

UNO-4671A Intel® Atom™ D510/D525 Substation Computer with 6 x LAN, 10 x COM, and 1 x PCI-104

NEW



Features

- China Electricity Certificate IV level
- IEC 61850-3 and IEEE 1613 compliant for substation automation applications
- Onboard Intel Atom D510 1.66GHz/D525 1.8 GHz processor
- Supports wide range and dual power input
- 2 x RS-232 isolated ports, 4 x RS-422/485 isolated ports and 4 x RS-485 isolated ports
- 6 x 10/100Base-T RJ-4 connector/2 x 10/100/1000Base-T and 4 x 10/100 Base-T RJ-45 connector
- Supports 1 x internal CF card and 1 x 2.5" SATA HDD
- Fanless design
- WES 2009, Windows XP, Windows CE 6.0, WES7 and Linux ready solution

Introduction

UNO-4671A is compliant with Electricity Certificate IV level (especially for China) and IEC 61850-3 certification, which defines the international standards of network and system communications in power substations. Featuring a fanless design with low power consumption and high performance Intel Atom D510/D525 processor, the UNO-4671A comes with 10 isolated serial ports, 6 x LAN, 4 x USB (Internal) and 1 x PCI-104 extension. With rich OS and driver support, such as WES 2009, Windows XP, Windows CE 6.0, WES7 and Linux, users can integrate applications easily with a platform that can provide versatile functions to fulfill diverse requirements.

Specifications

General

- **Certification** CE, FCC class A, CCC, Electricity IV level for China (Compatible IEC 61850-3, IEEE 1613)
- **Dimensions (W x D x H)** 2U (440 x 220 x 88 mm/17.3" x 8.6" x 3.4") fits into standard 19 inch rack
- **Enclosure** SECC
- **Mounting** 2U Rackmount
- **Power Consumption** 30 W @ 24 V (Typical)
- **Power Requirements** Supports dual power input (Optional)
Power 1: 100 ~ 240 V_{AC} or 100 ~ 240 V_{DC} (Optional 18 ~ 30 V_{DC})
Power 2: 100 ~ 240 V_{AC} or 100 ~ 240 V_{DC} (Optional 18 ~ 30 V_{DC})
- **Weight** < 5.5 kg
- **System Design** Fanless design
- **OS Support** WES 2009, Windows XP, Windows CE 6.0, WES7 and Linux
- **Remote Management** Built-in Advantech DiagAnywhere agent on Windows CE/XPe/7

System Hardware

- **CPU** Intel Atom D510 1.66 GHz/D525 1.8 GHz
- **Memory** 2 GB/4 GB DDR2 SDRAM
- **Indicators** LEDs for Power1&2, IDE, LAN (Active,Link) and Serial (Tx, Rx)
- **Storage** 1 x internal type/I CompactFlash® slot, 1 x Built-in 2.5" SATA HDD bracket
- **Display** VGA, 1920 x 1024
- **Reset Button** Yes
- **WatchDog Timer** Programmable 256 levels time interval, from 1 to 255 seconds for each tier

I/O Interface

- **Serial Ports** 10 ports, 2 x RS-232, 4 x RS-422/485, 4 x RS-485 (Automatic RS-485 data flow control)
- **Communication Speed** RS-232: 50 ~ 115.2 kps, RS-422/485: 50 ~ 921600 bps
- **LAN** 6 x 10/100Base-T RJ-4 connector/ 2 x 10/100/1000Base-T and 4 x 10/100 Base-T RJ-45 connector
- **USB Ports** 4 x USB (include 1 x internal USB), UHCI, Rev. 2.0 compliant
- **Expansion** 1 x PCI-104

Environment

- **Humidity** 95% @ 40°C (non-condensing)
- **Operating Temperature** IEC 60068-2-2 with 100% CPU/ I/O loading, 48 hrs -20 ~ 60°C (-4 ~ 140°F)
- **Operating Humidity** 20 ~ 95% (non-condensing)
- **Shock Protection** IEC 68 2-27 CompactFlash®: 30 G half sine, 11 ms
HDD: 20 G half sine, 11 ms
- **Vibration Protection** IEC 68 2-64 (Random 1 Oct./min, 1hr/axis.)
CompactFlash: 2 Grms @ 5 ~ 500 Hz

Ordering Information

- **UNO-4671A-A33E** Intel Atom D510 1.66 GHz, 2 GB RAM Automation Computer
- **UNO-4671A-A44BE** Intel Atom D525 1.8 GHz, 4GB RAM Automation Computer
- **PCLS-DIAGAW10** Advantech Remote Monitoring & Diagnosis Utility

Protocols Supported ModBus RTU, ModBus TCP, DLMS, IEC 60870-5-101, IEC 60870-5-103, IEC 60870-5-104, IEC 61850