

# MAS-5242-LG

## 4-Axis Extended-Type Motion Controller

NEW



### Features

- Motion Studio: Rapid application development tool
- Programmable with BASIC language
- 4-axis motion controller with 16-ch digital I/O
- RS-232 and TCP/IP support
- Quick configuration user interface
- Programmable encryption to protect intellectual property
- Built-in quick programming assistant
- C-integration: External DLL interface
- 2-axis linear interpolation

### Introduction

The MAS-5242-LG is a PC-based Programmable motion controller based on the Motion Studio software development tool. It features a range of built-in debugging tools and can be programmed using BASIC programming language. The unit is suitable for various applications and can greatly shorten the equipment development cycle.

The MAS-5242-LG is integrated with a high-performance digital signal processor and field-programmable gate array. It can easily calculate trajectories and perform real-time motion control as well as I/O processing. With Motion Studio, users can easily complete system configuration and diagnosis, enabling the simple and fast realization of complex motion control functions.

### Specifications

#### General

- **Dimensions (W x H x D)** 232 x 90 x 232 mm (9.13" x 3.54" x 9.13")
- **Power Requirements** 100 ~ 240 V<sub>AC</sub>
- **Weight** 5 kg
- **OS** Win7 Embedded x86/x64

#### System Hardware

- **CPU** 4th Generation Intel® Core™ i3 (LGA1150)
- **Memory** 4GB DDR3
- **Storage** 500GB

#### I/O Interface

- **Serial Ports** 2 x RS-232
- **LAN Ports** 2 x 10/100/1000M (RJ45)
- **USB Ports** 4 x USB 2.0
- **PCI Express** 1 x PCIe x4

#### Motion Control

- **Number of Axes** 4
- **Interpolation** 2-axis linear
- **Handwheel/JOG** 4-ch
- **Max. Output Speed** 1 Mpps
- **Pulse Output Type** CW/CCW or pulse/direction
- **Encoder Interface** 4-ch, quadrature (A/B phase) or up/down
- **Velocity Profiles** T/S-curve
- **General Inputs** 16
- **General Outputs** 16

#### Supports I/O Expansion Cards

- **PCIE-1730-AE** 16-ch isolated digital I/O card
- **PCIE-1756-AE** 32-ch isolated digital I/O card
- 

#### Motion Studio Software Development Tool

- **Programming Language** MAS BASIC
- **Number of Tasks** Up to 10 tasks can be executed independently or simultaneously
- **Communication Protocols** Modbus RTU/TCP, RS232, RS485, and TCP/IP
- **Debugging Tools** Terminal, watch, I/O Viewer, motion test tool, parameter viewer, VR viewer breakpoint operation, single step debugging, C-integration
- **Programmable Encryption**
- **Virtual Controller**
- **Programming Assistant**
- **Remote Monitoring and Diagnosis**

### Ordering Information

- **MAS-5242-LG30003** 4-axis extended-type motion controller with 16-ch digital I/O

#### Accessories

- **PCL-101100M-1E/2E/3E** 100-pin SCSI cable, 1/2/3 m
- **PCL-10251-1E/2E/3E** 100-pin SCSI to two 50-pin SCSI cables, 1/2/3 m
- **ADAM-3956-AE** 100-pin DIN rail SCSI 4-axis motion wiring board
- **ADAM-3955-AE** 50-pin DIN rail SCSI 2-axis motion wiring board
- **ADAM-3952-AE** 50-pin DIN rail SCSI and box header board
- **PCL-10153PA5-2E** 50-pin cable to Panasonic A4/A5 servo, 2 m
- **PCL-10153YS5-2E** 50-pin cable to Yaskawa Sigma V/7 servo, 2 m
- **PCL-10153MJ3-2E** 50-pin cable to Mitsubishi J3/J4 servo, 2 m
- **PCL-10153DA2-2E** 50-pin cable to Delta A2 servo, 2 m
- **96PD-S1P0-SYSE** License for WebAccess/HMI Runtime with 500 tags
- **PCIE-1730-AE** 16-ch isolated digital I/O card
- **PCIE-1756-AE** 32-ch isolated digital I/O card