UNO-1372GH

C1D2 Certified Small-Size DIN-rail Gateway with Intel® Atom™ E3845

Features

- UL listed for Hazardous Locations: Class I, Division 2
- Intel® Atom E3845 1.91GHz processor with 4GB DDR3L memory
- Dual power inputs
- Digital I/O with isolation protection for sensing and controlling
- Amazon AWS IoT Greengrass certified

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 - 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**: 10–36V_{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)
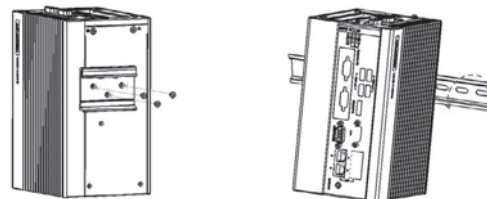- **Expansion**: 2 x Full-size mPCIe slot

I/O Interfaces

- **Serial Ports**: 1 x RS-232, DB9, 50bps~115.2kbps
  1 x RS-422/485, DB9, auto flow control, 50bps~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
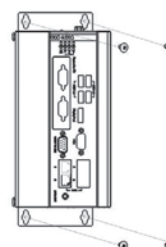
Environment

- **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
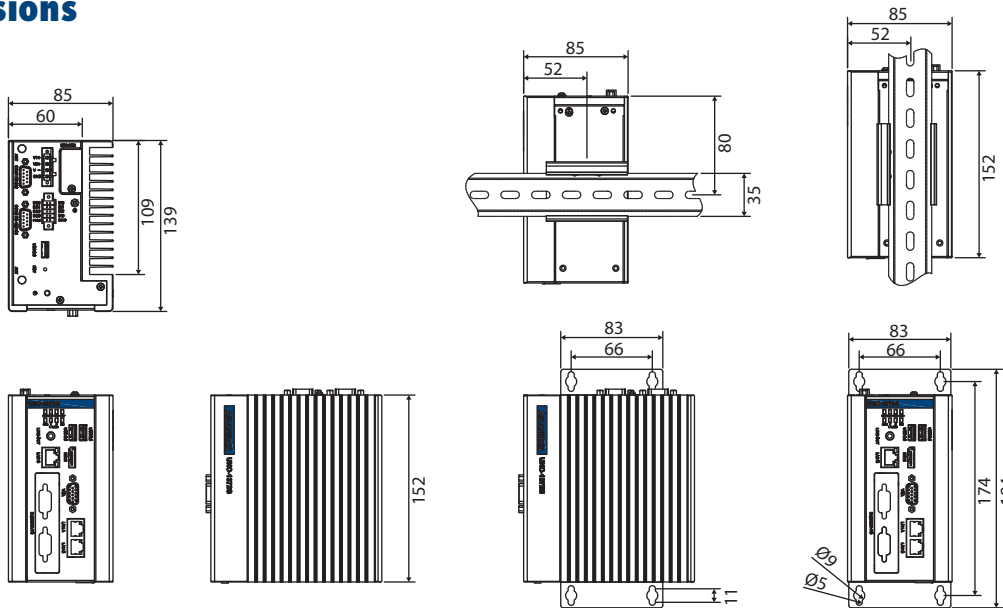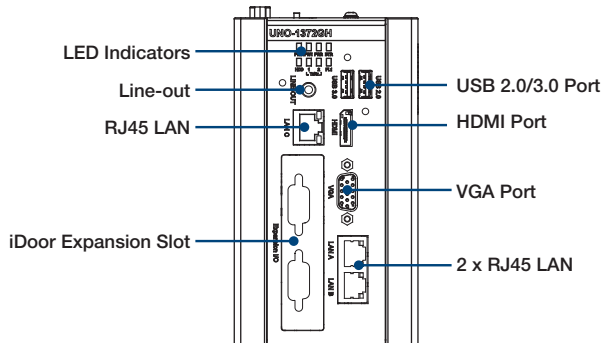
DIN-rail mounting illustration
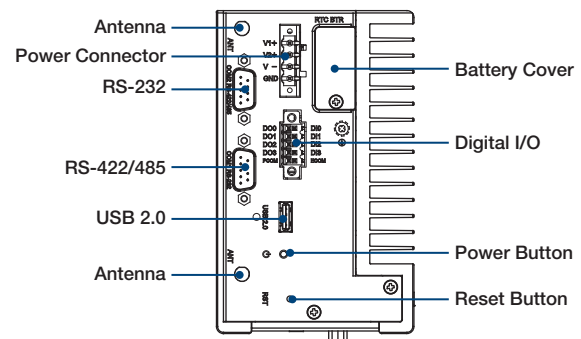
Wall mounting illustration

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, IO-Controller
- **PCM-26R2PN-SAE** — 2-Port Hilscher netX100 FieldBus mPCIe, PROFINET, RJ45, IO-Device
- **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-DE** — 100-240V 60W 24V 2.5A Power Supply
- **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

- **20703WX9ES0026** — Img W10LTSC x64 V6.05 B021 UNO-1372G-ExAE Entry
- **20703LEB1S0091** — Image AdvLinuxTu V2.0.6 for UNO/TPC series
- **20703WC70S0037** — Img WEC7 MUI V4.02 B117 for UNO-1372G
- **20703WE7PS0010** — Img WS7P X64 MUI V4.18 B024 for UNO-1372G
- **20703WE7PS0011** — Img WS7P X86 MUI V4.18 B021 for UNO-1372G

Please note: If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries. Please contact Advantech for certificate compliance.