AMAX-2240 Series 4-axis AMONet Motion Slave Modules

NEW

AMAX-2241 AMAX-2242 AMAX-2243

RoHS COMPLIANT 2002/95/EC CE

Features

- Max. 20 Mbps transfer rate
- Max. 6.5 MHz, 4-Axes pulse output
- 28 bits counter for incremental encoder
- 2 ~ 4 axes Linear interpolation
- 2 axes 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 distributed 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 SCSI-20P 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** AB 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** RJ45 x 2, SCSI-20P x 8 (only AMAX-2242/J2S) SCSI-50P x 4 (AMAX-2241/PMA and AMAX-2243/YS2)
- **Dimensions (L x W x H)** 125 x 47.6 x 156 mm
- **Power Consumption** 5 W @ 24 V typical
- **Power Input** 24 V_{DC} within 200 mA 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 RS-485 Motion Slave Module for Panasonic Minas A
- **AMAX-2242/J2S** 4-axis AMONet RS-485 Motion Slave Module for Mitsubishi MR-J2S
- **AMAX-2243/YS2** 4-axis AMONet RS-485 Motion Slave Module for Yaskawa Sigma-II
- **PCL-10220M-2** SCSI 20-pin x 2 cable (Optional for AMAX-2241/PMA and AMAX-2243/YS2)
- **PCL-10150M-2** SCSI 50-pin cable (Optional for AMAX-2242/J2S)
- **ADAM-3940** Terminal Board for AMAX-2240 series