UNO-2271G

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

NEW

Features

- Intel® Atom™ E3815 Processor up to 1.46 GHz 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/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

RoHS COMPLIANT 2002/95/EC | CCC | CE | FCC | c(UL)us LISTED E190881 I.T.E.

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/HDD
- **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_{DC}
- **Power Consumption** 12W (Typical), 20W (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 256 levels timer interval, from 1 to 255 sec
- **Processor** Intel Atom E3815 1.46GHz (E3825 support by project)
- **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 32G eMMC (Option mSATA)
- **Expansion** 1 x Full-size mPCIe slot

I/O Interfaces

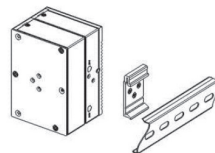- **Serial Ports** 2 x RS 232/422/485 by extension mini card for UNO-2271G-E23AE
- **LAN Ports** 2 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000Base-T Fast Ethernet
- **USB Ports** 1 x USB 3.0 for UNO-2271G-E21AE
  3 x USB 2.0 and 1 x USB 3.0 for UNO-2271G-E22AE
  1 x USB 3.0 for UNO-2271G-E23AE
- **Displays** 1 x HDMI, supports 1920 x 1080 @ 60Hz
- **Power Connector** 1 x 2 Pins, Terminal Block
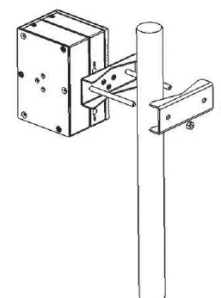- **Grounding Protection** Chassis Grounding

Environment

- **Operating Temperature** 0 ~ 50°C (32 ~ 122°F) @ 5 ~ 85% RH with 0.7 m/s airflow
- **Storage Temperature** - 20 ~ 70°C (-4 ~ 158°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
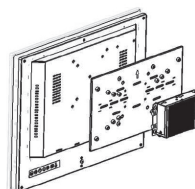
Installation Scenario
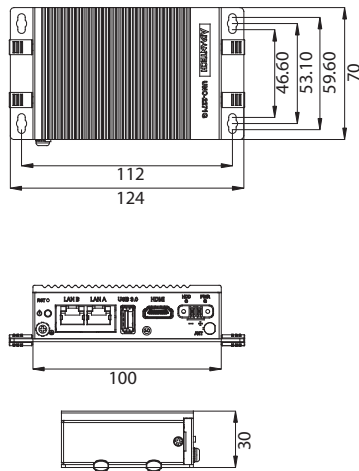
DIN-rail Mount Illustration
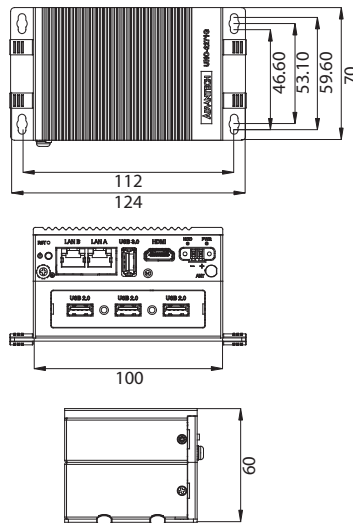
Pole Mount Illustration

VESA Mount Illustration

ADVANTECH | **IoT Gateways**

Dimensions

Unit: mm

UNO-2271G-E21AE

46.60 / 53.10 / 59.60 / 70

112
124

100

30

UNO-2271G-E22AE

46.60 / 53.10 / 59.60 / 70

112
124

100

60

UNO-2271G-E23AE

70

100

60
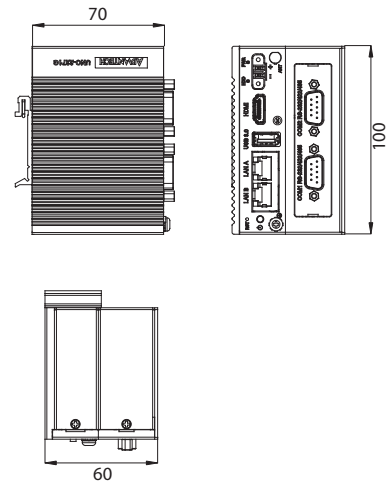
Front I/O View

UNO-2271G-E21AE

- Reset Button
- RJ45 LAN
- USB 3.0 Port
- HDMI
- eMMC, PWR LED Light
- Chassis Grounding
- Power Connector
- Reserved Antenna

