UNO-1372GH

Class I, Division 2 Certified Intel® Atom™ Quad-Core Control DIN-rail PC

NEW

Features

- UL listed for Hazardous Locations: Class I, Division 2
- Intel® Atom E3845 1.91GHz processor with 4GB DDR3L Memory
- 3 x GbE, 3 x USB, 2 x COM, 1 x VGA, 1 x HDMI, Audio, iDoor, mSATA, 2 x mPCIe, 1 x SATA, 4 x DI, 4 x DO, 1 x Power Terminal
- Spark-free design with lockable I/O kit
- Dual Power Input for Avoiding Power Down Time
- Exchangeable RTC Battery with easy Access on the Top
- Digital I/O with Isolation Protection for Sensing and controlling
- Diverse system IO and Supports Fieldbus Protocol by iDoor Technology as a Protocol Gateway
- 3G/GPS/GPRS/Wi-Fi Communication by iDoor Technology as a Communication Gateway
- Supports MRAM by iDoor Technology
- LAN Redundancy (Teaming)

iDoor | RoHS COMPLIANT 2002/95/EC | CCC | CE | FCC | c UL us LISTED E180881 I-T.E.

Introduction

In hazardous locations, devices are under potential danger from flammable gases, combustible dust, or ignitable fibers, creating the potential for fire and explosions. The UNO-1372GH is designed to be safely operated in these locations and are UL listed for Hazardous Locations with Class I, Division 2, groups A, B, C, D T4A certification. The UNO-1372GH is an Intel Atom DIN-rail PC which features an innovative iDOOR Technology for automation applications. It provides rich I/O include 3 x GbE, 3 x USB, 2 x COM, 1 x VGA, 1 x HDMI, Audio, iDoor,8 x DIO, all of them can be locked with system by lockable kit to make sure spark-free in harsh environment.

Specifications

General

- **Certification**
  CE, FCC, UL, CCC, BSMI
  Class I, Division 2, Groups A,B,C,D, Hazardous Location, Temperature code: T4A, Ambient Temperature Range: -20°C - 60°C
- **Dimensions (W x D x H)**   85 x 139 x 152 mm (3.3" x 5.5" x 6.0")
- **Form Factor**   Small Size
- **Enclosure**   Aluminum Housing
- **Mounting**   DIN-rail, Wallmount
- **Weight (Net)**   1.6kg (3.5lbs)
- **Power Requirement**   9~36V_{DC} (Recommend 12/24 V_{DC})
- **Power Consumption**   24W (Typical), 50W (Max)
- **OS Support**   Microsoft® Windows 7/8, WES7, WIN10 Ent. LTSB, AdvLinux

System Hardware

- **BIOS**   AMI UEFI 128Mbit Flash BIOS
- **Watchdog Timer**   Programmable 255 levels timer interval, from 1 to 255 sec
- **Processor**   Intel Atom E3845 1.91GHz, 2MB L2 Cache
- **System Chip**   Integrated Intel SoC Chipset
- **Memory**   Built-in 4GB DDR3L 1333 MHz (Up to 8GB)
- **Graphics Engine**   Intel® HD Graphics
- **Ethernet**   LAN A, B: Intel® i210-IT GbE, 802.1Qav, 802.1AS, 802.3az
  LAN C: Realtek RTL8111E GbE
- **LED Indicators**   LEDs for Power, battery, LAN (Active, Status), COM (Tx/ Rx), HDD and Programmable LED
  1 x mSATA
- **Storage**   One drive bay for SATA 2.5" HDD (Compatible with 9.5mm height HDD)
- **Expansion**   2 x Full-size mPCIe slot
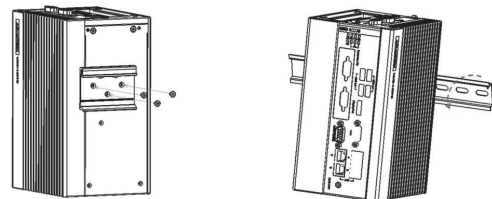
I/O Interfaces

- **Serial Ports**   1 x RS-232, DB9, 50~115.2kbps
  1 x RS-422/485, DB9, auto flow control, 50~115.2kbps
- **LAN Ports**   3 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000Base-T Fast Ethernet
- **USB Ports**   3 x USB Ports (2 x USB2.0, 1 x USB 3.0)
- **Isolated DIO**   4-ch digital input, 4-ch digital output (2500 V_{DC})
- **Displays**   1 x VGA, supports 1920 x 1080 @ 60Hz 24bpp
  1 x HDMI 1.4a, supports 1920 x 1080 @ 60Hz 24bpp
- **Audio**   Line-Out
- **Power Connector**   1 x 4 Pins, Terminal Block to support dual power input
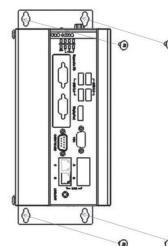
Environment

