

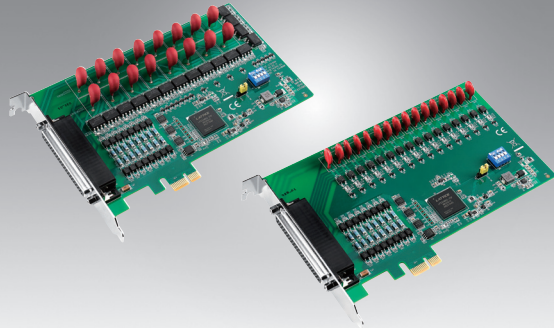
PCIE-1763AH

PCIE-1763DH

16-ch Solid-State Relay Output(for AC) and 16-ch Isolated Digital Input w/ Digital Filter & Interrupt PCIe Card

16-ch Solid-State Relay Output(for DC) and 16-ch Isolated Digital Input w/ Digital Filter & Interrupt PCIe Card

NEW



PCIE-1763AH

PCIE-1763DH



Features

- 16-ch solid-state relay (SSR) output with longer lifetime and higher operating speed compared to electro-mechanical relays
- Zero-crossing (synchronous) trigger for reduced inrush current and electrical noise
- 16-ch photoMOS relay output with longer lifetime and higher operating speed compared to electro-mechanical relays
- Much less contact problems such as arcs, bounce, and noise
- Suitable for both AC and DC applications with frequent ON/OFF switching
- LEDs for output state indication
- 16-ch isolated digital input (IDI) with both dry and wet contact configurations
- Interrupt capability for all IDI channels
- Programmable duration noise filter for all IDI channels

Introduction

The PCIE-1763AH provides 16 solid-state relay (SSR) outputs and 16 isolated digital input. The SSRs are classified to semiconductor relays which do not have moving contact and differ from the conventional electro-mechanical relays in many ways. They are superior to electro-mechanical relays in longer lifetime, higher operating speed, less contact problems such as arcs, bounce, and noise. In addition, the zero-crossing (synchronous) trigger effectively reduces inrush current and electrical noise during SSR turn-on. Therefore, they are most suitable for applications which need conducting high voltage (> 80 VAC) AC loads and frequent ON/OFF switching.

The PCIE-1763DH provides 16 photoMOS relay outputs and 16 isolated digital input. The photoMOS relays are classified to semiconductor relays which do not have moving contact and differ from the conventional electro-mechanical relays in many ways. They are superior to electro-mechanical relays in longer lifetime, higher operating speed, less contact problems such as arcs, bounce, noise, and smaller size. Therefore, they are most suitable for applications which need conducting AC or DC low voltage load (< 60 V) and frequent ON/OFF switching.

The isolated digital inputs accept both dry and wet contact configurations. All channels have interrupt capability and are equipped with programmable duration noise filter.

Specifications

Solid-State Relay Output (PCIE-1763AH)

▪ Channels	16
▪ Relay type	Solid-state relay SPST (form A)
▪ Load voltage	400 V max. (AC rms)
▪ Load current	1.2 A _{RMS} max.
▪ Peak load current	12 A (1 cycle @ 60 Hz)
▪ On-state voltage drop	2.5 V max.
▪ Off-state leakage current	100 µA max.
▪ Critical rate of rise of off-state voltage	200 V/µs min.
▪ Holding current	25 mA max.
▪ Zero crossing voltage	50 V max.
▪ Turn-on time	100 µs max.
▪ Isolation protection	5000 V _{RMS}

Solid-State Relay Output (PCIE-1763DH)

▪ Channels	16
▪ Relay type	PhotoMOS SPST (form A)
▪ Load voltage	60 V _{DC} max.
▪ Load current	1.2 A max.
▪ Turn-on time	1.0 ms typ.
▪ Turn-off time	0.6 ms typ.
▪ Isolation protection	1,500 V _{DC} max.

Isolated Digital Input

▪ Channels	16
▪ Input voltage	Logic 0: 3 V max. (0 V min.) Logic 1: 10 V min. (30 V max.)
▪ Input resistance	2.7 kΩ

▪ Interrupt capability	All channels
▪ Noise filter	8 µs ~ 131 ms programmable for all channels
▪ Opto-isolator response	50 µs typ./100 µs max.
▪ Isolation protection	2,500 V _{DC} max.

General

▪ Interface	PCI Express x1
▪ I/O Connector type	1 x DB62 female connector
▪ Dimensions	168 x 100 mm (6.6" x 3.9")
▪ Power consumption	Typical: 3.3V @350mA, 12V @350mA Max: 3.3V@ 370mA, 12V @ 1000mA
▪ Operating temperature	0 ~ 60°C (32 ~ 140°F)
▪ Storage temperature	-20 ~ 70°C (-4 ~ 158°F)
▪ Storage humidity	5 ~ 95% RH (non-condensing)
▪ Certifications	CE/FCC

Ordering Information

▪ PCIE-1763AH-AE	16-ch Solid-State relay (SSR) output and 16-ch isolated digital input w/ digital filter & interrupt PCIe card
▪ PCIE-1763DH-AE	16-ch Solid-State Relay Output(for DC) and 16-ch isolated digital input w/ digital filter & interrupt PCIe card

Accessories

▪ PCL-10162-1E	DB62 Shielded Cable, 1 m
▪ PCL-10162-3E	DB62 Shielded Cable, 3 m
▪ ADAM-3962-AE	DB62 DIN-rail Wiring Board