AMAX-2240 Series
4-axis AMONet Motion Slave Modules

AMAX-2241   AMAX-2242   AMAX-2243

RoHS COMPLIANT 2002/95/EC CE

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 Axes**   4
- **Interpolation**   Linear or 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+ 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 Vrms
- **Max. Input Frequency**   2 MHz @ 5 V

General

- **Bus Type**   AMONet RS-485
- **Certifications**   CE
- **Connectors**   2 x RJ45 and 8 x 20-pin SCSI (AMAX-2242/J2S)
  4 x 50-pin SCSI (AMAX-2241/PMA and AMAX-2243/YS2)
- **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 68-2-3)
- **Operating Temperature**   0 ~ 60° C (32 ~ 140° F)

Ordering Information

- **AMAX-2241/PMA**   4-axis AMONet Motion Module for Panasonic Minas A
- **AMAX-2242/J2S**   4-axis AMONet Motion Module for Mitsubishi MR-J2S
- **AMAX-2243/YS2**   4-axis AMONet Motion Module for Yaskawa Sigma-II
- **PCL-10220M-2**   20-pin SCSI Cable, 2 m
- **PCL-10150M-2**   50-pin SCSI Cable, 2 m
- **ADAM-3940**   Wiring Board for AMAX-2240 Series