

# UNO-1252G

Intel® Quark Micro DIN-rail Gateway  
w/ 2 x LAN, 2 x mPCIe, 2 x COM, 4 x DI,  
4 x DO, 2 x USB, 1 x 1GB microSD card,  
1 x SIM

NEW



## Features

- Intel® Quark X1001 400 MHz Processor with 256/512MB Memory
- 2 x LAN, 2 x mPCIe, 1 x RS-232, 1 x RS-232/485, 4 x DI, 4 x DO, 2 x USB, 1 x 1GB microSD card, 1 x SIM
- COM ports and Digital I/O with Isolation Protection design for Sensing and Controlling
- Chassis Grounding Protection
- Compact with Fanless Design
- DIN-rail mounting design
- Supports GPRS/3G/GPS/Wi-Fi Communication by iDoor Technology
- Supports Yocto Linux system

## Introduction

The UNO-1252G is an Intel Quark DIN-rail controller for IoT gateway solution. This controller features dual LAN ports and mPCIe card slots for economic gateway application bridging cloud and brown area. The general purpose input/output ports also success gateway controller directly reading status of sensors and indicating required results. The UNO-1252G is also equipped with Advantech iDoor technology that employs iDoor modules to extend itself to become a wireless gateway. In addition, the UNO-1252G also features eight LED indicators for the status of Power, Battery, SD card, COM ports and three programmable indicators.

## Specifications

### General

- Certification** CE, FCC, CCC, BSMI, UL
- Dimensions (W x D x H)** 63 x 105 x 100 mm (2.48" x 4.13" x 3.94")
- Form Factor** Micro Size
- Enclosure** Aluminum Housing
- Mounting** DIN-rail
- Weight (Net)** 0.6 kg (1.33 lbs)
- Power Requirements** 10~36 V<sub>DC</sub>
- Power Consumption** 10 W (Typical), 18W (Max)
- OS Support** Yocto Linux

### System Hardware

- BIOS** 8MB SPI Flash
- Processor** Intel Quark X1001 400 MHz
- System Chip** Integrated Intel SoC Chipset
- Memory** On-board 256/512 MB DDR3 800 MHz
- LED Indicators** LEDs for Power (PWR), battery (BTR), COM1~2 (Tx/Rx) and microSD (SD), Programmable Indicators (PL1~3)
- Storage** Built-in 1GB micro SD card, up to 32GB
- Expansion** 2 x Full size mPCIe slot (1 x USB signal, 1 x PCIe signal)

### I/O Interfaces

- Isolated Serial Ports** 1 x RS-232, DB9, 50~115.2 kbps, supports console debug  
1 x RS-232/485, DB9, 50~115.2 kbps (Isolation Protection 1000 V<sub>DC</sub>)
- LAN Ports** 2 x RJ45, 10/100 Mbps
- USB Ports** 1 x USB 2.0 (type-A), 1 x USB Client (micro-B)
- Isolated DI/O** 4-ch digital input, 4-ch digital output (Isolation

Protection 1000 V<sub>DC</sub>, Overvoltage protection 30 V<sub>DC</sub>, default wet contact)

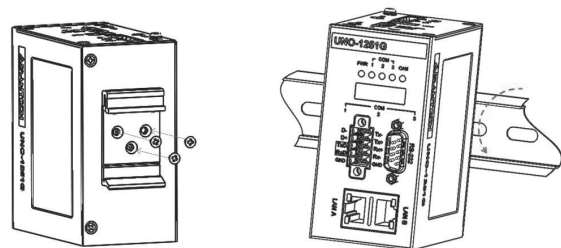
- Power Connector** 1 x 3 Pin, Terminal Block
- Grounding Protection** Chassis Grounding
- SIM** 1 x SIM card slot

### Environment

- Operating Temperature** -20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH
- Storage Temperature** -40 ~ 85°C (-40 ~ 185°F)
- Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11ms
- Vibration Protection** Operating, IEC 60068-2-64, 2 Grms, random, 5 ~ 500Hz, 1 hr/axis

