

Main Features

- 4-Axis independent control and pulse output up to 4Mpps
- Pulse output options: CW/CCW, OUT/DIR
- 4 x Differential encoder interface, ABZ phase
- EtherCAT slave protocol communication
- Support CiA 402 device profile
- General purpose I/O: 12 DI

Product Overview

AXE-5904 is a 4-axis pulse type point-to-point motion EtherCAT slave module, featuring real-time EtherCAT communication and CiA 402 device profile for machine automation applications requiring high-speed and point-to-points function. With pulse type commands, AXE-5904 supports pulse output rate and encoder input up to 4MHz in 4 xAB phase mode and build-in dedicated I/O points for servo control and mechanism to facilitate building up whole machines.

Specifications

Pulse Type Motion Control

- Number of axes: 4
- Pulse output rate: up to 4Mpps
- Pulse command output: CW/CCW, OUT/DIR
- Committed I/O signal: LS±/CMP±/HS/SVON/RDY/INP/ALM/ARST/DCLR for each axis

Encoder Input

- Encoder input type: incremental, 32-bit
- Encoder signal: CW/CCW, AB/Z
- Positioning range: -2,147, 483, 648 through 2, 147, 483, 647 pulse (32-bit)
- Max. input frequency: 4MHz

General I/O

- General-purpose input: 3 channel per axis
- Input type: photo-coupler input (corresponding to current sink output)
- Response time of DI (Max.): 100 μsec
- General-purpose output: 2 channel per axis
- Response time of DO (Max.): 100 μsec

Power Requirements

- DC input range: DC 24V ±10% with over-voltage and reversed-voltage protection

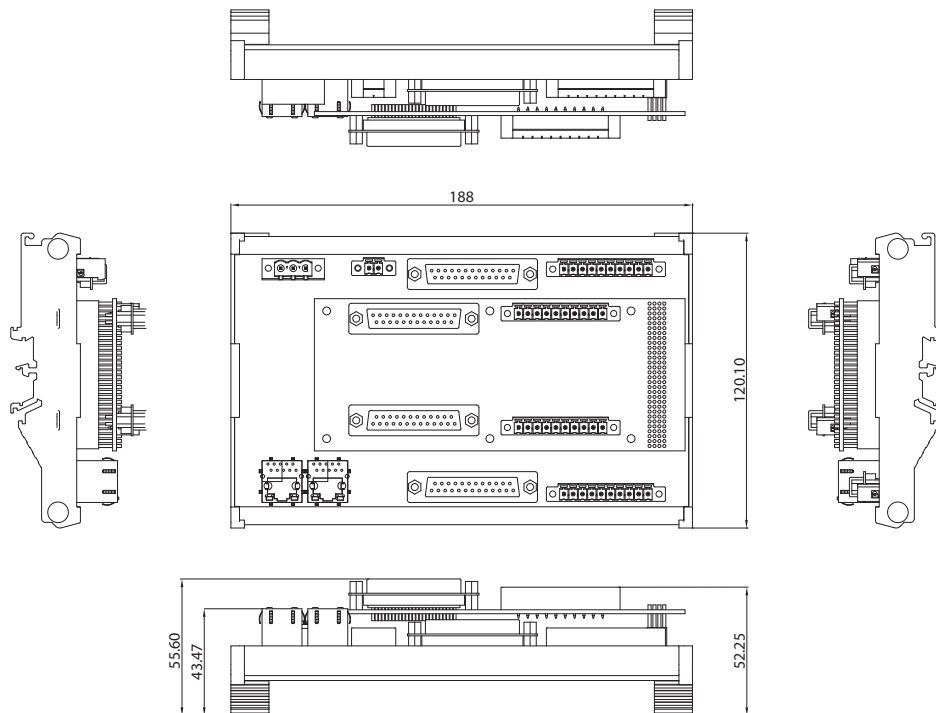
Common Section

- Data transfer medium: Ethernet cable (min CAT 5), shield
- Bus interface: 2 x RJ-45
- Data transfer rate: 100M baud
- Protocol: EtherCAT
- Device profile: CiA 402
- Operating temperature: 0°C~50°C
- Relative humidity:
 - 35~85%, non-condensation, operating
 - 10~90%, non-condensation, non-operating
- Shock: IEC 60068 2-27
- Vibration: IEC 60068-2-6, IEC 60068-2-64
- Enclosure type rating: IP00
- Mounting type: din-rail
- Dimension (mm): 120.1 x 188 x 55.6 (W x L x H)

Certifications

- CE
- FCC Class A

Dimension Drawing



Ordering Information

- **AXE-5904 (P/N: 10J40590400X0)**
Point-to-point 4-axis pulse type motion EtherCAT slave module