

ECU-4674

Intel® ATOM E3930 Power and Energy Computers with 8 x LAN, 10 x COM, 1 x IRIG-B

NEW



Features

- China Electricity Certificate IV level Certification for substation applications
- IEC 61850-3 and IEEE 1613 compliant
- Intel® Atom® E3930 processor, 4G DDR3L
- 10 x RS232/485 isolated serial ports
- 8 x RS232/422/485 isolated serial ports extension (optional)
- 8 x 10/100/1000 Base-T Ethernet ports
- 8 x 10/100/1000 Base-T Ethernet ports extension (optional)
- 8 x DI/O ports extension (optional)
- 1 x Internal m-SATA, 2 x 2.5" SATA
- 1 x IRIG-B
- Redundant isolated power with 100-240V AC/DC input
- Mounting: 2U Rack-mount

Introduction

The ECU-4674 product is compliant with Electricity Certificate level IV with higher reliability and stability, which is suitable for Global P&E automation market and harsh environment. ECU-4674 is designed for fanless heat dissipation and can provide up to 16 Ethernet ports and 18 isolated COM ports. ECU-4674 is positioned in the global power and energy automation sector to meet the data gateway requirements of smart substations and more needs of other different applications.

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)** 440 x 220 x 88mm (W x D x H)
- **Enclosure** SECC & Aluminum
- **Mounting** 2U Rack mount
- **Power Requirements** Power 1: 100 ~ 240 V AC/DC (ip.side)
Power 2: 100 ~ 240 V AC/DC (option)
- **Power Consumption** 25W (typical)
- **Weight** 5.5 kg
- **OS Support** Windows10, Linux
- **System Design** Fanless

System Hardware

- **CPU** Intel Atom dual-core E3930, 1.3GHz
- **Memory** 4G DDR3L SODIMM socket
- **Indicators** LEDs for Power, HDD, LAN (Active, Status), Serial (Tx, Rx), IRIG-B, Programmable LED
- **Storage** 1 x m-SATA, 2 x 2.5" SATA
- **Display** VGA + DVI-I
- **Watchdog Timer** Programmable 256 levels time interval, from 1 to 255 seconds for each tier
- **Power Fail Alarm** Power(1,2) on: Close
Power(1,2) off: Open

I/O Interface

- **Serial Ports** COM1~8: RS232/485
COM9~10: RS232/422/485
COM11~18 extension: RS232/422/485
2500 Vdc isolation
- **Serial Port Speed** COM1~10: 50 ~ 115.2 kbps
COM11~18: 50 ~ 921.6 kbps
- **LAN** 8/16 x 10/100/1000M, RJ-45, teaming supported
- **USB Ports** 3 x USB2.0, 1 x USB3.0

Digital Input

8-ch isolated digital input
Wet contact: Logic 0:0-3 Vdc; Logic 1: 10-30 Vdc
Isolation protect: 2000 Vdc, 30-50 Vdc over voltage protection (Only for ECU-4674-CA64SCE)

Digital Output

8-ch isolated digital output
2000 VDC isolation, 200mA max/channel sink current
Keeps output status after system hot reset
Open collector to 40V (200mA maximum sink current load) 3 kHz speed (Only for ECU-4674-CA64SCE)

Programmable LED

8

Time Synchronization Interface

- **Type** IRIG-B
- **Channel** 1
- **Support Format** IRIG-B00X according to IRIG STANDARD 04, 200-98
- **Resolution of Time** 1s

Environment

- **Operation Temperature** -25 ~ 70°C (-4 ~ 158°F)
ECU-4674-LA64SCE
- **Operation Humidity** 5 ~ 95% RH (non-condensing)
- **Storage Humidity** 5 ~ 95% RH (non-condensing)
- **Shock Protection** IEC 68 2-27 mSATA®: 10 G half sine, 11 ms
- **Vibration Protection** IEC 68-2-64 (Random 1 Oct./min, 1hr/axis.)

Ordering Information

- **ECU-4674-LA64SCE** Intel Atom E3930, 8 x LAN, 10 x COM, 1 x IRIG-B
- **ECU-4674-CA64SCE** Intel Atom E3930, 8 x LAN, 18 x COM, 1 x IRIG-B, 8 x DI, 8 x DO
- **ECU-4674-EA64SCE** Intel Atom E3930, 16 x LAN, 10 x COM, 1 x IRIG-B
- **XECU-FSP150-1H35(*)** FSP AC/DC 100-240V 150W W/PFC
(Note: dual powers configuration is available upon request via Advantech CTOS)