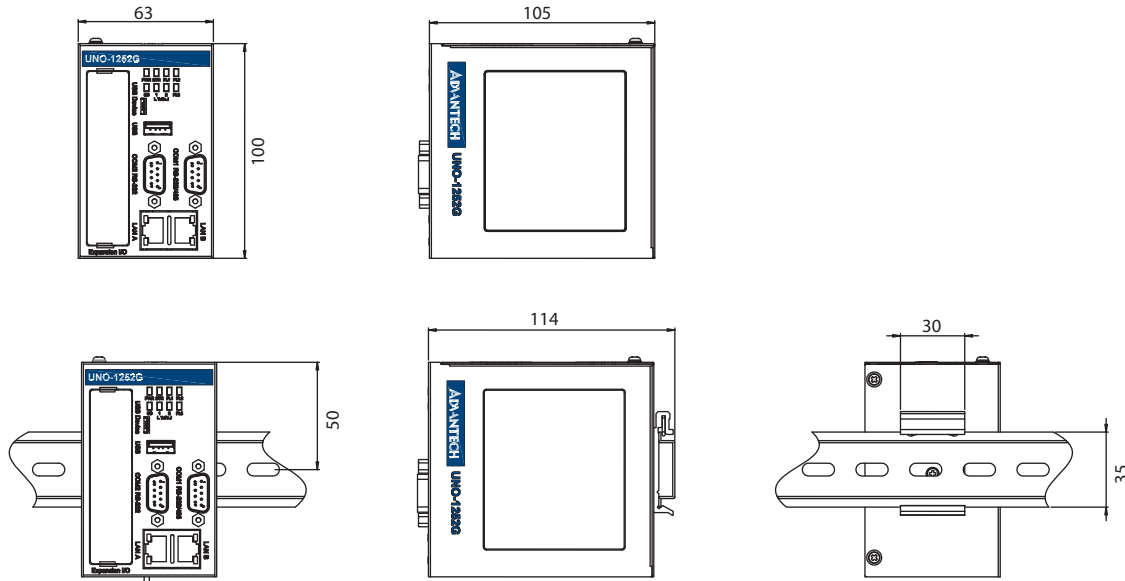
## Installation Scenario

### DIN-rail Mount Illustration



**Dimensions**

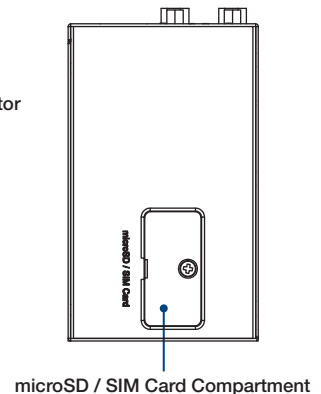
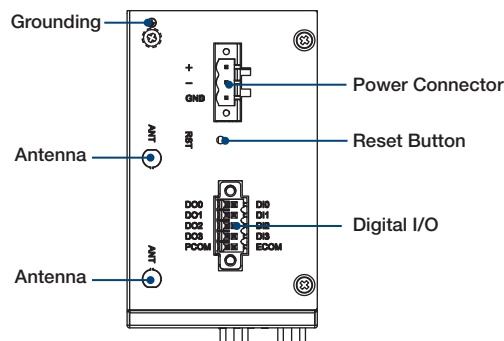
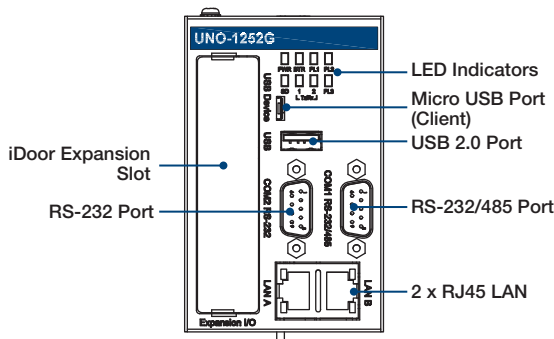
Unit: mm



**Front I/O View**

**Top I/O View**

**Bottom I/O View**



**Ordering Information**

- **UNO-1252G-Q0AE** Intel Quark X1001 400MHz, 2 x LAN, 2 x mPCIe, 2 x COM, 4 x DI, 4 x DO, 2 x USB, 1GB microSD
- **UNO-1252G-Q0BE** Intel Quark X1001 400MHz, 2 x LAN, 2 x mPCIe, 2 x COM, 4 x DI, 4 x DO, 2 x USB, 1GB microSD

**iDoor Modules**

- **PCM-24S33G-AE** Wide-Temp 3.75G HSPA and GPS, 2-in-1, mPCIe w/ dual SIM Card holder, Antenna, cable
- **PCM-24S2WF-BE** WiFi 802.11 ac/a/b/g/n 2T2R w/Bluetooth 4.1, M.2/Full-size mPCIe, Antennas
- **PCM-26D2CA-AE** 2-Port Isolated CANBus mPCIe, CANOpen, DB9
- **PCM-24D2R2-BE** 2-Ports Isolated RS-232 mPCIe, DB9
- **PCM-24D2R4-BE** 2-Ports Isolated RS-422/485 mPCIe, DB9
- **PCM-24D4R2-BE** 4-Ports Non-Isolated RS-232 mPCIe, DB37
- **PCM-24D4R4-BE** 4-Ports Non-Isolated RS-422/485 mPCIe, DB37

\*More iDoor modules will be supported by project.

**Optional Accessories**

- **UNO-IPS2440-AE** 24 V<sub>DC</sub>/ 40 Watts DIN-Rail Power Supply
- **PWR-247-CE** ADP A/D 100-240V 60W 24V
- **1702002600** Power Cable US Plug 1.8 M
- **1702002605** Power Cable EU Plug 1.8 M
- **170203180** Power Cable UK Plug 1.8 M
- **1700000596** Power Cable China/Australia Plug 1.8 M