



IP-16ADC

IndustryPack® with 16 channel, 16-bit
analog to digital conversion

Features

- Up to 16 single-ended or eight differential 16-bit ADC channels
- Precision on-board reference
- Input ranges of 0-5V, 0-10, $\pm 5V$, $\pm 10V$
- 10 μs conversion time
- Factory calibrated; data in ID PROM

The IP-16ADC provides 16 single-ended or eight differential channels of 16-bit analog to digital conversion on a single-wide IndustryPack. The single-ended and differential inputs may be mixed. A programmable gain amplifier provides a selection of input ranges. Conversions take place in less than 10 μs .

Gain and offset calibration parameters are stored in the board's ID PROM.

Note that this product **requires** an external low noise +/- 15 VDC power supply.

Specifications

Form Factor	Single-wide IndustryPack
IndustryPack bus speed	8 MHz
Wait states	One on writes; none on reads
Number of channels	16 ADC single-ended or 8 ADC differential (may be mixed)
Precision	16 bits
Input voltage ranges	0-10V, 0-5V, $\pm 10V$, $\pm 5V$ nominal; selectable by software
Accuracy	16 bit with no missing codes 0.002% typical (ADC and amp)
Calibration	Offset and gain factory calibrated. Parameters in ID PROM
Conversion time	8 μs . 100 ksamples/sec aggregate if single channel driven
Input impedance	60 Mohm
Input protection	$\pm 65 V$ with power on, $\pm 80 V$ with power off
Reference	1ppm/C typical, 0.01% accuracy
Dimensions	1.8 inches x 3.9 inches
Power Requirements	+5 VDC, 210 mA typical, 270 mA max +15 VDC external, 45 mA typical, 70 mA max -15 VDC external, 45 mA typical, 70 mA max
Environmental	Operating temperature: 0° to +70°C Humidity: 5% to 95% non-condensing Storage: -10° to +85°C

Order Information

IP-16ADC	IndustryPack with sixteen 16-bit ADC channels
IP-TERM	50-screw terminal block with ribbon connector

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