

AMAX-2240 Series

4-axis AMONet Motion Slave Modules



Features

- Max. 20 Mbps transfer rate
- Max. 6.5 MHz, 4-axis pulse output
- 28 bits counter for incremental encoder
- 2 ~ 4-axis linear interpolation
- 2-axis circular interpolation
- T-Curve and S-Curve velocity profiles support
- Change speed on-the-fly
- Easy installation with RJ45 phone jack and LED diagnostic
- Easy installation for servo or stepping motor driver
- Suitable for DIN-rail mounting

Introduction

AMAX-2240 series is used to increase the number of axes for an AMONet RS-485 decentralized motion control network. These extension slave modules connect serially by a simple and affordable Cat.5 LAN cable, reducing the wiring between driver and controller. This is very suitable for highly integrated machine automation applications. Please select cable 20-pin SCSI and plug this cable into the motor driver and motion slave module.

Specifications

Pulse Type Motion Control

- **Motor Driver Support** Pulse-type servo
- **Number of Axis** 4
- **Interpolation** Linear and circular
- **Max. Output Speed** 6.5 Mpps
- **Step Count Range** $\pm 134, 217, 728$
- **Pulse Output Type** OUT/DIR, CW/CCW, A/B phase
- **Position Counter** $\pm 134, 217, 728$
- **Home Modes** 13
- **Velocity Profiles** T-Curve, S-Curve
- **Local I/O**
 - Machine Interfaces: EL+ x 4, EL- x 4, ORG x 4, SD x 4
 - Servo Driver Interfaces: ALM x 4, RDY x 4, SVON x 4, INP x 4, ERC x 4
 - Position Compare I/O: LTC x 4, CMP x 4

Encoder Interface

- **Input Type** A/B phase, CW/CCW
- **Counts per Enc. Cycle** x1, x2, x4 (AB phase only)
- **Input Range** Compatible with TIA/EIA-422 differential line driver
I : ± 20 mA, VOD : ± 2 V/min
- **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** AMAX-2242/J2S: 2 x RJ45 and 8 x 20-pin SCSI
AMAX-2241/PMA & AMAX-2243/YS2: 4 x 50-pin SCSI
- **Dimensions (L x W x H)** 125 x 47.6 x 151 mm (4.9" x 1.8" x 5.9")
- **Power Consumption** 5 W @ 24 V typical
- **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-2241/PMA-AE** 4-axis AMONet Motion Module for Panasonic MINAS A
- **AMAX-2242/J2S-AE** 4-axis AMONet Motion Module for Mitsubishi MR-J2S
- **AMAX-2243/YS2-AE** 4-axis AMONet Motion Module for Yaskawa Sigma-II

Accessories

- **PCL-10220M-2E** 20-pin SCSI Cable, 2 m (for AMAX-2242/J2S)
- **PCL-10150M-2E** 50-pin SCSI Cable, 2 m (for AMAX-2241/PMA and AMAX-2243/YS2)
- **ADAM-3940-AE** 40-pin Flat Cable Wiring Board with LED