



## PCIe-ENCODER600

PCI Express Bus, 6-axis Encoder Input Card

### Features

- 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



### Introduction

The **PCIe-ENCODER600** contains a 6-axis encoder counter and each axis has a 32-bit, true counter with a Encoder Counting Rate of 4 MHz (Max.). 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 **PCIe-ENCODER600** 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.

### Specifications

Model	PCIe-ENCODER600
<b>Software</b>	
OS Support	Windows 7/10 32/64-bit Windows XP/2000 32-bit
SDK	DOS 6.2, Linux 2.6 Labview 8.5 and above
<b>Hardware</b>	
Connector	68-pin SCSI-II female connector
<b>General</b>	
No. of Axes	6
<b>Encoder Input</b>	
Mode	Quadrant, CW/CCW, PULSE/DIR
Counting Rate	4 MHz (Max.)
<b>Pulse Output</b>	
Counter Width	32-bit
<b>Digital Input</b>	
Channels	6

Model	PCIe-ENCODER600
Isolation	2500 Vrms optical isolation
<b>Digital Output</b>	
Channels	8
Isolation	2500 Vrms optical isolation
<b>PC Bus</b>	
Type	PCI Express x 1
<b>Power</b>	
Consumption	+12 V @ 200 mA +3.3 V @ 500 mA
<b>Mechanical</b>	
Dimensions (mm)	120.4 mm x 90.8 mm
<b>Environment</b>	
Operating Temperature	0 ~ +60°C
Storage Temperature	-20 ~ +80°C
Humidity	5 ~ 85% RH, Non-condensing

### Ordering Information

<b>PCIe-ENCODER600 CR</b>	PCI Express Bus, 6-axis Encoder Input Card (RoHS)
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### Accessories

DN-68 CR	Encoder Input Board for PISO-ENCODER300(U)/ PISO-ENCODER600(U) (RoHS)
CA-SCSI15-H3 CR	SCSI-II 68-pin Cable, 1.5M (for high speed motion application) (RoHS)
CA-SCSI30-H3 CR	SCSI-II 68-pin Cable, 3M (for high speed motion application) (RoHS)
CA-SCSI50-H3 CR	SCSI-II 68-pin Cable, 5M (for high speed motion application) (RoHS)