# UNO-2271G

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



### **Features**

- Intel® Atom™ E3815 Processor up to 1.46 GHz with 4GB DDR3L onboard
- 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/GPS/GPRS/Wi-Fi Communication by iDoor Technology
- Supports 30+ iDOOR combination with four main categories of smart factory application
- Chassis Grounding Protection
- Built-in 32G eMMC storage
- Selectable I/O support for standard models

## Introduction

Advantech's new generation UNO-2000 series of Embedded Automation Computers are Fanless with highly ruggedized with embedded operation system. New UNO-2000 series implement Universal, Customized, and Domain idea into modular design concept which provides 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 Peripheral, Industrial Fieldbus, Smart I/O Communication, and Signal Communication. New UNO-2000 series including pocket, small, and regular-size form-factors with indicated market segments in terms of different kinds of smart factory application categories such as Equipment Connectivity (EC), Process Visualization (PV), Environment Management (EM), and Dispatch Management (DM) solution. New UNO enables smart factory and fulfill all application.

## **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-E21AE

100 x 70 x 65 mm (3.9" x 2.8" x 2.6"). UNO-2271G-E22AE and E23AE

 Form Factor Pocket Size, same dimension as standard 2.5" SSD/

Enclosure Aluminum Housing

- Mounting Stand, Wall, VESA (Optional), DIN-rail (Optional).

Pole (Optional)

Weight (Net) 0.5 kg (1.1lbs) for UNO-2271G-E21AE

0.6 kg (1.2lbs) for UNO-2271G-E22AE and E23AE

 Power Requirement 10 ~ 30V<sub>DC</sub>

Power Consumption 12W (Typical), 20W (Max)

For mSATA storage: Windows7, Windows10 LTSB, OS Support

Advantech Linux

For eMMC storage: Advantech embedded customized Windows 7 64bits, Windows 10 LTSB, Advantech Linux

#### **System Hardware**

BIOS AMI EFI64 Mbit

 Watchdog Timer Programmable 256 levels timer interval, from 1 to 255

Processor Intel Atom E3815 1.46GHz (E3825 support by project)

System Chip Intel Atom SoC integrated

Onboard 4GB DDR3L 1066 MHz Memory

**Graphics Engine** Intel® HD Graphics

Realtek RTL8111E GbE, 802.10av Ethernet **LED Indicators** LEDs for Power, HDD, LAN (Active, Status) Onboard 32G eMMC (Option mSATA) Storage

Expansion 1 x Full-size mPCle slot

#### I/O Interfaces

2 x RS 232/422/485 by extension mini card for Serial Ports

UNO-2271G-E23AE

2 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000Base-T LAN Ports

Fast Ethernet USB Ports

1 x USB 3.0 for UNO-2271G-E21AE 3 x USB 2.0 and 1 x USB 3.0 for UNO-2271G-E22AE

1 x USB 3.0 for UNO-2271G-E23AE

Displays 1 x HDMI, supports 1920 x 1080 @ 60Hz 1 x 2 Pins, Terminal Block

**Power Connector Grounding Protection** Chassis Grounding

#### **Environment**

• Operating Temperature  $0 \sim 50^{\circ}\text{C} (32 \sim 122^{\circ}\text{F}) @ 5 \sim 85\% \text{ RH with } 0.7 \text{ m/s}$ airflow

Storage Temperature **Relative Humidity** 

- 20 ~ 70°C ( -4 ~ 158°F)

**Shock Protection** 

 $10 \sim 95\%$  RH @  $40^{\circ}$ C, non-condensing Operating, IEC 60068-2-27, 50G, half sine, 11 ms Operating, IEC 60068-2-64, 2 Grms, random,

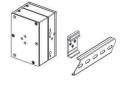
5 ~ 500 Hz, 1hr/axis (mSATA)

