



# DA8P-12 12-Bit Analog Output PCMCIA Card



- ✓ 8 Independent Analog Outputs
- ✓ 12-Bit Resolution
- ✓ Simultaneous Output of Multiple Channels
- ✓ 8 Digital Inputs/Outputs
- ✓ On-Board Event Timer
- ✓ External Interrupt Inputs

The DA8P-12 is an eight channel analog output/digital I/O card for systems supporting Type II PCMCIA cards. Available in two versions, the DA8P-12B offers eight bipolar analog outputs with a range of  $\pm 5$  volts while the DA8P-12U provides eight unipolar analog outputs with a range of 0 to +5 volts.

The DA8P-12 can update multiple outputs simultaneously under software control or with an external event. In addition to analog output, the DA8P-12 provides the user with 8 channels of TTL compatible digital I/O. Each digital channel is independently programmable as an input or output channel allowing the user to both control and monitor digital information.

An on-board event timer allows the DA8P-12 to interrupt the CPU at software programmable time intervals. This allows the DA8P-12 to be used as a simple arbitrary waveform synthesizer.

External interrupt inputs are also provided to interrupt the CPU for such events as an external trigger. The DA8P-12 includes software drivers to simplify the development of custom DOS applications in C, QuickBasic, and Turbo Pascal. A Dynamic Link Library (DLL) is provided for Windows software development. An optional Visual Basic Controls (VBX) is also available. Example programs are provided for all supported languages.

A client software driver is provided to configure the DA8P-12. The



DA8P-12 client software driver is compatible with PCMCIA Card Services Specification 2.1. A separate enabler program is provided for the configuration of the DA8P-12 for those who wish to run the card without card and socket services installed. For turn-key operation, the DA8P-12 is also compatible with LABTECH NOTEBOOK and Snap-Master.

**Output Voltage:**  $\pm 5V$  (DA8P-12B, 0-5V (DA8P-12U)

**Output Current:** 1 mA/channel  
**Relative Accuracy:**  $\pm 1$  LSB maximum

**Offset Error:**  $\pm 5$  LSB maximum (DA8P-12U)  $\pm 6$  LSB maximum (DA8P-12B)

**SETTLING TIME TO LSB**  
**Positive Full-Scale Change:** 10  $\mu s$  max (3 $\mu s$  typ)  
**Negative Full-Scale Change:** 10  $\mu s$  max (5 $\mu s$  typ)

**POWER REQUIREMENTS**  
**No Load:** 12 mA @ +5V maximum  
**Full Rate Load:** 140 mA @ +5V maximum  
**Power-Down Mode:** 20 mA @ +5V maximum

## Specifications

**Resolution:** 12-bit

### To Order (*Specify Model Number*)

Model No.	Price	Description
DA8P-12B	\$495	8 Channel PCMCIA analog output card with bipolar outputs
DA8P-12U	495	8 Channel PCMCIA analog output card with unipolar outputs

*Comes with complete operator's manual, driver software and PCMCIA configuration software.*

**Ordering Example:** DA8P-12B analog output board with UIO-37 terminal panel and CP-IO37 cable, \$495 + \$110 + \$40 = **\$645**.

### Accessories

Model No.	Price	Description
UIO-37	\$110	Terminal strip, Requires CP-IO37 cable
CP-IO37	40	Cable, 24 inches
VISUALDAQ	195	Visual Basic Controls