# UNO-1372GH

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





## **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 mPCle, 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)

## 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 to make sure they are spark-free in harsh environments.

# **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

Dimensions (WxDxH) 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<sub>DC</sub> (Recommend 12/24 V<sub>DC</sub>)

**Power Consumption** 24W (Typical), 50W (Max)

Microsoft® Windows 7/8, WES7, WIN10 Ent. LTSB, AdvLinux **OS Support** 

## **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

Integrated Intel SoC Chipset System Chip

Memory Built-in 4GB DDR3L 1333 MHz (Up to 8GB)

Graphics Engine Intel® HD Graphics

LAN A, B: Intel® i210-IT GbE, 802.1Qav, 802.1AS, 802.3az Ethernet

LAN C: Realtek RTL8111E GbE

LED Indicators LEDs for Power, battery, LAN (Active, Status), COM (Tx/Rx),

HDD and Programmable LED

1 x mSATA

One drive bay for SATA 2.5" HDD (Compatible with 9.5mm Storage

height HDD)

2 x Full-size mPCle slot Expansion

All product specifications are subject to change without notice

#### 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 3 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast LAN Ports

**Ethernet** 

3 x USB Ports (2 x USB2.0, 1 x USB 3.0) IISR Ports 4-ch digital input, 4-ch digital output (2500  $V_{DC}$ ) 1 x VGA, supports 1920 x 1080 @ 60Hz 24bpp Isolated DIO Displays

1 x HDMI 1.4a, supports 1920 x 1080 @ 60Hz 24bpp

Audio

**Power Connector** 1 x 4 Pins, Terminal Block to support dual power input

#### **Environment**

**Operating Temperature** 

Storage Temperature

Relative Humidity

**Shock Protection** 

**Vibration Protection** 

Ingress Protection

- 20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow (Industry SSD)

- 40 ~ 85°C ( -40 ~ 185°F) 95% RH @ 40°C, non-condensing

Operating, IEC 60068-2-27, 50G, half sine, 11ms Operating, IEC 60068-2-64, 5Grms, random, 5 ~ 500Hz,

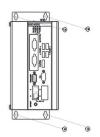
## **Installation Scenario**

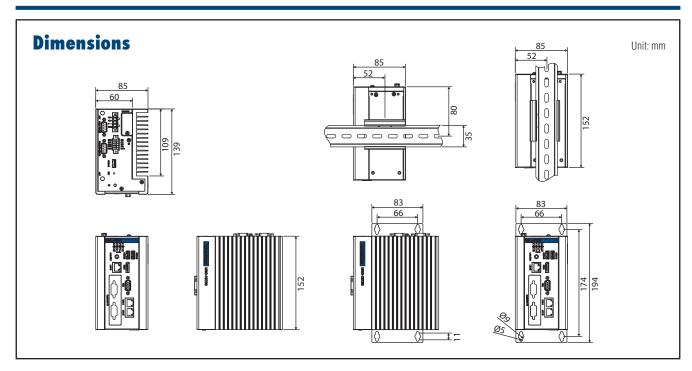
#### **DIN-rail mounting illustration**



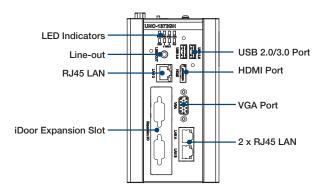


## **Wall mounting illustration**





## Front I/O View



# **Ordering Information**

UNO-1372GH-E3AE

Class I, Division 2 Certified Intel Atom Quad-Core 1.91GHz, 4GB, 3 x LAN, 2 mPCle, iDoor

## iDoor Modules

PCM-23C1CF-BE

PCM-23U1DG-BE

PCM-24R2GL-AE

PCM-24U2U3-AE

PCM-24D2R4-BE

PCM-24D4R4-BE

PCM-24S2WF-BE

PCM-24S33G-AE

■ PCM-26R2PN-MAE

PCM-26R2PN-SAE

PCM-26D1DB-MAE

PCM-26D1DB-SAE

1 CFast Slot with Cover Protection USB Slot w/ Lock for USB Dongle

2-Port Gigabit Ethernet, mPCle, RJ45 2-Port USB 3.0, mPCle, USB-A type 2-Port Isolated RS-422/485 mPCle, DB9

4-Port Non-Isolated RS-422/485 mPCle, DB37 WiFi 802.11 ac/a/b/g/n 2T2R w/Bluetooth 4.1

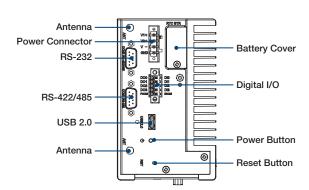
Wide-Temp 3.75G HSPA and GPS, 2-in-1, Full-size mPCle w/ Redundant SIM Card holder, 2-port SMA 2-Port Hilscher netX100 FieldBus mPCle, PROFINET,

RJ45, Master 2-Port Hilscher netX100 FieldBus mPCle, PROFINET, RJ45, Slave

1-Port Hilscher netX100 FieldBus mPCle, PROFIBUS, DB9, Master

1-Port Hilscher netX100 FieldBus mPCle, PROFIBUS, DB9, Slave

# Top I/O View



# **Optional Accessories**

PWR-247-CE

1702002600

1702002605

1702031801

1700000596 UNO-IPS2460-AE

ADP A/D 100-240V 60W 24V (Commercial Grade) Power Cable EU 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) 24 V<sub>DC</sub>/ 60 Watts DIN-Rail Power Supply

# Embedded O/S

**2070014956** 

2070014549

2070014098

20703WE7PS0010 20703WE7PS0011

Image Win10 Enterprise 2016 LTSB X64 MUI for UNO-1372G

Image AdvLinuxTU for UNO-1372G

Image WEC7 MUI for UNO-1372G

Img WS7P X64 MUI V4.18 B024 for UNO-1372G Img WS7P X86 MUI V4.18 B021 for UNO-1372G