

STRAIN GAGE READOUT



MODEL 9300A

FEATURES

- Front panel digital zero
- Easily programmed span 1000 to 30,000 counts
- Splash proof bezel with panel gasket seal
- Heavy duty aluminum case
- All programming and calibration from four front panel switches
- Optional analog output 4-20mA or 0 to 10VDC
- 5 digit, .56" red LED readout with negative indication
- Two setpoints with relay closures
- Short case, only 4" behind the panel depth
- Optional RS232 or RS485 interface
- 16 Bit A/D Converter
- Microprocessor based unit

MODEL 9300

The Model 9300 is a microprocessor based digital panel readout designed for use as a strain gage conditioner/readout. The unit provides 10 VDC excitation and all signal conditioning for four wire bridges. The span is programmable for a display of 1000 to 30,000 counts using the four front panel switches. Two alarm points with relay closure outputs are standard.

Optional analog outputs of 0-10 VDC or 4-20mA are available and the high and low points of these outputs can be programmed via the front panel switches or even inverted, ie: 20-4mA instead of 4-20mA. Peak and valley detect with memory and reset are standard on the unit. RS232 and 485 interface options are available to interface to computers, PLC's or printers. Bezel and scratch resistant lens are sealed to meet the requirements of NEMA 4 and supplied with gasket to seal unit to panel.

SPECIFICATIONS

Power Requirements:

- AC: 105 VAC to 132VAC @ 50mA (47 to 500 Hz)
- AC: 198VAC to 264VAC @ 25mA (47 to 500 Hz) optional.

Display:

- Type: Five digit, seven segment LED 0.56" (14.3 mm) high.
- Polarity Indication: "-" Displayed
- Overrange Indication: "Or" displayed

Environmental:

- Operating Temperature Range: -20°C to +60°C
- Storage Temperature Range: -25°C to +85°C
- Relative Humidity: 0% to 90%, Non-condensing

Dimensions:

- Case size "D" Refer to page 39.
- Weight: 1 pound
- I/O Terminations: Fifteen quick disconnect terminals

Analog to Digital Conversion:

- Technique: 16 Bit Sigma Delta
- Rate: 10 Conversions/Second

Analog Output: (optional)

- Voltage: 0-10V, 2.5mV resolution. 0V and 10V points are programmable via front panel switches. Maximum drive capability ± 2 mA.
- CMV: 1400V Peak (AC or DC) between analog output, ground and AC power line ground.
- 4-20mA output, maximum load 600 Ω . The 4mA and 20mA points are programmable via front panel switches

Serial interface: (optional)

- ASCII RS232 or RS 485 compatible (optional); format: 1 start bit, 8 data bits, 1 stop bit, and no parity bits. Baud rates: 9600, 4800, 2400, 1200, 600, 300, 150, & 75 programmable from the front panel. Output compatible with DCI Model 9100 remote readout.

Excitation:

- 10VDC @ 50mA. For 1/2 and 1/4 bridges, completion resistors would need to be supplied.

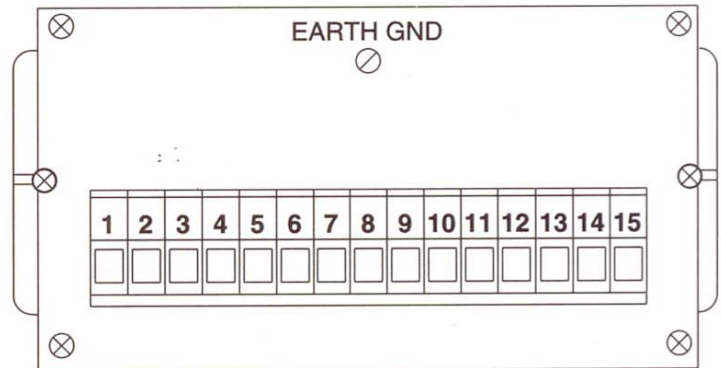
Input Voltage: +10mV to ± 35 mV

- Span programmable from ± 1000 to $\pm 30,000$ counts using front panel switches.
- Span and Limits stored in nonvolatile memory during power loss.

Limit Outputs: Two form "A" relay closures rated .25A at 28V.

OPTIONS

- 01 RS232 Compatible Interface
- 02 RS485 Compatible Interface
- 05 +5VDC input power 500mA max
- 08 4-20mA output max load 600 ohms
- 09 Analog output, (0-10VDC) tracks input
- 12 9-18VDC power 400mA max
- 22 230VAC; 50-400 Hz input power
- 24 18-36VDC power 300mA max
- 50 Sunlight Readable Red LED



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|------------------|-----------------------|
| 1 - POWER- | 9 - COMMON2 |
| 2 - POWER+ | 10 - +INPUT1 |
| 3 - SER485/RX232 | 11 - -INPUT1 |
| 4 - SER485/TX232 | 12 - EXCITATION PLUS |
| 5 - DIGITAL GND | 13 - EXCITATION MINUS |
| 6 - LIMIT1 | 14 - ANALOG OUT |
| 7 - COMMON1 | 15 - ANALOG |
| 8 - LIMIT2 | |