UNO-2271G

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

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

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. It 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 (3.9" x 2.8" x 1.2"), UNO-2271G-E21AE
  100 x 70 x 65 (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** Microsoft® Windows 10, Windows 7,, 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
- **System Chip** Intel Atom SoC integrated
- **Memory** Onboard 4GB DDR3L 1066 MHz
- **Graphics Engine** Intel® HD Graphics
- **Ethernet** Realtek RTL8111E GbE, 802.10av, IEEE1588/802.1AS, 803.3az
- **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

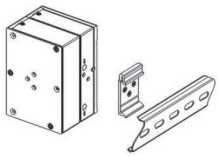
- **Serial Ports** 2 x RS 232/422/485 by extension mini card for UNO-2271G-E22AE/UNO-2271G-E23AE
- **LAN Ports** 2 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000Base-T Fast Ethernet
- **USB Ports** 1 x USB 3.0 for UNO-2271G-E21AE
  3 x USB 2.0 and 1 x USB 3.0 for UNO-2271G-E22AE and UNO-2271G-E23E by extension USB card support (Option COM port x 2)
- **Displays** 1 x HDMI, supports 1920 x 1080 @ 60Hz
- **Power Connector** 1 x 2 Pins, Terminal Block
- **Grounding Protection** Chassis Grounding

Environment

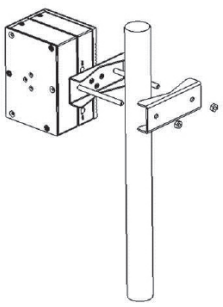
- **Operating Temperature** 0~50°C (32 ~ 122°F) @ 5 ~ 85% RH with 0.7 m/s airflow
- **Storage Temperature** - 20 ~ 70°C (-4 ~ 158°F)
- **Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- **Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11 ms
- **Vibration Protection** Operating, IEC 60068-2-64, 2 Grms, random, 5 ~ 500 Hz, 1hr/axis (mSATA)
- **Ingress Protection** IP40

Installation Scenario

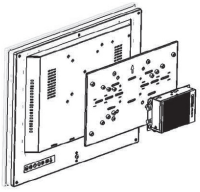
DIN-Rail Mount Illustration



Pole Mount Illustration



VESA Mount Illustration



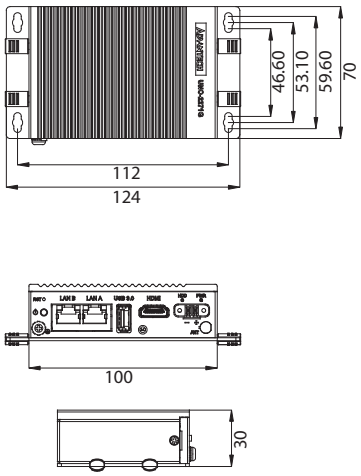
All product specifications are subject to change without notice

Last updated : 19-Aug-2016

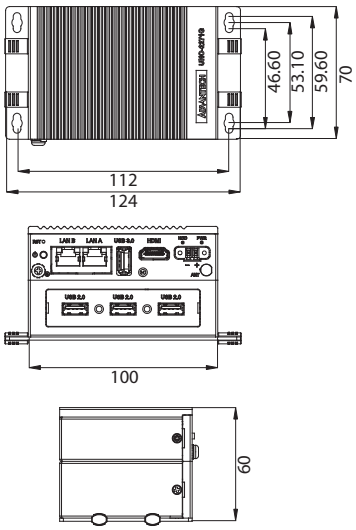
Dimensions

Unit: mm

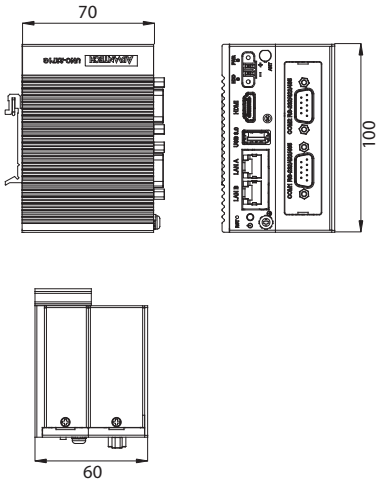
UNO-2271G-E21AE



UNO-2271G-E22AE

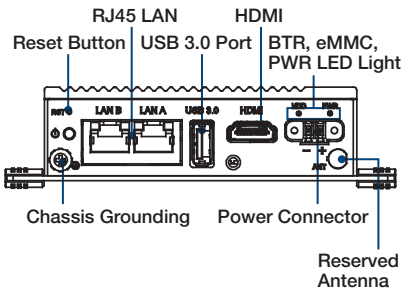


UNO-2271G-E23AE

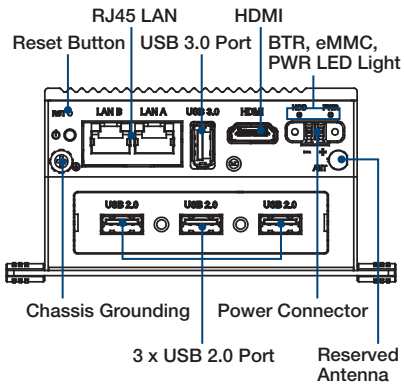


Front I/O View

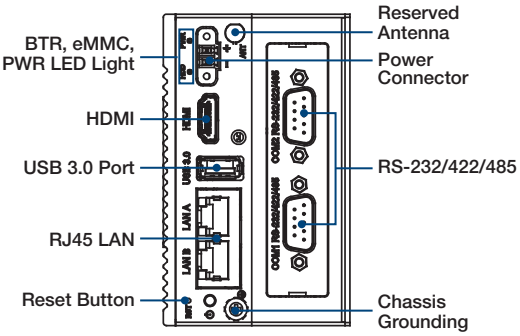
UNO-2271G-E21AE



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 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-STKAE	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-2000G-VMKAE	UNO-2000 VESA Mount Kit
UNO-2000G-PMKAE	UNO-2000 Pole Mount Kit
1960018849T021	UNO-2271G DIN RAIL Kit
TBD	Windows 10 Enterprise image for UNO-2271G
TBD	WES7P image for UNO-2271G MUI

EIS Software Bundle Packages

EIS-FPV110-A2271AE	UNO-2271G-E22AE, ACP TMReady Client, HDMIx1
EIS-FPV110-H2271AE	UNO-2271G-E21AE, 1500 tags, 32G eMMC, WES7P
EIS-FEM210-H2271AE	UNO-2271G-E23AE, 1500 tags, 32G eMMC, WES7P
EIS-FEM210-S2271AE	UNO-2271G-E23AE, 1500 tags, 32G eMMC, WES7P
EIS-FEC310-H2271AE	UNO-2271G-E23AE, 1500 tags, 32G eMMC, WES7P
EIS-FDM410-H2271AE	UNO-2271G-E23AE,1500 tags, 32G eMMC, WES7P