

# PCL-839+

## 3-axis Stepping Motor Control ISA Card



### Features

- Independent, simultaneous control of three stepping motors
- Optically-isolated outputs
- Five isolated digital inputs per axis for limit switches
- Half-size PC add-on card
- Up to 200 kpps step rate
- 16 x digital I/O

### Introduction

PCL-839+ three axis intelligent stepping motor control card turns your IBM-compatible PC into a 3-axis motion-control station. The card's one PCD-4541 intelligent controller chips can execute a variety of motion-control commands. For advanced applications, Advantech supplies function libraries which you can link to your C program.

#### Programming PCL-839+

You can control each axis directly through the card's I/O registers, but use of the card's high-level interpreter is recommended. This interpreter reads high-level commands from a text file to perform specific tasks. We also supply function libraries which you can call from your C program. The libraries come with 'Turbo C' source code which you can recompile if you want to access the libraries from other C compilers.

### Specifications

#### Pulse Type Motion Control

- **Motor Driver Support** Stepping
- **Number of Axes** 3
- **Max. Output Speed** 200 kpps
- **Step Count Range** 0 ~ 16,777,215
- **Pulse Output Type** Pulse/direction, CW/CCW
- **Velocity Profiles** T-Curve
- **Local I/O**
  - Machine Interfaces: PEL x 3, MEL x 3, ORG x 3, SLD x 6
  - General Inputs: 16 (5 V/TTL)
  - General Outputs: 16 (5 V/TTL)

#### General

- **Bus Type** ISA
- **Certifications** CE
- **Connectors**
  - 1 x DB37 (limit switches and pulse output)
  - 1 x 20-pin flat cable (digital I/O)
- **Dimensions (L x H)** 185 x 100 mm (7.3" x 3.9")
- **Power Consumption** Max.: 5 V @ 390 mA
- **Storage Humidity** 5 ~ 95% RH, non-condensing (IEC 68-2-3)
- **Operating Temperature** 0 ~ 70° C (32 ~ 158° F)
- **Storage Temperature** -20 ~ 70° C (-4 ~ 158° F)

### Ordering Information

- **PCL-839+** 3-axis Stepping Motor Control ISA Card
- **PCL-10137-1** DB37 Cable, 1 m
- **PCL-10137-2** DB37 Cable, 2 m
- **PCL-10137-3** DB37 Cable, 3 m
- **ADAM-3937** DB37 DIN-rail Wiring Board
- **ADAM-3920** 20-pin DIN-rail Flat Cable Wiring Board

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