# ECU-4674

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



### **Features**

- China Electricity Certifcate IV level Certifcation 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 10/100/1000 Base-T Ethernet ports
- 1 x Internal m-SATA, 2 x 2.5" SATA HDD
- 1 x Time Synchronize IRIG-B
- Redundant isolated power with wide AC/DC input range
- Mounting: 2U Rack-mount





## Introduction

The ECU-4674 product is compliant with Electricity Certificate level IV (especially for China) and IEC 61850-3 and IEEE 1613 certification, which provides higher reliability and stability, suitable for any Global P&E automation market and harsh environment. With versatile communication interface to use for Smart substation Communication server and IED Analyzer to fulfill the Data Gateway & Protocol Conversion requiremment easily. Featuring a fanless design with high performance Intel Atom® E3930 processor, the ECU-4674 comes with 10 isolated serial ports, 8 x LAN and 1 x PCIEx1 extension. With Structured and functional module Internal design for easy customization and Fast assembly to fulfill the different kind of application.

# **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 88 mm Enclosure SECC & Aluminum Mounting 2U Rack mount

**Power Requirements** Supports Redundant power input

> Power 1: 100 ~ 240  $V_{AC}$  or 100 ~ 240  $V_{DC}$ Power 2: 100 ~ 240 V<sub>AC</sub> or 100 ~ 240 V<sub>DC</sub>

Supports Power loss alarm

Weight < 5.5 kg **OS Support** Windows10, Linux

 System Design **Fanless** 

#### **System Hardware**

- CPU Intel Atom dual-core E3930, 1.3GHz 4G DDR3L SDRAM built-in Memory

LEDs for Power, HDD, Programmable LED, IRIG-B, Indicators

LAN (Active, Status) and Serial (Tx, Rx) 1 x m-SATA, 2 x 2.5" SATA HDD DB15 VGA connector + DVI-I Connector

 Watchdog Timer Programmable 256 levels time interval, from 1 to 255

seconds for each tier

I/O Interface

Storage

Display

 Serial Ports 10 Ports, 10 x RS232/485

2,500  $V_{\text{DC}}$  isolation

(Automatic RS-485 data flow control)

 Serial Port Speed RS-232: 50 ~ 115.2 kbps,

RS-485: 50 ~ 921.6 kbps

8 x 10/100/1000Base-T RJ-45 ports, teaming function LAN

supported

 USB Ports 4 x USB2.0 (include 1 x internal USB), 1 x USB3.0

 Programmable LED 8-ch programmable LED indicator

## **Time Synchronization Interface**

Type Channel 1

Support Format IRIG-B00X according to IRIG STANDARD 04, 200-98 Message Syntax QQQHHMMSS (year, day, hour, minute & second)

Resolution of Time

#### **Environment**

-40°C/60°C&95% RH Storage

Operation Temperature -25~70°C (-4 ~ 158°F) ECU-4674-LA64SCE **Operation Humidity** 40°C&95% RH (non-condensing)

**Shock Protection** 10g, 11ms with half sine

**Vibration Protection** Random 2Grms@5~500Hz, 1hr/axis with SSD

# **Ordering Information**

 ECU-4674-LA64SCE Intel Atom E3930, 8 x LAN, 10 x COM, 1IRIG-B

Computer

 ECU-4674-CA64SCE Intel Atom E3930, 8 x LAN, 18 x COM, 1IRIG-B

Computer

ECU-4674-EA64SCE Intel Atom E3930, 16 x LAN, 10 x COM, 1IRIG-B

Computer

XECU-FSP150-1H35(\*) FSP AC/DC 100-240V 150W W/PFC (Note: For

ECU-4676 Dual Power, by CTOS configuration center)