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MODEL 302 SPECIFICATIONS

A/D TYPE: 24-bit delta-sigma converter with microcontroller supervisor and optical isolation

MONOTONICITY: 23 bits

LINEARITY: +/-0.002% of full scale

DIFFERENTIAL INPUT RANGE: +/-5 volts

DC COMMON MODE RANGE: +/-6.5 volts

DC COMMON MODE REJECTION: -100 dB typical

ANALOG INPUTS: 6, multiplexed true differential protected to +/-60 volts

INPUT IMPEDANCE: 1,000,000 megohms typical

PROGRAMMABLE DATA RATE: 50 to 1000 Hz, lower rates by digital averaging.

EFFECTIVE RESOLUTION: Effective resolution is total resolution in bits minus RMS noise in bits. Figures below use oversampling ratio of 4

Rate	Effective Resolution in Bits
1000	20
100	22
50	22.5

SCANNING MODE: Single, or multi-channel scanning modes. Rates are crystal-controlled for accuracy. Divide rates above by 5 for per channel data rate in multi-channel scanning modes.

ANALOG OUTPUTS: 3 at 14-bit resolution. Outputs will settle to within 1% of full scale in 1 second.

DIGITAL INPUTS: 4 bits, contact closure or 5V logic compatible

DIGITAL OUTPUTS: 8 latched, ruggedized, double-buffered 5V outputs

POWER REQUIREMENT: 15 to 30 VDC, regulated or unregulated, for isolated circuitry
NOTE: The on-board regulator can be optionally left off the Model 302 if a regulated 12 volt power supply is available.

TYPICAL POWER CONSUMPTION: The microcontroller operates as a low-power USB bus-powered device. The analog input and digital I/O requires 30 MA (add drive current for active digital outputs, up to 20 MA each, and analog output drive current, if any)

SIZE: 6.5 x 4.8 x 0.8 inches

Rugged drivers and sample application code are included at no extra cost.