# ECU-479F

## Power Automation Computer Based on 13th Generation Intel<sup>®</sup> Core<sup>™</sup> Processors



### **Features**

- 13th Generation Intel<sup>®</sup> Core<sup>™</sup> processors support up to 16 cores
- 2 x DDR4 SODIMM RAM with ECC, up to 64GB
- 2 x hot-swappable PSU (100-240V<sub>DC</sub>/V<sub>AC</sub>)
- 4 x 2.5" hot-swappable HDD/SSD, 1 x M.2 2280 NVMe
- 4 x LAN, 2 x serial ports with isolation protection
- 4 x Display Port++ 1.2 up to 4K
- 3 x PCIe x4 Gen. 3, 1 x PCIe x16 Gen. 4, and 1 x ECU-P Slot
- Supports iBMC and compatible with VMware vSphere
- Supports TPM 2.0 by optional TPM 2.0 module

# Introduction

The ECU-479F is a Electricity IV level for China certified product that provides high reliability and stability for power submation applications. ECU-479F features a fanless robust design, high CPU performance, easy maintenance, flexible expansion, and rich communication interface. It supports virtualization technology that makes ECU-479F suitable for power substation digitalization.

# **Specifications**

#### General

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| Certification         | CE, FCC, Electricity IV level for China  | - LAN  |
|-----------------------|--|--|
| Power Requirements    | 2 x power supply, 350W<br>Power1: 100 ~ 240 V <sub>AC</sub> /50Hz or 210~ 280V <sub>L C</sub><br>Power2: 100 ~ 240 V <sub>AC</sub> /50Hz or 210 ~ 280V <sub>DC</sub> |  |
| Dimensions (W x D x H | ) 440 x 430 x 88 mm  | <ul> <li>Serial P</li> </ul>                   |
| Enclosure             | SECC and aluminum  |  |
| Weight                | 10.0 Kg  | <ul> <li>Serial P</li> </ul>                   |
| Mounting              | 2U Rackmount   | <ul> <li>USB</li> </ul>                        |
| Cooling               | Fan  |  |
| ystem Hardware        |  | <ul> <li>Expansi</li> </ul>                    |
| CPU                   | Compatible vith 12th Generation Intel <sup>®</sup> Core™<br>Processors (To be assembled in Advantech CTOS<br>center)   | Environm                                       |
| Chipset               | Intel <sup>®</sup> R680E chipset   |  |
| Memory                | 2 x DDR4 SODIMM RAM with ECC, up to 64GB   | <ul> <li>Operation</li> </ul>                  |
| Storage               | 4 x 2.5" hot-swappable SATA SSDs, up to 9.5mm height<br>1 x M.2 2280 M-Key NVMe PCIe Gen. 3 x4 / SATA<br>Supports Intel® RST RAID 0,1,5,10                           | <ul> <li>Non-ope</li> <li>Operation</li> </ul> |
| Display               | 4 x DP++ 1.2 up to 4K @ 60Hz   | <ul> <li>Storage</li> <li>Sheets P</li> </ul>  |
| Watchdog Timer        | Programmable 256 levels time interval, from 1 to 255 seconds for each tier   | <ul><li>Shock P</li><li>Vibratio</li></ul>     |
|                       |  |  |

#### **Communication Interface**

| LAN                   | 4 x 10/100/1000 Base-T RJ45 ports 2,500V<br>isolation<br>Supports IBMC, Intel <sup>®</sup> AMT, SNMP remote<br>management                         |
|-----------------------|---|
| Serial Port           | 2 x RS-232/422/485 (DB9 connectors, Standard) 2,500V isolation  |
| Serial Port Speed     | RS-232/422/485: 50 ~ 115.2 kbps   |
| USB                   | 3 x USB 3.2 Gen1 at rear I/O<br>2 x USB 3.2 Gen1 at front I/O<br>1 x internal USB 2.0   |
| Expansion             | 1 x standard PCle x16 slot Gen. 4 low profile<br>3 x standard PCle x4 slot Gen. 3 low profile<br>1 x PCle + PCl interface for ECUP card extension |
| vironment             |   |
| Operating Temperature | -15 ~ up to 55 °C<br>(Depends on CPU model and configuration)   |

Non-operating Temperature -40 ~ 85 °C

- Operating Humidity
- Storage Humidity
- Shock Protection
- Vibration Protection

95% RH (non-condensing) 95% RH (non-condensing) IEC 60068-2-27: 20G half sine,11 ms Vibration Protection IEC 60068-2-64: Random 2GRMS With SSD ,1Grms With HDD, 1hr/axis.