



# **PCIe-ENCODER300**

PCI Express Bus, 3-axis Encoder Input Card

<b>□</b> Features
3-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
CE UK FC KOHS

#### **■** Introduction

The **PCIe-ENCODER300** contains a 3-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 3 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  $\sim$  HR6). The HR1  $\sim$  HR6 pins can also be used as digital input.

The **PCIe-ENCODER300** 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-ENCODER300	
Software		
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	
Hardware		
Connector	68-pin SCSI-II female connector	
General		
No. of Axes	3	
<b>Encoder Input</b>		
Mode	Quadrant, CW/CCW, PULSE/DIR	
Counting Rate	4 MHz (Max.)	
Pulse Output		
Counter Width	32-bit	
Digital Input		
Channels	6	

Model	PCIe-ENCODER300		
Isolation	2500 Vrms optical isolation		
Digital Output			
Channels	8		
Isolation	2500 Vrms optical isolation		
PC Bus			
Туре	PCI Express x 1		
Power			
Consumption	+12 V @ 200 mA +3.3 V @ 500 mA		
Mechanical			
Dimensions (mm)	120.4 mm x 90.8 mm		
Environment			
Operating Temperature	0 ~ +60°C		
Storage Temperature	-20 ~ +80°C		
Humidity	5 ~ 85% RH, Non-condensing		

## Ordering Information

PCIe-ENCODER300 CR	PCI Express Bus, 3-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)

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