

UNO-4673A UNO-4683

**Intel® Atom™/Core™ i7 Automation
Computers with 6 x LAN, 2 x COM and
3 x Expansion Slots**

NEW



Introduction

The UNO-4673A and UNO-4683 are compliant with the hardware requirements of IEC 61850-3, which defines the international standards of network and system communications in power substations. Featuring fanless designs with built-in isolated PSU and 3 expansion slots for I/O plug-in cards, the UNO-4673A and UNO-4683 are suitable for harsh environment applications. The rear I/O connection and LEDs on front panel for all ports and modes highly simplify monitoring for operation and maintenance.

Specifications

General

- **Certification** IEC 61850-3, IEEE 1613, CE, FCC Class A, UL, CCC
- **Dimensions (W x D x H)** 2U (440 x 280 x 88) mm (17.3" x 11" x 3.4")
fits into standard 19 inch rack
- **Enclosure** SECC
- **Mounting** 2U Rackmount
- **Power Consumption** 45W (Typical)
- **Power Requirements** AC : 100 ~ 240 V_{AC} (47 ~ 63 Hz)
DC : 106 ~ 250 V_{DC}
With isolation protection, AT
- **Weight** 6.0 kg
- **OS Support** WES7, Windows XP Embedded, Windows /XP, Windows CE 6.0, Linux, QNX, Win10, Win7, Windows Server 2008R2/ 2012/ 2012R2
- **System Design** Fanless
- **Remote Management** Built-in Advantech DiagAnywhere agent on Windows CE/XPe

System Hardware

- **CPU** Intel Dual Core Atom D510 1.66 GHz / Core i7 2.0 GHz
- **Memory** 2G DDR2 SDRAM/4G DDR3 SDRAM built-in
- **Indicators** LEDs for Power, IDE, Alarm for battery backup SRAM, Diagnosis (programmable), LAN (Active, Status) and Serial (Tx, Rx)
- **Keyboard/Mouse** 2 x PS/2 connector for Keyboard & Mouse
- **Storage** CF 1 x internal type I/II CompactFlash® slot
HDD 1 x build-in 2.5" SATA HDD bracket
*RAID capable with 2nd HDD kit
- **Display** DB15 VGA connector, 2048 x 1536 @ 85 Hz (UNO-4673A)
1 x DVI-I (UNO-4683)
- **Watchdog Timer** Programmable 7-tier event handler, from 1 to 255 seconds for each tier
- **Battery Backup SRAM** 1 MB
- **Relay:** Relay output: Form C
Contact: 5A@250V_{AC}/5A@30V_{DC}

Features

- IEC 61850-3 and IEEE 1613 compliant for substation automation applications
- Onboard Intel Atom 1.66 GHz / Core i7 2.0 GHz processor
- 2 x RS-232/422/485 isolated serial ports with automatic flow control and 128KB FIFO
- 2 x 10/100/1000 Base-T (supports teaming function) and 4 x 10/100 Base-T
- Supports 1 x internal CF card and 1 x 2.5" SATA HDD
- 6 x USB 2.0 (1 x internal) and 3 x Domain I/O expansions
- Rear wiring, multiple system & I/O LED status indicators
- Windows related and Linux
- Fanless design
- Isolation power design with wide AC / DC input range
- Isolation between chassis and power ground
- One internal USB for dongle and flash drive
- Redundant power supplier for system power backup

I/O Interface

- **Serial Ports** 2 x DB-9
Automatic RS-485 data flow control
2000 V_{DC} EFT protection & 2000 V_{DC} isolation
- **Serial Port Speed** RS-232: 50 ~ 115.2 kbps
RS-422/485: 50 ~ 921.6 kbps (Max.)
- **LAN** 2 x 10/100/1000 Base-T RJ-45 ports, teaming function supported
4 x 10/100Base-T RJ-45 ports
- **Audio** Line-out
- **USB Ports** 6 x USB, UHCI, Rev. 2.0 compliant
2 x Front, 3 x Rear and 1 x Internal ports
- **Expansion** 3 x Domain I/O expansions (Only slot 1 supports PCIe resource)

Environment

- **Storage Humidity** 5 ~ 95% RH (non-condensing)
- **Operating Temperature** IEC 60068-2-2 with 100% CPU/ I/O loading, 48 hrs
-20 ~ 70°C
- **Operating Humidity** 5 ~ 95% RH (non-condensing)
- **Shock Protection** IEC 60068-2-27 CompactFlash®: 50 G half sine, 11 ms
HDD: 20 G half sine, 11 ms
- **Vibration Protection** IEC 60068-2-64 (Random 1 Oct./min, 1hr/axis.)
CompactFlash®: 2 Grms @ 5 ~ 500 Hz,
HDD: 1 Grms @ 5 ~ 500 Hz

Ordering Information

- **UNO-4673A-A33E** Intel Atom 1.66 GHz, 2 GB RAM Automation Computer
- **UNO-4683-D34E** Core i7 2.0 GHz, 4 GB RAM Automation Computer
- **UNO-4673ADP-A33E** Intel Atom 1.66 GHz, 2 GB RAM, dual PSU Automation Computer
- **UNO-4683DP-D34E** Core i7 2.0 GHz, 4 GB RAM, dual PSU Automation Computer