www.esis.com.au
Ph 02 9481 7420
Fax 02 9481 7267
esis.enq@esis.com.au
ESIS Industrial Electronics

UNO-1252G

Intel® Quark Micro Din-Rail Gateway
w/ 2 x LAN, 2 x mPCIe, 2 x COM, 8 x DI/O,
2 x USB, 1 x 1GB microSD card, 1 x SIM

NEW

Features

- Intel® Quark X1001 400 MHz Processor with 256MB Memory
- 2 x LAN, 2 x mPCIe, 1 x RS-232, 1 x RS-232/485, 8 x DI/O, 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 employes 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 VDC
- **Power Consumption** — 10 W (Typical)
- **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 MB DDR3 800 MHz
- **LED Indicators** — LEDs for Power (PWR) , battery (BTR), COM1~2 (Tx/Rx) and microSD (SD), Programmable Indicators (PL1~3)
- **Storage** — 1 x microSD Slot (1GB microSD card included)
- **Expansion** — 1 x Full-size mPCIe with USB signal, 1 x Full-size mPCIe with PCIe signal, 1 x iDoor I/O front plate

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_{DC})
- **LAN Ports** — 2 x RJ45, 10/100 Mbps (DHCP supported by LAN A)
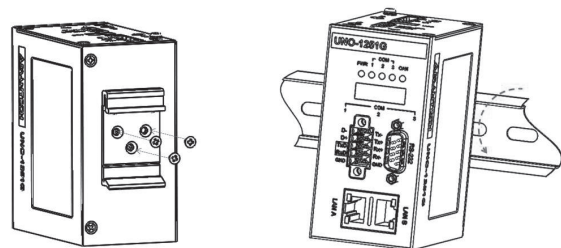- **USB Ports** — 1 x USB 2.0 (type-A), 1 x USB Client (micro-B)

- **Isolated DI/O** — 4-ch digital input, 4-ch digital output (Isolation Protection 1000 V_{DC} , Overvoltage protection 30 V_{DC})
- **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
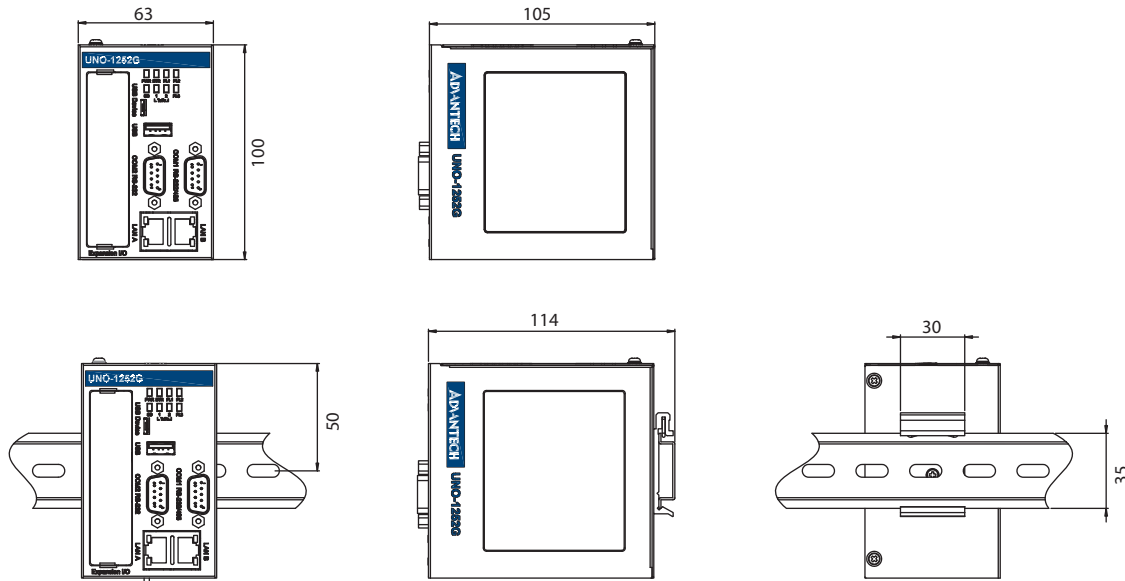
Installation Scenario
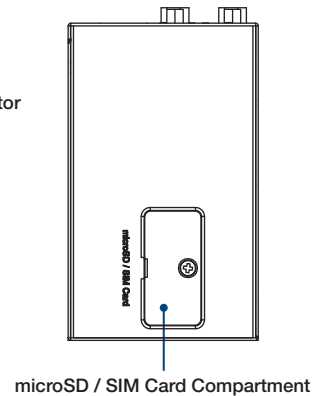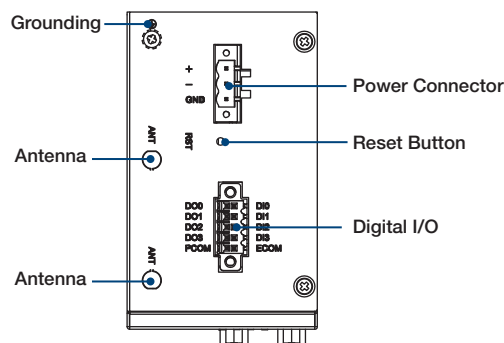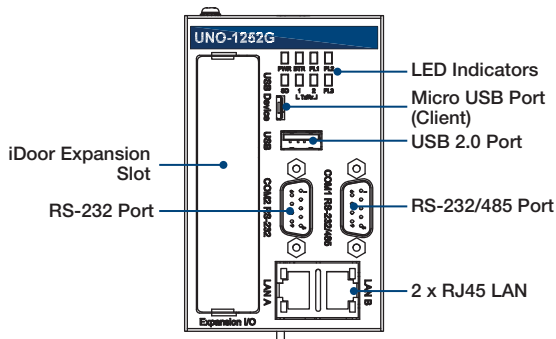
DIN-Rail Mount Illustration

Dimensions

Unit: mm

Front I/O View

- LED Indicators
- Micro USB Port (Client)
- USB 2.0 Port
- iDoor Expansion Slot
- RS-232 Port
- RS-232/485 Port
- 2 x RJ45 LAN

Top I/O View

- Grounding
- Antenna
- Antenna
- Power Connector
- Reset Button
- Digital I/O

Bottom I/O View

microSD / SIM Card Compartment

Ordering Information

- **UNO-1252G-Q0AE** Intel Quark X1001 400MHz, 2 x LAN, 2 x mPCIe, 2 x COM, 8 x DI/O, 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

*More iDoor modules will be supported by project.

Optional Accessories

- **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
- **96FMMSDI-2G-ET-AT** ATP 2G MICRO SD CARD I-GRD SLC(G)
- **968EMC0048** HSPA/EDGE/GPS PCI Express Mini Card
- **1750006264** Coaxial cable for antenna
- **1750005865** Antenna L=10.9 cm 50 Ohm