

# AMAX-2240 Series

## 4-axis AMONet Motion Slave Modules

**NEW**



AMAX-2241

AMAX-2242

AMAX-2243



### 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

### 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**  $\pm 134,217,728$
- **Pulse Output Type**  $\pm \text{OUT/DIR}$ ,  $\pm \text{CW/CCW}$ ,  $\pm \text{A/B phase}$
- **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** AB phase, CW/CCW
- **Counts per Enc. Cycle** x1, x2, x4 (AB phase only)
- **Input Range** Compatible with TIA/EIA-422 Differential Line Driver  
 $I = \pm 20 \text{ mA}$ ,  $V_{OD} = \pm 2 \text{ V/min}$
- **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<sub>DC</sub> within 200mA 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
- **PCL-10150M-2** SCSI 50-pin cable
- **ADAM-3940** Terminal Board for AMAX-2240 series