# **ADVANTECH**

# **PCIE-1762H**

# **16-Channel Isolated Digital Input and 16-Channel Relay Output Card**

## **Packing List**

Before installation, check to ensure that you have received the following items:

- 1 x PCIE-1762H card
- . 1 x Startup manual

If anything is missing or damaged, contact your distributor or sales representative immediately.

#### User Manual

For more information about this product, please refer to the PCIE-1762H user manual provided on the Advantech waheita

## **Declaration of Conformity**

### **FCC Class A**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause interference. In such cases, users are required to correct the interference at their own expense.

#### CE

This product has passed the CE test for environmental specifications when shielded cables are used for external wiring. We recommend the use of shielded cables. This type of cable is available from Advantech. Contact your local supplier for ordering information.

For more information about this or other Advantech products, visit our website at

#### http://www.advantech.com

For technical support and customer service, visit

#### https://www.advantech.com/support/

This startup manual is for PCIE-1762H.

Part No. 2001176200 Printed in Taiwan

Edition 1 August 2018

#### Overview

Advantech's PCIE-1762H is a 16-channel relay actuator and 16-channel isolated digital input data acquisition card for PCle bus. The 16 on-board SPDT relays are ideal for applications such as device ON/OFF control and power switching. Moreover, to ensure easy monitoring, each relay is equipped with a red LED indicator that shows its ON/ OFF status.

Meanwhile, the 16 optically isolated digital input channels make the PCIE-1762H card suitable for use in environments with noise or floating potentials.

### Software Installation

PCIE-1762H is a relay actuator and IDI card. The product's user manual, drivers, and programming SDK are available on the Advantech website. To obtain this software, simply access the link below and then search the product name.

http://support.advantech.com.tw



## Hardware Installation

After the device driver is installed, the PCIE-1762H card can be installed in your computer.

Follow the steps outlined below to install the PCIE-1762H card:

- Touch a metal part of the computer to neutralize any static electricity that may be in your body.
- Insert the card into a PCI Express slot. To avoid damaging the card, do not use excessive force.

# **Pin Assignments**

					_	
		+			V	
		42	21	RLY_OUT 0	42	RLY_OUT 6
RLY_OUT 11	62	41	20	RLY_COM 0	41	RLY_COM 6
RLY_COM 11	61	40	19	RLY_OUT 1	40	RLY_OUT 7
RLY_OUT 12	60	39	18	RLY_COM 1	39	RLY_COM 7
RLY_COM 12	59	38	17	RLY_OUT 2	38	RLY_OUT 8
RLY_OUT 13	58	37	16	RLY COM 2	37	RLY COM 8
RLY_COM 13	57	36	15	RLY_OUT 3	36	RLY_OUT 9
RLY_OUT 14	56	35	14	RLY_COM 3	35	RLY_COM9
RLY_COM 14	55	34	13	RLY_OUT 4	34	RLY_OUT 10
RLY_OUT 15	54	33	12	RLY_COM 4	33	RLY_COM 10
RLY_COM 15	53	32	11	RLY_OUT 5	32	NC
NC	52	31	10	RLY_COM 5	31	NC
NC	51	30	9	NC	30	NC
ECOM 3	50	29	8	IDI 15	29	IDI 14
ECOM 3	49	28	7	IDI 13	28	IDI 12
ECOM 2	48	27	6	IDI 11	27	IDI 10
ECOM 2	47	26	5	IDI 9	26	IDI 8
ECOM 1	46	25	4	IDI 7	25	IDI 6
ECOM 1	45	24	3	IDI 5	24	IDI 4
ECOM 0	44	23	2	IDI 3	23	IDI 2
ECOM 0	43	22	1	IDI 1	22	IDI 0
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## Pin Use Description

- IDI n (n= 0 ~ 3): Isolated digital input of Group 0 - IDI n (n=  $4 \sim 7$ ): Isolated digital input of Group 1 - IDI n (n= 8 ~ 11): Isolated digital input of Group 2 - IDI n (n= 12 ~ 15): Isolated digital input of Group 3 - ECOM0: External common input of Group 0 - ECOM1: External common input of Group 1 - ECOM2: External common input of Group 2 - ECOM3: External common input of Group 3

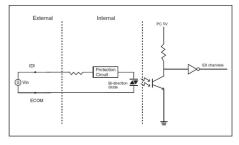
NC: No connection
RLY\_OUT n (n = 0 ~ 15): Relay output channel

- RLY\_COM n (n = 0 ~ 15): Relay output common channel

## **Signal Connections**

## **Isolated Digital Input Connections**

The PCIE-1762H card features 16 isolated digital input channels that are designated IDI0  $\sim$  IDI15. Each isolated digital input channel accepts 10  $\sim$  30  $V_{\rm DC}$  voltage and bi-directional input. This means that both positive and negative voltage can be applied to an isolated input pin (Vin ). The image below shows how to connect an external input source to one of the card's isolated input channels.



## **Relay Connections**

After the computer is powered on, the initial relay output status of the PCIE-1762H card should be as shown below:

