

UNO-1483G

Intel® Core™ i Regular-Size DIN-rail
Controller w/ 4 x GbE, 3 x mPCIe,
1 x PCIe, DP, VGA, 4 x DI, 4 X DO

NEW



Introduction

The UNO-1483G is an Intel 4th generation Core i3 DIN-rail controller. This controller features dual power inputs that shorten down time and enhance operation excellence. The general purpose input/output ports also help machine builders integrate direct control of start/stop inspections and indicate inspection results. UNO-1483G is also equipped with PCIe slot and Advantech iDoor technology that extend this product to applications such as motion controller, or isolation control unit using iDoor modules. A UNO-1483G fitted with 4 gigabyte LAN, 2 USB 3.0, 3 COM, DP, and VGA provides essential upstream and downstream links. PoE, for example, can be connected to an IP camera using iDoor.

Specifications

General

- **Certification** CE, FCC, UL, CCC, BSMI
- **Dimensions (W x D x H)** 106 x 139 x 198 mm (4.2" x 5.8" x 7.8")
- **Form Factor** Regular Size
- **Enclosure** Aluminum Housing
- **Mounting** DIN-rail, Wallmount
- **Weight (Net)** 2.4kg (5.3lbs)
- **Power Requirement** 12V/24V_{Voc} ± 20%
- **Power Consumption** 40W (Typical), 55W (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® 4th Gen. Core™ i3-4010U ULT 1.7GHz Haswell Dual Core, 3MB L2
Core i7-4650U/i5-4300U/Celeron 2980U by project
Integrated Intel 8 Series Chipset
- **System Chip** Built-in 8GB DDR3L 1600 MHz
- **Memory** Intel® HD Graphics 4400
- **Graphics Engine** LAN B/C/D: Intel® i210-IT GbE
- **Ethernet** LAN A: Intel® i218-LM GbE
- **LED Indicators** LEDs for Power, battery, LAN (Active, Status), COM (Tx/Rx) and HDD
- **Storage** 1 x mSATA
One drive bay for SATA 2.5" HDD (Compatible with 9.5mm height HDD)
- **Expansion** 1 x Full-size mPCIe slot, mPCIe 2.0
1 x Half-size mPCIe slot w/ PCIe signal
1 x PCIe1 slot

I/O Interfaces

- **Serial Ports** 1 x RS-232, DB9, 50-115.2kbps
2 x RS-422/485, DB9, auto flow control, 50-115.2kbps
- **LAN Ports** 4 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast Ethernet
- **USB Ports** 4 x USB Ports (2 x USB2.0, 2 x USB3.0)
- **Isolated DIO** 4-ch digital input, (Wet/dry contact
4-ch digital output (2500 V_{oc})
- **Displays** 1 x VGA, supports 1920x1080@60Hz 24bpp
1 x DP 1.2, supports 1920x1080@60Hz 24bpp
Line-Out
- **Audio** 1 x 7 Pins, Terminal Block to support dual power input and remote power control
- **Power Connector**

Features

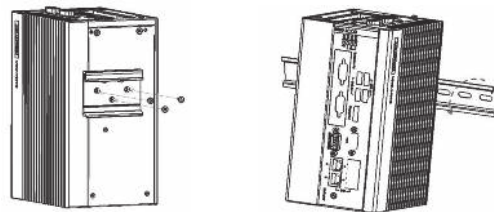
- 4th Generation Intel® Core™ i processors 1.7GHz with 8GB DDR3L memory
- 4 x GbE, 4 x USB 2.0/3.0, 1 x RS-232, 2 x RS-422/485, 1 x VGA, 1 x DP, audio
- Compact with fanless design
- Supports PCIe card, PoE iDoor module and digital I/O for machine motion/vision application
- Dual power input and remote power button for avoiding power down time and remote power control
- 3G/GPS/GPRS/Wi-Fi communication by iDoor technology
- Supports MRAM by iDoor technology
- Hot-Swap RTC battery with easily access at top side
- Supports Fieldbus protocol by iDoor technology

Environment

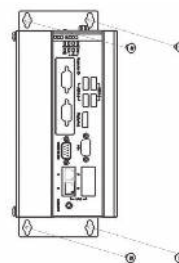
- **Operating Temperature** - 20 ~ 60°C (-4 ~ 140°F) @ 5 ~ 85% RH with 0.7m/s airflow
- **Storage Temperature** - 40 ~ 85°C (-40 ~ 185°F)
- **Relative Humidity** 10 ~ 95% RH @ 40°C, non-condensing
- **Shock Protection** Operating, IEC 60068-2-27, 50G, half sine, 11ms
- **Vibration Protection** Operating, IEC 60068-2-64, 1Grms, random, 5 ~ 500Hz, 1 hr/axis

