

# ECU-469

## Power Automation Computer Based on 12/13th Generation Intel® Core™ Processors



### Features

- 12/13th Generation Intel® Core™ processors support up to 24 cores
- 2 x DDR4 SODIMM RAM, up to 64GB
- 100-240V<sub>AC</sub>/DC Redundant Power Supply (configurable option)
- 48V Power for Selection
- 2 x 2.5" SATA HDD, 1 x m.2 SATA
- 8 x LAN, 10 x Serial Port with Isolation Protection
- 1 x VGA & 1 x HDMI Display Interface
- 2 x ECU-P Slot
- Supports TPM 2.0

### Introduction

The ECU-469 is an Electricity IV level for China certified product that provides high reliability and stability for power automation applications. ECU-469 features a fanless robust design, high CPU performance, easy maintenance, flexible expansion, and rich communication interface. It supports virtualization technology that makes ECU-469 suitable for power substation digitalization.

### Specifications

#### General

- **Certification** CE, FCC, Electricity IV level for China
- **Power Requirements** 2 x power supply, 150W  
Power1: 100 ~ 240 V<sub>AC</sub>, 100 ~ 240 V<sub>DC</sub> (default)  
Power2: 100 ~ 240 V<sub>AC</sub>, 100 ~ 240 V<sub>DC</sub> (option)
- **Dimensions (W x D x H)** 440 x 280 x 88 mm
- **Enclosure** SECC and aluminum
- **Weight** 6.0 Kg
- **Mounting** 2U Rackmount
- **Cooling** Fanless

#### System Hardware

- **CPU** Compatible with 12/13th Generation Intel® Core™ Processors (To be assembled in Advantech CTOS center)
- **Chipset** Intel® H610 chipset
- **Memory** 2 x DDR4 SODIMM RAM, up to 64GB
- **Storage** 2 x 2.5" SATA HDD, 1 x m.2 SATA
- **Display** 1 x VGA & 1 x HDMI Display Interface
- **Watchdog Timer** Programmable 256 levels time interval, from 1 to 255 seconds for each tier
- **Relay** Relay Output Form C  
Contact 5A @ 250V<sub>AC</sub>/ 3A @ 30V<sub>DC</sub>  
Channel 1

#### Communication Interface

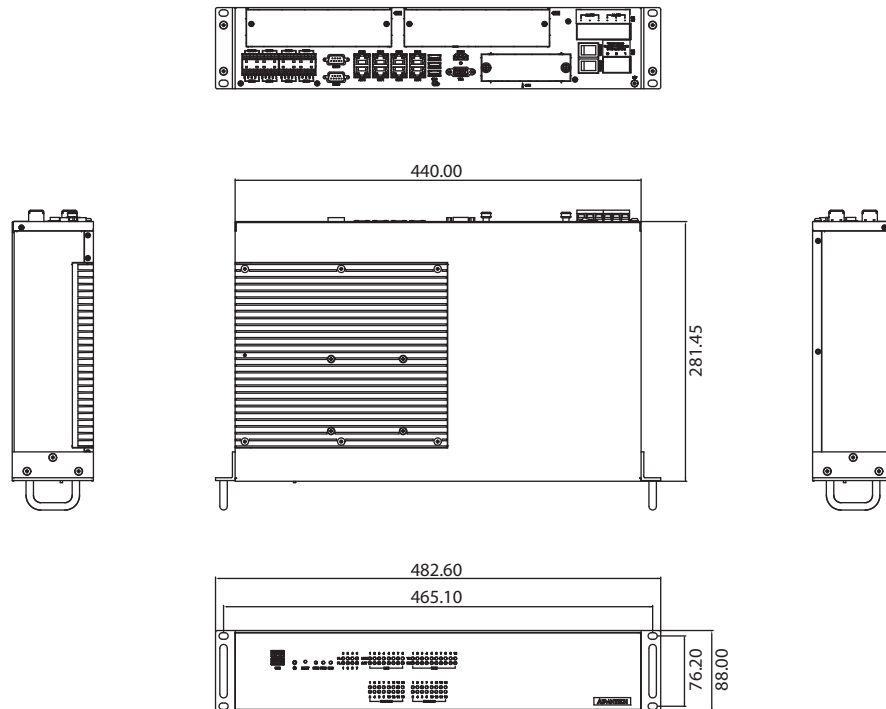
- **LAN** 8 x 10/100/1000 Base-T RJ45 ports 2,500V isolation
- **Serial Port** 2 x RS-232/422/485 (DB9 connectors, Standard)  
8 x RS-232/422/485 (Terminal Block)  
2,500V isolation
- **Serial Port Speed** RS-232/422/485: 50 ~ 115.2 kbps(Max.),  
DB9 connectors  
RS-232: 50 ~ 115.2 kbps (Max.), Terminal Block  
RS-422/485: 50 ~ 921.6 kbps (Max.), Terminal Block
- **USB** 6 x USB, UHCI, rev 2.0 compliant  
(3 x rear, 1 x internal), rev 3.0 compliant  
(2 x front)
- **Expansion** 2 x PCIe interface for ECUP card extension

#### Environment

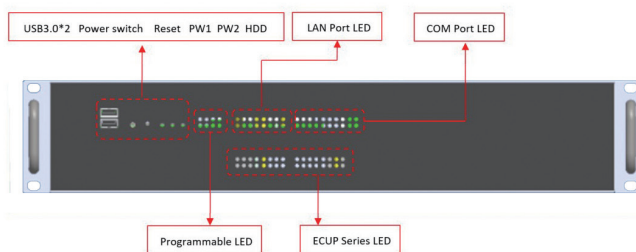
- **Operating Temperature** -25 ~ 65 °C  
(Depends on CPU model and configuration)
- **Non-operating Temperature** -40 ~ 85 °C
- **Operating Humidity** 5 ~ 95% RH (non-condensing)
- **Storage Humidity** 5 ~ 95% RH (non-condensing)
- **Shock Protection** IEC 60068-2-27: 30G half sine, 11 ms
- **Vibration Protection** IEC 60068-2-64: Random 2Grms with SSD,  
1hr/axis.

## Dimensions

Unit: mm



## Schematic diagram of front panel LED



## Ordering Information

- ECU-469V1-L1 Intel 12/13 CPU, 8 x LAN, 10 x COM
- XECU-FSP150-1H35(\*) FSP AC/DC 100-240V 150W W/PFC  
(Note: For ECU-469 Dual Power, by CTOS configuration center)

## ECUP Series Expansion Card

- ECU-P1524PE-AE 2 x SFP 100Mbps HSR/PRP Card w/ ECUP slot
- ECU-P1524PE-GAE 2 x SFP Gigabit HSR/PRP Card w/ ECUP slot
- ECU-P1528PE-B 8 x SFP Gigabit LAN card w/ ECUP slot
- ECU-P1528RE-B 8 x R45 Gigabit LAN card w/ ECUP slot
- ECU-P1618D-B 8x RS-232/422/485 PCIe w/ ECUP slot
- ECU-P1628D-B 8x Isolated RS-232/422/485 PCIe w/ ECUP slot

## Schematic diagram of rear panel interface