Ingress Protection

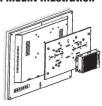
**Vibration Protection** 

# Installation Scenario

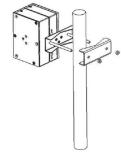
## **DIN-rail Mount Illustration**

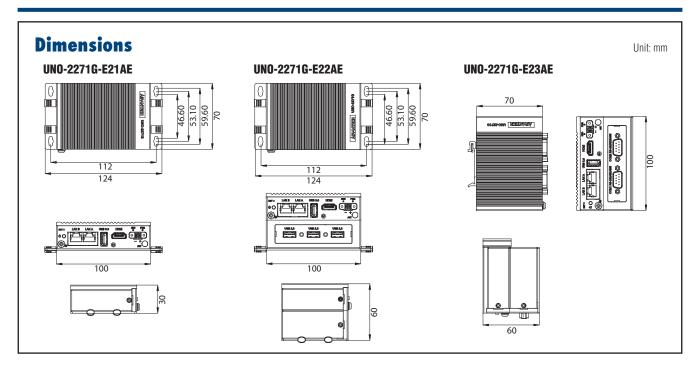


#### **VESA Mount Illustration**



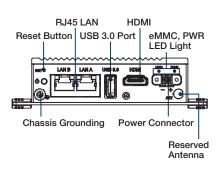
#### **Pole Mount Illustration**



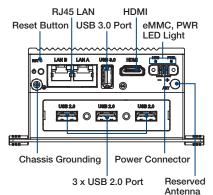


## Front I/O View

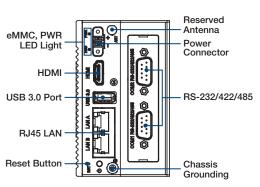
#### UNO-2271G-E21AE



#### UNO-2271G-E22AE



#### UNO-2271G-E23AE



## **Ordering Information**

UNO-2271G-E21AE

2271G-Standard, Intel Atom E3815 1.46 GHz, 4GB, 2 x LAN, 1 x mPCle, 1 x USB3.0

UNO-2271G-E22AE

2271G-Universal, Intel Atom E3815 1.46 GHz, 4GB, 2 x LAN, 1 x mPCle, 1 x USB3.0, 3 x USB2.0

UNO-2271G-E23AE

2271G-DIN RAIL, Intel Atom E3815 1.46GHz, 4GB, 2 x LAN,

UNO-2271G-W1032GE

1 x mPCle, 1 x USB3.0, 2 x RS-232/422/485

2271G-Ready-to-Go, UNO-2271G-E21AE with Windows 10 LTSB, WISE-PaaS/RMM, and PWR-247-CE 60W Adapter

## iDoor Modules

PCM-24S2WF-AE 802.11 a/b/g/n 2T2R w/ Bluetooth4.0, Half-size mPCle, 2-port

 PCM-24S23G-AE 6-band HSPA Cellular Module, GPS, SIM holder, SMAx2

PCM-24R2GL-AE 2-Port Gigabit Ethernet, mPCle, RJ45

PCM-24D2R2-AE 2-Port Isolated RS-232 mPCle, DB9

PCM-24D4R4-AE 4-Port Non-Isolated RS-422/485 mPCle, DB37

PCM-24R1TP-AE 1-Port Gigabit Ethernet, Intel® 82574L, mPCle, RJ45

24-Channel Isolated Digital I/O w/ counter mPCle, DB37 PCM-27D24DI-AE

## **Optional Accessories**

PWR-247-CE

1702002600

1702002605

1702031801

1700000596

UNO-2271G-EKAE UNO-2271G-DMKAE

UNO-2000G-VMKAE

UNO-2000G-PMKAE

UNO-2271G-LKAE

60W AC to DC UNO series power adapter (Industrial Grade)

Power Cable US Plug 1.8 M (Industrial Grade)

Power Cable EU Plug 1.8 M (Industrial Grade)

Power Cable UK Plug 1.8 M (Industrial Grade)

Power Cable China/Australia Plug 1.8 M (Industrial Grade)

UNO-2271G Expansion ME Kit UNO-2271G DIN RAIL Kit

UNO-2000 VESA Mount Kit UNO-2000 Pole Mount Kit

UNO-2271G lockable kit 10 units/per pack