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
- 100-240$V_{AC/DC}$ 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

CE FCC RoHS COMPLIANT 2002/95/EC

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_{AC}, 100 ~ 240 V_{DC} (default) Power2: 100 ~ 240 V_{AC}, 100 ~ 240 V_{DC} (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_{AC}/ 3A @ 30V_{DC} Channel 1

Communication Interface

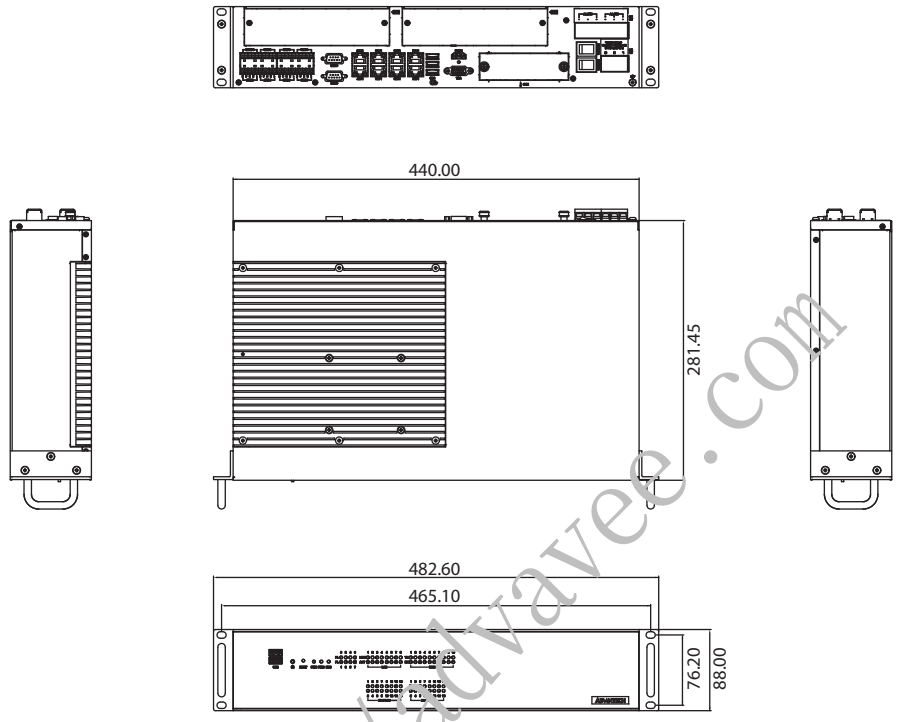
LAN	8 x 10/100/1000 Base-T RJ45 ports 2,500V isolation
Serial Port	2 x RS-232/422/485 (DB9 connectors, Standard) 8 x RS-232/422/485 (Terminal Block) 2,500V isolation
Serial Port Speed	RS-232/422/485: 50 ~ 115.2 kbps(Max.), DB9 connectors RS-232: 50 ~ 115.2 kbps (Max.),Terminal Block RS-422/485: 50 ~ 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

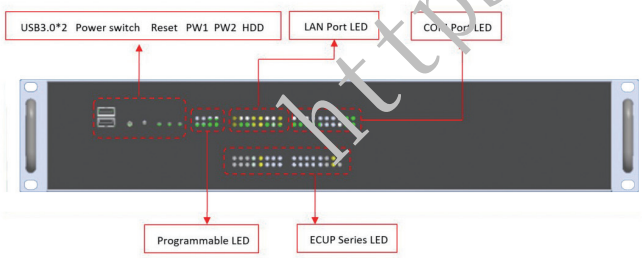
Operating Temperature	-25 ~ 65 °C (Depends on CPU model and configuration)
Non-operating Temperature	-40 ~ 85 °C
Operating Humidity	5 ~ 95% RH (non-condensing)
Storage Humidity	5 ~ 95% RH (non-condensing)
Shock Protection	IEC 60068-2-27: 30G half sine,11 ms
Vibration Protection	IEC 60068-2-64: Random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

Dimensions

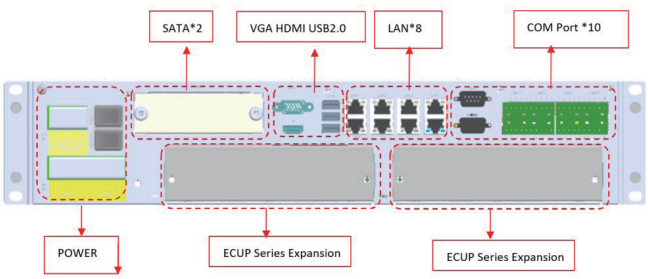
Unit: mm



Schematic diagram of front panel LED



Schematic diagram of rear panel interface



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 SPF 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