz,
1 x DP supports 3840 x 2160 @30Hz
- Audio** Line-out
- Power Connector** 1 x 2 Pins, Terminal Block

Environment

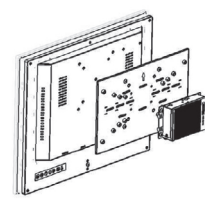
- Operating Temperature** -20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7 m/s airflow
-40 ~ 85°C (-40 ~ 185°F)
- Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11 ms
- Vibration Protection**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

Installation Scenario

DIN-rail Mount Illustration



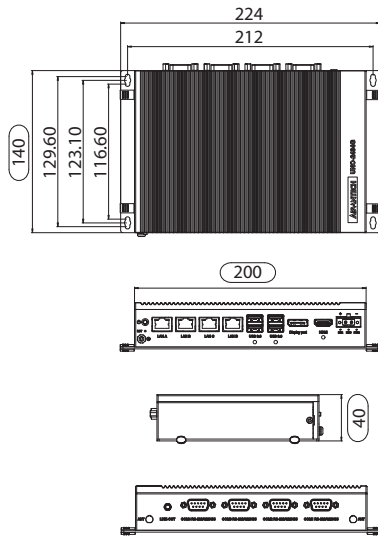
VESA Mount Illustration



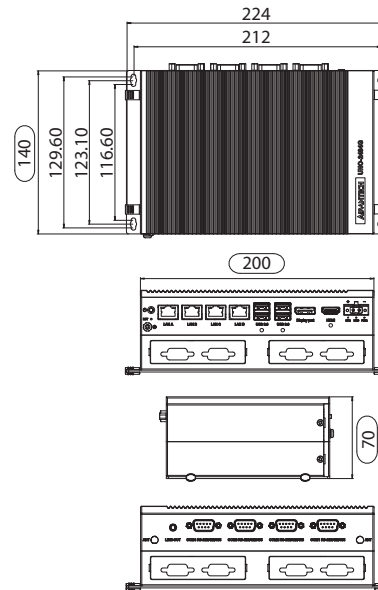
Dimensions

Unit: mm

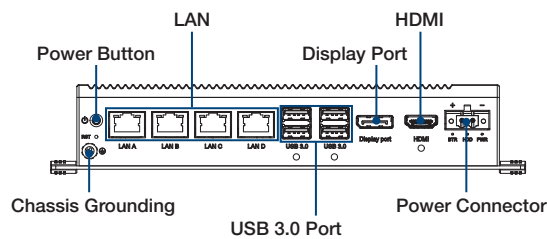
UNO-2484G Single stack version



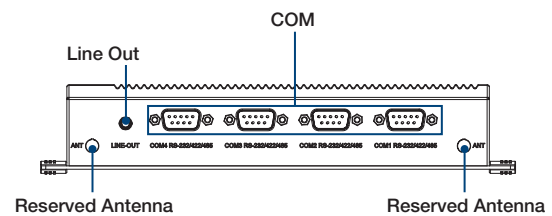
UNO-2484G double stack version



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	
	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

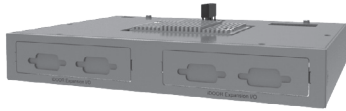
Operating System

- UNO-2484G-6 series:**
 - 20703WE7PS0009 WS7P X64 MUI V4.18 BQ23 Image
 - 20703WX9HS0001 WIN10 LTSC V6.04 for i7 version
 - 20703WX9VS0001 WIN10 LTSC V6.04 for i5/i3 version
- UNO-2484G-7 series:**
 - 20703WX9HS0000 WIN10 LTSC V6.04 for i7 version
 - 20703WX9VS0000 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

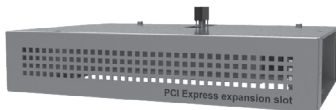
Ordering Information

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

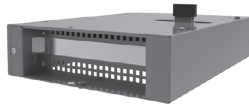
UNO-2484G-PCIEAE

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