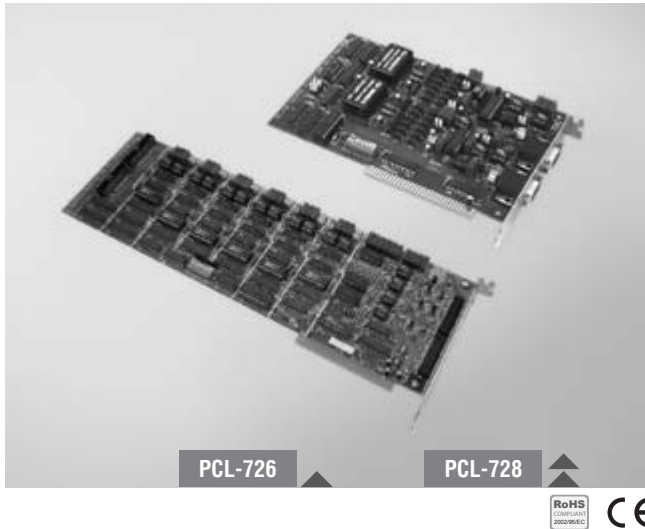


# PCL-726

# PCL-728

**12-bit, 6-ch Analog Output ISA Card  
with 32-ch Digital I/O**

**12-bit, 2-ch Isolated Analog Output  
ISA Card**



## Features

- Independent analog output channels
- 12-bit resolution double-buffered D/A converter
- Multiple voltage ranges:  $\pm 10$  V,  $\pm 5$  V,  $0 \sim 5$  V,  $0 \sim 10$  V and  $4 \sim 20$  mA current loop (sink)
- 16 digital input and 16 digital output channels (PCL-726)
- Two DB9 connectors for easy wiring (PCL-728)

## Introduction

PCL-726, and PCL-728 are analog output cards with 12-bit analog output channels. You can individually configure each channel to any of the following ranges:  $0 \sim 5$  V,  $0 \sim 10$  V,  $\pm 5$  V,  $\pm 10$  V and  $4 \sim 20$  mA current loop (sink). Designed for use in industrial environments, these cards are ideal, economical solutions for applications that require multiple analog outputs or current loops.

## Specifications

### Analog Output

- **Channels** PCL-726: 6  
PCL-728: 2 isolated
- **Resolution** 12 bits, double buffered
- **Output Rate** Static update
- **Reference Voltage** Internal:  $-5$  V ( $\pm 0.05$  V)  
 $-10$  V ( $\pm 0.05$  V)  
External: DC or AC,  $\pm 10$  V max.  
(Software programmable)
- **Output Range**

|                    |                          |                          |
|--------------------|--------------------------|--------------------------|
| Internal Reference | <b>Bipolar (V)</b>       | $\pm 5$                  |
|                    | <b>Unipolar (V)</b>      | $0 \sim 5$ , $0 \sim 10$ |
|                    | <b>Current Loop (mA)</b> | $4 \sim 20$              |
| External Reference | <b>Bipolar (V)</b>       | $\pm 10$                 |

- **Isolation Protection**  $500 V_{DC}$  (PCL-728)
- **Driving Capability** 5 mA
- **Output Impedance**  $0.1 \Omega$
- **Operation Modes** Software polling
- **Accuracy** 0.012%
- **Excitation Voltage**  $8 \sim 36$  V for  $4 \sim 20$  mA current loop

### Digital Input (PCL-726)

- **Channels** 16
- **Compatibility** 5 V/TTL
- **Input Voltage** Logic 0: 0.8 V max.  
Logic 1: 2.0 V min.

### Digital Output (PCL-726)

- **Channels** 16
- **Compatibility** 5 V/TTL
- **Output Voltage** Logic 0: 0.5 V, Logic 1: 2.4 V
- **Output Capability** Sink: 0.5 V @ 0.4 mA max.  
Source: 2.7 V @ 50 mA max.

### General

- **Bus Type** ISA
- **I/O Connectors** PCL-726: 4 x 20-pin box header  
PCL-728: 2 x DB9 female connector
- **Dimensions (L x H)** PCL-726: 340 x 100 mm (13.4" x 3.9")  
PCL-728: 184 x 119 mm (7.25" x 4.7")
- **Power Consumption**  
PCL-726: 5 V @ 500 mA typical, 1 A max.  
12 V @ 80 mA typical, 110 mA max.  
12 V @ 60 mA typical, 90 mA max.  
PCL-728: 5V @ 800 mA max.
- **Operating Temperature**  $0 \sim 50^{\circ} \text{C}$  ( $32 \sim 122^{\circ} \text{F}$ )
- **Storage Temperature**  $0 \sim 65^{\circ} \text{C}$  ( $32 \sim 149^{\circ} \text{F}$ )
- **Operating Humidity** 5 ~ 95% RH, non-condensing (refer to IEC 68-2-3)

## Ordering Information

- **PCL-726** 12-bit, 6-ch AO ISA Card w/ Digital I/O
- **PCL-728** 12-bit, 2-ch Isolated AO ISA Card
- **PCL-10120-1** 20-pin Flat Cable, 1 m
- **PCL-10120-2** 20-pin Flat Cable, 2 m
- **PCLD-780** Screw Terminal Board w/ Two 20-pin Flat Cables
- **PCLD-782** 16-ch Isolated DI Board w/ 1m 20-pin Flat Cable
- **PCLD-785** 16-ch Relay Board w/ One 1m 20-pin Flat Cable
- **PCLD-880** Wiring Board w/ Two 20-pin Flat Cables & Adapter
- **ADAM-3909** DB9 DIN-rail Wiring Board
- **ADAM-3920** 20-pin DIN-rail Flat Cable Wiring Board