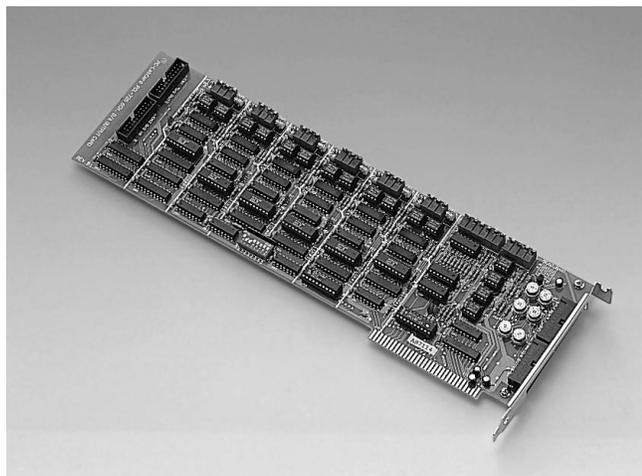


# PCL-726

## 6-ch Analog Output Card



CE

### Features

- 6 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 channels and 16 digital output channels

### Introduction

The PCL-726 provides six 12-bit D/A channels on a full-size add-on card. You can individually configure each channel to any of the following ranges:  $0$  to  $+5$  V,  $0$  to  $+10$  V,  $\pm 5$  V,  $\pm 10$  V and  $4$  to  $20$  mA current loop (sink). Designed for use in industrial environments, the PCL-726 is an ideal, economical solution for applications that require multiple analog outputs or current loops.

In addition to its analog outputs, the PCL-726 also provides 16 digital output channels plus 16 digital input channels. Its TTL-compatible D/I and D/O ports easily interface with our line of daughterboards for industrial On/Off control and sensing applications.

### Specifications

#### Analog Output (D/A Converter)

- **Channels** 6
- **Resolution** 12 bits, double buffered
- **Output Ranges** Unipolar:  $0 \sim +5$  V,  $0 \sim +10$  V  
Bipolar:  $\pm 5$  V,  $\pm 10$  V  
Current loop (sink):  $4 \sim 20$  mA,  $\pm 10$  V with external DC or AC reference
- **Throughput** 15 KHz
- **Settling Time**  $\leq 70$   $\mu$ sec.
- **Accuracy**  $\pm 0.012\%$  full scale range
- **Temperature Drift:** 5 PPM/ $^{\circ}$  C ( $0^{\circ} \sim 50^{\circ}$  C)
- **Linearity**  $\pm 1/2$  bit
- **Voltage Output Current**  $\pm 5$  mA max.
- **Current Loop Excitation Voltage** minimum  $+8$  V, maximum  $+36$  V for  $4 \sim 20$  mA current loop
- **Reset (Power-on) Status** all D/A channels will be at  $0$  V output after reset or power-on (both bipolar and unipolar modes)

#### Digital Input

- **Channels** 16-ch TTL compatible DI
- **Logic Level 0**  $0.8$  V max.
- **Logic Level 1**  $2.0$  V min.
- **Input Loading**  $0.5$  V @  $0.4$  mA max. (low)  
 $2.7$  V @  $50$  mA max. (high)

#### Digital Output

- **Channel** 16-ch TTL compatible DO
- **Logic Level 0**  $0.5$  V @  $8.0$  mA (sink)
- **Logic Level 1**  $2.4$  V @  $0.05$  mA (source)

#### General

- **Power Consumption**  $+5$  V @  $500$  mA typical,  $1$  A max.  
 $+12$  V @  $80$  mA typical,  $110$  mA max.  
 $-12$  V @  $60$  mA typical,  $90$  mA max.
- **Operating Temperature**  $0^{\circ} \sim 50^{\circ}$  C ( $32^{\circ} \sim 122^{\circ}$  F)
- **Storage Temperature**  $0^{\circ} \sim 65^{\circ}$  C ( $32^{\circ} \sim 149^{\circ}$  F)
- **Operating Humidity**  $5\% \sim 95\%$  RH non-condensing (refer to IEC 68-2-3)
- **Connectors** one 37-pin D type female connector  
two 20-pin male ribbon cable connectors
- **Dimensions**  $340$  mm (L) x  $100$  mm (H) ( $13.4^{\circ}$  x  $3.9^{\circ}$ )

### Ordering Information

- **PCL-726** 6-channel D/A output and DIO card, user's manual and driver CD-ROM (cable not included)
- **PCL-10120-1** 20-pin flat cable, 1 m
- **PCL-10120-2** 20-pin flat cable, 2 m
- **PCLD-780** Screw terminal board
- **PCLD-782** Opto-Isolated D/I board (16-ch)
- **PCLD-785** Relay output board (16-ch)
- **ADAM-3920** 20-pin wiring terminal for DIN-rail mounting

### Applications

- PID loop control
- Programmable voltage source
- Servo control
- Programmable current sink
- Function generator