UNO-2271G-E22AE

- Reset Button
- RJ45 LAN
- USB 3.0 Port
- HDMI
- eMMC, PWR LED Light
- Chassis Grounding
- Power Connector
- 3 x USB 2.0 Port
- Reserved Antenna

UNO-2271G-E23AE

- eMMC, PWR LED Light
- HDMI
- USB 3.0 Port
- RJ45 LAN
- Reset Button
- Reserved Antenna
- Power Connector
- RS-232/422/485
- Chassis Grounding
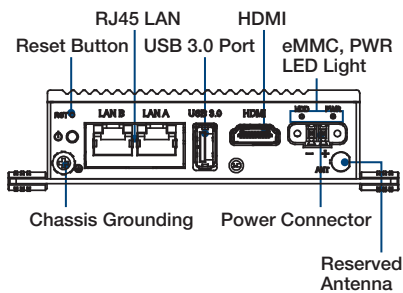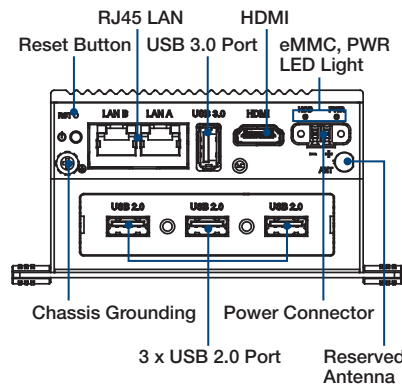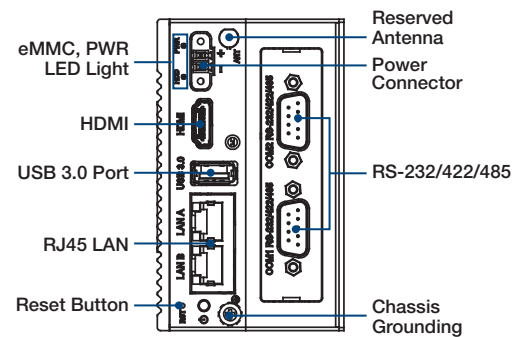
Ordering Information

- **UNO-2271G-E21AE** 2271G-Standard, Intel Atom E3815 1.46 GHz, 4GB, 2 x LAN, 1 x mPCIe, 1 x USB3.0
- **UNO-2271G-E22AE** 2271G-Universal, Intel Atom E3815 1.46 GHz, 4GB, 2 x LAN, 1 x mPCIe, 1 x USB3.0, 3 x USB2.0
- **UNO-2271G-E23AE** 2271G-DIN RAIL, Intel Atom E3815 1.46GHz, 4GB, 2 x LAN, 1 x mPCIe, 1 x USB3.0, 2 x RS-232/422/485
- **UNO-2271G-W1032GE** 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 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-AE** 2-Port Isolated RS-232 mPCIe, DB9
- **PCM-24D4R4-AE** 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

Optional Accessories

- **PWR-247-CE** 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-2271G-EKAE** UNO-2271G Expansion ME Kit
- **UNO-2271G-DMKAE** UNO-2271G DIN RAIL Kit
- **UNO-2000G-VMKAE** UNO-2000 VESA Mount Kit
- **UNO-2000G-PMKAE** UNO-2000 Pole Mount Kit
- **UNO-2271G-LKAE** UNO-2271G lockable kit 10 units/per pack

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