

ISA PC-266

4 Channel 16bit Analog Output

EDR Software | User Manual



The PC-266 provides you with four 16-bit analog outputs. Each channel is independent and has double-buffered data input. Output data may be written totally asynchronously from software, on demand from the board (by means of interrupts or polling) or on demand from the board's pacer clock. Three independent TTL digital input lines are provided for monitoring external status information or to control PC-266's clock generation.

Features

- ♦ Four 16-bit analog voltage outputs
- ♦ $\pm 10V$ Full Scale
- ♦ Outputs short circuit protected
- ♦ Settles to 4LSB in 7 S
- ♦ Double-buffered D/A data inputs
- ♦ 8 differential input channels for thermocouple or RTD sensors
- ♦ Use with K,J,E,T,B,R,S & N thermocouples, and 100W or 1kW RTDs
- ♦ Cold Junction compensation & screw terminal block on auxilliary board
- ♦ Gains selectable from: 1, 10, 100, 200, 300, 500, 600, 700, 800
- ♦ 30 to 50Hz acquisition rate via polled I/O and Interrupts.

Specifications

ANALOG OUTPUTS

Number of channels:	4	
Resolution:	16bits, 1 part in 65536	
Full Scale Ranges:	$\pm 5V$, $\pm 10V$, bipolar: 0-5V, 0-13.5V unipolar	
Settling Time:	Max 10m sec into a load of 500pF, 2kW, <1m sec for small steps	
Data Throughput:	800 kHz @ 50 kHz nominal per channel	
Output Current:	$\pm 5mA$ max	
External Reference:	Up to 4, $\pm 10V$	
Accuracy	Typical	Maximum
Uni-polar Offset:	$\pm 1/4$ LSB	± 1 LSB
Bi-polar Zero:	$\pm 1/2$ LSB	± 2 LSB
Linearity Error:	$\pm 1/4$ LSB	$\pm 1/2$ LSB
Linearity over temp:	$\pm 1/2$ LSB	$\pm 1/4$ LSB
Diff Non-Linearity:	$\pm 1/4$ LSB	
Gain Error:	± 2 LSB	± 5 LSB
Temperature Drift:	10ppm/ $^{\circ}C$ max of full-scale range	
Short Circuit Current:	Limited to 40mA to 0V or any power rail to $\pm 15V$	
DIGITAL I/O		
Digital Lines:	3TTL inputs	
Clock Oscillator:	2 MHz	
Timers:	3 16bit programmable counter/timers	
PC INTERFACE		
Bus Interface:	16bit PC/AT interface	
Registers:	64 I/O mapped (32, 16bit registers)	
Interrupts:	2 independent: D/A buffer empty and timing trigger	
Power Requirements:	$+5V$ @ 1.5A	

Ordering Information

Supplied with EDR Software

PC-266C 4 Channel 16bit Analog Output D/A Board

View connector pinouts in Reference Section

Optional Accessories

Refer to System Diagram in Reference Section

ADPT-5050 via IDC50 (Analog O/P)