KYAC311 Series

## FEATURES

- Powerful performance with an Intel x86 4-core processor.
- Supports up to 32-axis motion control with 1 ms cycle time
- With an optimized BIOS kernel to meet real-time control requirements
- EtherCAT supports up to 32 slave device
- System task jitter within 35us
- Complies with IEC61131-3 standard and PLCopen specifications
- Supports industrial protocols such as EtherCAT, Ethernet/IP, OPC UA, and ModbusTCP
- Integrated with two serial ports, switch flexibly between RS232 and RS485
- Dual power redundant design to ensure stable power supply
- Supports a wide operating temperature -20~60 ${ }^{\circ} \mathrm{C}$



## SPECIFICATIONS

| KYAC311-E3MA |  |  |
| :---: | :---: | :---: |
| Hardware Specification | CPU | Intel ${ }^{\circledR}$ Celeron J1900, 2.0GHz, 4 Cores/4 Threads, 2MB L2 Cache |
|  | TDP | 10W |
|  | BIOS | AMI UEFI 64Mbit |
|  | Memory | 8GB DDR4 |
|  | Storage | 128GB SSD mSATA |
|  |  | $1 \times$ USB3.0, $3 \times$ USB2.0 |
|  |  | Onboard built-in $1 \times$ USB2.0, support hardware encryption |
|  | COM | $2 \times$ DB9, RS232/RS485 configurable RS485 support automatic flow control, RS232 with ESD protection (air-gap discharge: $\pm 8 \mathrm{KV}$, contact discharge: $\pm 6 \mathrm{KV}$ ) |
|  | Network Interface | $2 \times 100 / 1000 B A S E-T(X)$, Intel I210 |
|  | DVI-D | Max resolution $1920 \times 1080$ |
|  | Expansion Slot | $1 \times$ miniPCle with SIM Tray |
|  | Watchdog | 1~255 Levels programmable |


| Software Specification | RTE | Codesys RTE 3.5.18 |
| :---: | :---: | :---: |
|  | Operating System | Windows 10 |
| Power Supply | Input Voltage | DC12~24V $\pm 10 \%$, Overcurrent, overvoltage and reverse connection protection |
|  | Consumption | Max 45W |
| Mechanical Structure | Structure | Fanless design, supports wall-mounted or DIN-Rail installation |
|  | Dimensions | (L) $200 \mathrm{~mm} \times(\mathrm{W}) 154.5 \mathrm{~mm} \times(\mathrm{H}) 57.6 \mathrm{~mm}$ |
|  | Weight | 1.6 Kg |
| Environment | Operating Temperature | $-20^{\circ} \mathrm{C} \sim 60^{\circ} \mathrm{C}$ |
|  | Storage Temperature | $-40^{\circ} \mathrm{C} \sim 80^{\circ} \mathrm{C}$ |
|  | Humidity | 5~95\% (No condensation) |
|  | Vibration | 5~500Hz, 1.5Grms IEC60068-2-64 |
|  | Impact | 20G (duration $11 \mathrm{~ms} \mathrm{half} \mathrm{sine} \mathrm{wave)} \mathrm{IEC60068-2-27}$ |
|  | EMC | CE/FCC Class A |

## DIMENSIONS



## ORDERING INFORMATION

| P/N | Description |
| :--- | :--- |
| KYAC311-E3MAWOSM | J1900/8G/128G SSD/WIN10/Softmotion |
| KYAC311-E3MAW0SMTW | J1900/8G/128G SSD/WIN10/Softmotion/Target \&Web Visu |