Installation Scenario

DIN-rail mounting illustration

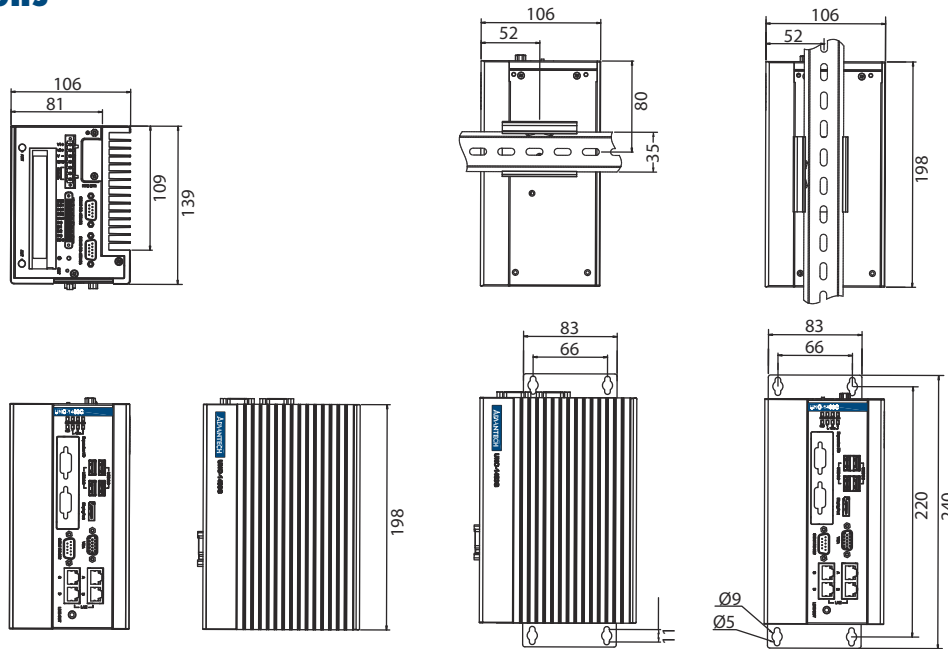


Wall mounting illustration

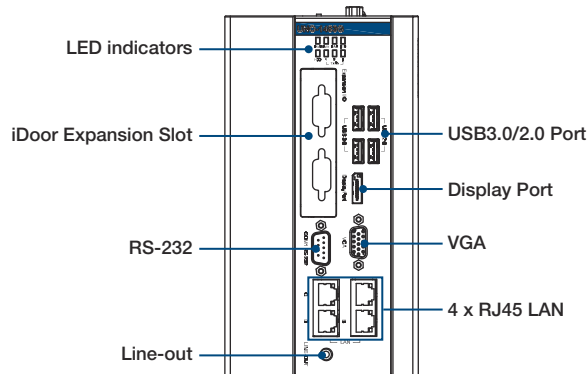


Dimensions

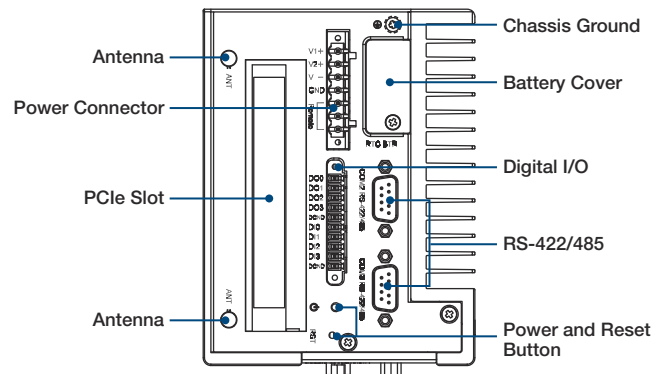
Unit: mm



Front I/O View



Top I/O View



Ordering Information

- **UNO-1483G-434AE** Intel® Core™ i3-4010U ULT 1.7GHz, 8GB, 4 x LANs, 2 x mPCIe, 1 PCIe Slot

Note: Processor i7-4650U/i5-4300U/Celeron 2980U reserved for project

iDoor Modules

- **PCM-24R2PE-AE** Intel i350, GbE, PoE IEEE 802.3af, PD, RJ45 x 2
- **PCM-24U2U3-AE** 2 port USB 3.0 mini card
- **PCM-2300MR-AE** MR4A16B, 2MByte
- **PCM-26D2CA-AE** SJA1000 CANbus, CANopen, DB9 x 1
- **PCM-24D2R4-BE** OXPcie-952 UART, Isolated RS-422/485, DB9 x 2
- **PCM-24S2WF-BE** WiFi 802.11 ac/a/b/g/n 2T2R w/Bluetooth 4.1
- **PCM-24S33G-AE** 63.75G HSPA and GPS, Dual SIM card slots

Optional Accessories

- **96PSA-A120W19T2** AC to DC 100-240V 120W Adapter
- **1702002600** Power Cable US Plug 1.8 M
- **1702002605** Power Cable EU Plug 1.8 M
- **1702031801** Power Cable UK Plug 1.8 M
- **1700000596** Power Cable China/Australia Plug 1.8 M

Embedded O/S

- **2070013219** Image Linux for UNO-1483G
- **207UNWX5VS0000** Image WIN10 2016 LTSB v6.01 B060 for UNO-1483G
- **20703WE7PS0013** Img WS7P x64 MUI V4.18 B026 UNO-1483G-43xAE
- **20703WE7PS0014** Img WS7P x86 MUI V4.18 B023 UNO-1483G-43xAE

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.