



## PISO-ENCODER600U

PCI Bus, 6-axis Encoder Input Card

### Introduction

The **PISO-ENCODER600U** contains a 6-axis encoder counter and each axis has a 32-bit, true counter with a maximum encoder counting rate of 4 MHz. The counting mode can be selected from three types: 1. Quadrant mode, 2. CW/CCW mode, and 3. PULSE/DIR mode. There are also three kinds of counter reset modes provided: 1. Register Reset, 2. Index Reset, and 3. Hardware Reset. The "Index Reset" mode resets by using a C+/C- channel, which will reset the counter on each revolution. The "Hardware Reset" mode resets the counter using an external pin (HR1 ~ HR6). The HR1 ~ HR6 pins can also be used as digital input.

The PISO-ENCODER600U also provides 8-ch digital outputs. 2500 Vrms photo-couplers are used to isolate the digital I/O to prevent high voltages from affecting the system. Device drivers and function libraries for DOS, Windows 7 and Windows XP/2000 are provided.

### Software Support

|                         |  |
|-------------------------|--|
| Windows Driver/DLL/Lib  | Windows 7/10 32/64-bit<br>Windows XP/2000 32-bit |
| DOS Library             | DOS 6.2  |
| Labview Development Kit | Labview 8.5 and above                            |
| Linux Library           | Linux 2.6  |

### Ordering Information

|                            |   |
|----------------------------|---|
| <b>PISO-ENCODER600U CR</b> | Universal PCI Bus 6-axis Encoder Input Card (RoHS)<br>Includes: CA-SC68, SCSI-II 68-pin Male Connector (Solder Type) with Cover |
|----------------------------|---|

### Accessories

|          |   |
|----------|---|
| DN-68 CR | Encoder Input Board for PISO-ENCODER300U / PISO-ENCODER600U |
|----------|---|

### Features

- Universal PCI bus
- 6-axis encoder counter
- True 32-bit counter
- Encoder Counting Rate: 4 MHz (Max.)
- Third-order internal digital filter
- Counting Mode: Quadrant, CW/CCW, PULSE/DIR
- A+, A-, B+, B-, C+, C- inputs
- Programmable reset counter function
- Index (C channel) reset counter function
- Hardware reset (HR1 ~ HR6), reset counter function
- 68-pin SCSI-II connector



### Specifications

| Model                     | PISO-ENCODER600U                |
|---------------------------|---------------------------------|
| <b>General</b>            |                                 |
| Number of Axes            | 6                               |
| Slot Interface            | Universal PCI bus               |
| Resolution                | 32-bit                          |
| Encoder Interface         | Quadrant, CW/CCW, PULSE/DIR     |
| Encoder Counting Rate     | 4 MHz (Max.)                    |
| I/O Isolation             | 2500 Vrms optical isolation     |
| Connector                 | 68-pin SCSI-II female connector |
| <b>Digital Input</b>      |                                 |
| Digital Input Channels    | -                               |
| <b>Digital Output</b>     |                                 |
| Digital Output Channels   | 8                               |
| <b>Power</b>              |                                 |
| Power Consumption         | +5 V @ 500 mA                   |
| <b>Environmental</b>      |                                 |
| Operating Temperature     | 0 ~ +60°C                       |
| Storage Temperature       | -20 ~ +80°C                     |
| Ambient Relative Humidity | 0 ~ 90% RH, non-condensing      |
| Dimensions                | 120.4 mm x 90.8 mm              |