

# MAS-3245-LG

## 4-Axis PC-Based Programmable Motion Controller

NEW



### Features

- Motion Studio: Rapid application development tool
- Programmable with BASIC language
- 4-axis embedded motion controller with 32-ch digital I/O
- RS-232, RS-485, and TCP/IP support
- Quick configuration user interface
- Programmable encryption to protect intellectual property
- Built-in quick programming assistant
- C-integration: External DLL interface
- 2/3-axis linear, 2/3-axis circular, and helical interpolation
- 2-axis position comparison trigger, high-speed latch

### Introduction

The MAS-3245-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-3245 is integrated with a high-performance digital signal processor and field-programmable gate array. It can easily calculate trajectories, perform real-time motion control, and provide I/O processing support functions such as linear, circular, and helical interpolation. Other features include a multi-axis comparison trigger, high-speed position latch, and T/S-curve acceleration/deceleration support. Additionally, 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 D x H)** 250 x 160 x 85 mm (9.8" x 6.3" x 3.3")
- **Power Consumption** 24 W (typical)
- **Power Requirements** 0 ~ 30 V<sub>DC</sub> (e.g. 24 V @ 1 A) (Min. 48 W), AT
- **Weight** 2.4 kg
- **OS** Win7 Embedded x86/x64

#### System Hardware

- **CPU** Intel® Atom™ Dual-Core E3825 1.33 GHz
- **Memory** 2 GB DDR3
- **Storage** mSATA 32 GB

#### I/O Interface

- **Serial Ports** 2 x COM RS-232/422/485
- **LAN Ports** 2 x 10/100/1000M (RJ45)
- **USB Ports** 4 x USB 2.0, 1 x USB 3.0

#### Motion Control

- **Number of Axes** 4
- **Interpolation** 2/3-axis linear, 2/3-axis circular, and helical
- **Comparison Trigger** 4-ch, 2/3-axis position
- **High-Speed Latch** 4-ch
- **Handwheel/JOG** 4-ch
- **Max. Output Speed** 5 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
- **Local I/O** LMT+, LMT-, ORG, ALM, INP, CMP, LTC
- **General Inputs** 32
- **General Outputs** 32

#### 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-3245-LG10001** 4-axis embedded motion controller with 32-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 cable, 1/2/3 m
- **PCL-10137-1E/3E** DB37 cable, 1/3 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
- **ADAM-3937-BE** DB37 DIN rail wiring board
- **PCL-10153PA5-2E** 50-pin cable to Panasonic A4/A5 servo, 2 m
- **PCL-10153YS5-2E** 50-pin cable to Yaskawa Sigma V7 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