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

Installation Scenario
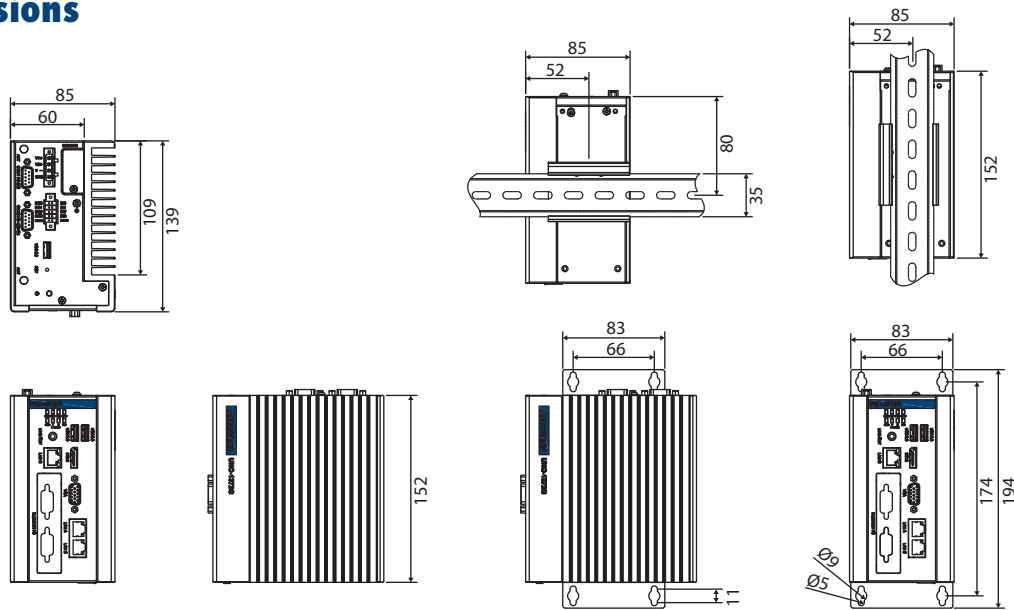
DIN-rail mounting illustration
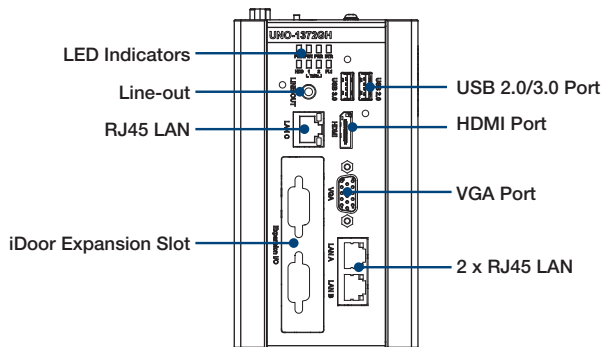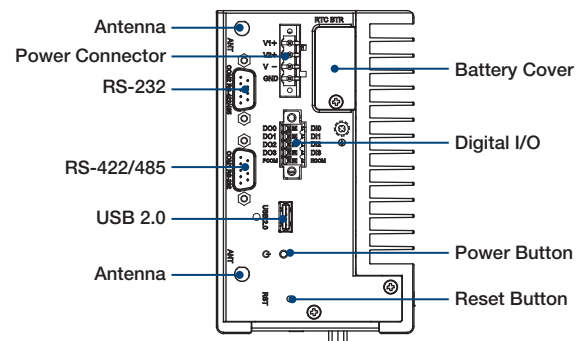

Wall mounting illustration

Last updated: 6-Nov-2017

Dimensions

Unit: mm

Front I/O View

- LED Indicators
- Line-out
- RJ45 LAN
- iDoor Expansion Slot
- USB 2.0/3.0 Port
- HDMI Port
- VGA Port
- 2 x RJ45 LAN

Top I/O View

- Antenna
- Power Connector
- RS-232
- RS-422/485
- USB 2.0
- Antenna
- Battery Cover
- Digital I/O
- Power Button
- Reset Button

Ordering Information

- **UNO-1372GH-E3AE**   Class I, Division 2 Certified Intel Atom Quad-Core 1.91GHz, 4GB, 3 x LAN, 2 mPCIe, iDoor

iDoor Modules

- **PCM-23C1CF-BE**   1 CFast Slot with Cover Protection
- **PCM-23U1DG-BE**   USB Slot w/ Lock 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-24D2R4-BE**   2-Port Isolated RS-422/485 mPCIe, DB9
- **PCM-24D4R4-BE**   4-Port Non-Isolated RS-422/485 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, 2-in-1, Full-size mPCIe w/ Redundant SIM Card holder, 2-port SMA
- **PCM-26R2PN-MAE**   2-Port Hilscher netX100 FieldBus mPCIe, PROFINET, RJ45, Master
- **PCM-26R2PN-SAE**   2-Port Hilscher netX100 FieldBus mPCIe, PROFINET, RJ45, Slave
- **PCM-26D1DB-MAE**   1-Port Hilscher netX100 FieldBus mPCIe, PROFIBUS, DB9, Master
- **PCM-26D1DB-SAE**   1-Port Hilscher netX100 FieldBus mPCIe, PROFIBUS, DB9, Slave

Optional Accessories

- **PWR-247-CE**   ADP A/D 100-240V 60W 24V (Commercial 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-IPS2460-AE**   24 V$_{DC}$/ 60 Watts DIN-Rail Power Supply

Embedded O/S

- **2070014956**   Image Win10 Enterprise 2016 LTSB X64 MUI for UNO-1372G
- **2070013467**   Image WES7P X64 MUI. for UNO-1372G
- **2070014549**   Image AdvLinuxTU for UNO-1372G
- **2070014098**   Image WEC7 MUI for UNO-1372G