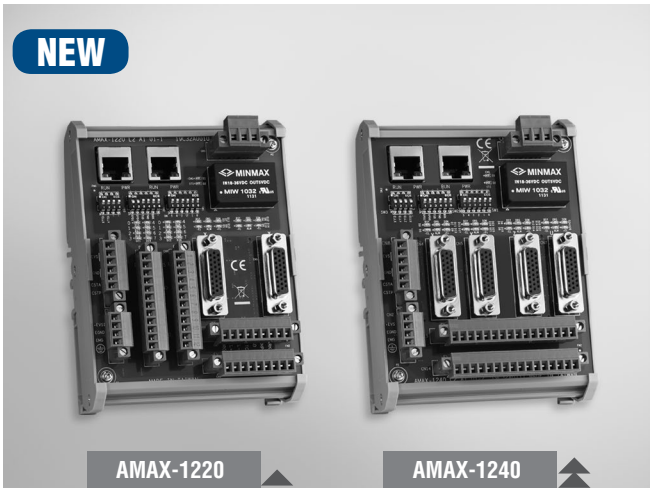
AMAX-1220
AMAX-1240

Open Frame Type 2/ 4-axis AMONet Motion Slave Modules



Features

- End limit logic is switchable (high or low active)
- BoardID is switchable
- Easily visible LED indicators on board to do diagnosis
- Direct wire to servo drive to save terminal board space while installation
- Max. 6.5 MHz, 4-axis pulse output
- 28 bits counter for incremental encoder
- Horizontal installation for for servo or stepping motor driver
- Suitable for DIN-rail mounting

Introduction

AMAX-1220 and AMAX-1240 have compact open frame designs for horizontal placement and an interface connector mounted on the board. With a transfer cable to servo drive, both models can conveniently connect to Mitsubishi J3, Yaskwa Sigma V and Panasonic A4/A5.

The AMAX-1220 is an economic 2-axis AMONet slave module which supports motion functionality in point-to-point (PTP), linear & circular interpolation, simultaneously start/stop among multiple slave modules, and brake signal to servo for emergence consideration. The AMAX-1240 is an advanced 4-axis AMONet slave module which not only supports AMAX-1220 motion functionality, but also supports advanced features in position compare and triggering function. Both linear interval and table setups are supported.

Specifications

Pulse Type Motion Control

- **Motor Driver Support** Pulse-type servo
- **Number of Axes** AMAX-1220: 2
AMAX-1240: 4
- **Interpolation** Linear and circular
- **Max. Output Speed** 6.5 Mpps
- **Step Count Range** ±134, 217, 728
- **Pulse Output Type** OUT/DIR, CW/CCW, A/B phase
- **Position Counter** ±134, 217, 728
- **Home Modes** 13
- **Velocity Profiles** T-Curve, S-Curve
- **Local I/O**
  - Machine Interfaces: EL+/-, ORG and SD (Slow Down) for Each Axis
  - Servo Driver Interfaces: ALM, RDY, SVON, INP, Break for Each Axis
  - Position Compare I/O: LTC, CMP for Each Axis(Only available for AMAX-1240-AE)
  - Simultaneous Move Within Multiple Modules: CSTA/CSTP (Simultaneously Start/Stop) for each model
  - General Purpose I/O: AMAX-1220 supports 8xDI and 8xDO

Encoder Interface

- **Input Type** A/B phase, CW/CCW
- **Counts per Enc. Cycle** x1, x2, x4 (AB phase only)
- **Input Range** Low: 0 ~ 0.5V
High: 3.5 ~ 7V
- **Isolation Protection** 2,500 V_{RMS}
- **Max. Input Frequency** 2 MHz @ 5 V

General

- **Bus Type** AMONet RS-485
- **Certification** CE, FCC Class A
- **Connectors** RJ-45 x 2 are for communication port
DB-26 connector by transfer cable to servo drives. Other are screw terminal type connectors
- **Dimensions (L x W x H)** 141 x 108 x 60 mm (5.6" x 4.3" x 2.4")
- **System Power Consumption** 2 W @ 24 V typical
  - Output Channel Power Consumption: 120W typical, 240W max.
  - Input Channel Power Consumption: AMAX-1220: 8 W @ 24 V external power (max.)
AMAX-1240: 10 W @ 24 V external power (max.)
- **System Power Input** 24 V_{DC} within 200 mV ripple
- **Humidity** 5 ~ 95% RH, non-condensing (IEC 60068-2-3)
- **Operating Temperature** 0 ~ 60°C (32 ~ 140°F)

Ordering Information

- **AMAX-1220-AE** Economic 2-axis AMONet Motion Control Module
- **AMAX-1240-AE** Advanced 4-axis AMONet Motion Control Module

Accessories

- **PCL-10153PA5-2E** 50-pin Cable to Panasonic A4 and A5 Servo, 2 m
- **PCL-10153PA5LS-2E** 50-pin Cable to Panasonic MINAS A Servo, 2 m
- **PCL-10153YS5-2E** 50-pin Cable to Yaskawa Sigma V Servo, 2 m
- **PCL-10153MJ3-2E** 50-pin Cable to Mitsubishi J3 Servo, 2 m
- **PCL-10153DA2-2E** 50-pin Cable from ADAM-3955/ADAM-3956 to Delta A2 Servo, 2 m

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