

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**

Preliminary



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)
Built-in 4 GB DDR3L, 1866 MHz (supports up to 8 GB)
- **Memory** Intel® HD Graphics 500
- **Graphics Engine** Intel® i210 GbE, 802.3Qav, 802.1AS, 802.3az
- **Ethernet** Power, RTC battery, LAN (active, status), and HDD
- **LED Indicators** 1 x mSATA shared with mPCIe socket
- **Storage** 1 x 2.5" SATA HDD drive bay (max. height 9.5 mm)
2 x Full-size mPCIe sockets
- **Expansion**

I/O

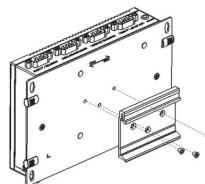
- **Serial Ports** 4 x RS-232/422/485, DB9, 50 ~ 115.2kbps
- **LAN** 2 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast Ethernet
- **USB** 4 x USB 3.0
- **Displays** 1 x HDMI 1.4b (3840 x 2160 @30 Hz)
1 x DP 1.2 (3840 x 2160 @60 Hz)
- **Power Connector** 1 x 2-pin terminal block

Environment

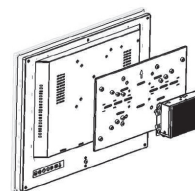
- **Operating Temperature** -20 ~ 60 °C/-4 ~ 140 °F @ 5 ~ 85% RH with 0.7m/s airflow
- **Storage Temperature** -40 ~ 85 °C/-40 ~ 185 °F
- **Relative Humidity** 10 ~ 95% RH @ 40 °C/104 °F, non-condensing
- **Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11ms
- **Vibration Protection**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



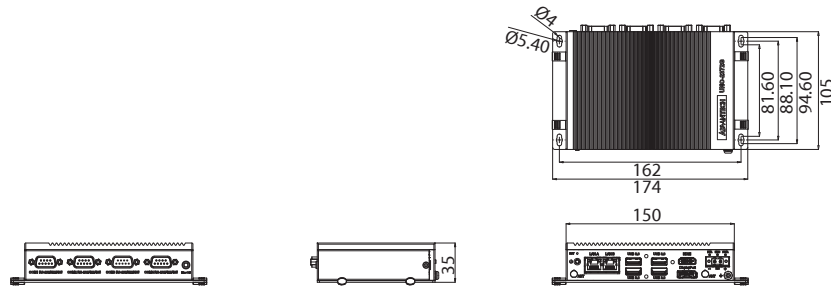
Ordering Information

- **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)

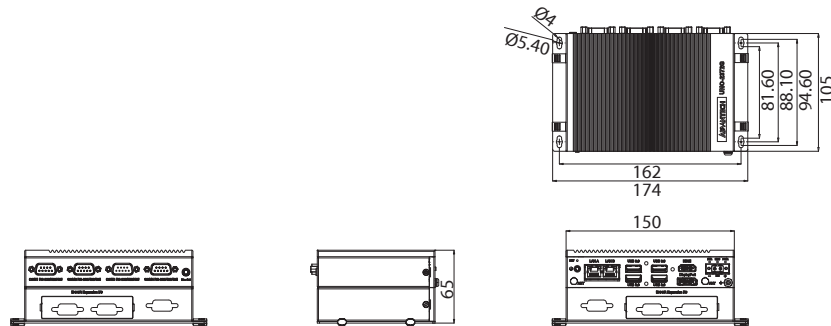
Dimensions

Single Stack

Unit: mm

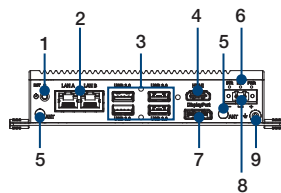


Double Stack



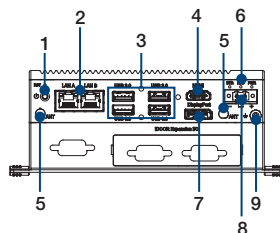
Front I/O

Single Stack



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

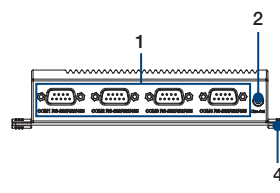
Double Stack



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

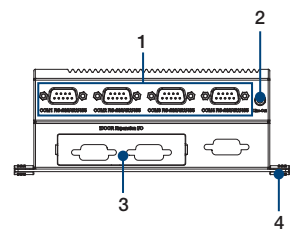
Rear I/O

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

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

Embedded OS

- TBD