

RATIO/RATE METER UP/DOWN COUNTER PARALLEL INPUT DISPLAY



SERIES 6100C

FEATURES

- Up/Down counter with quadrature interface (optional)
- Parallel input display (binary or grey code) (6109C)
- Engineering units multiplier (.0001 to 9.9999)
- Analog output option
- Two separate displays for rate/total and a third for ratio/difference (optional)
- Two relay alarm outputs
- High-speed counter: 10 KHz per channel
- Serial interface option, RS232 or RS485

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The new 6100C is a versatile dual channel indicator with a high-speed microprocessor to perform math functions on the two inputs. The unit will display a rate, ratio, totalize, or show a linear or angular position with inputs from incremental or absolute encoders. The unit is available with a .56" six digit LED display with thumbwheels for setting the limits, or the .56" LED display and two 6 digit .3" LED displays. The two smaller displays will show the limits or two rate inputs with the main display showing the ratio of the two inputs. When used as a readout for an absolute encoder the unit can be programmed to accept BCD, natural binary, grey code, or excess three BCD code. An analog output option is available so the unit can be used for control function or to interface to an A/D input card on a computer or PLC.

SPECIFICATIONS

Accuracy: ± 1 count of LSD

Input Count Rate: 1 Hz to 10KHz

Gate Time Resolutions:

1 to 9 seconds in one second steps

Programmable by front panel switches or serial interface

Parallel Input:

24 bit natural binary or grey code, TTL compatible.

Transducer Power:

5VDC at 200mA on units without option 18 installed.

5VDC at 500mA on units with option 18 installed.

Engineering Units Multiplier:

.001 to 9.9999, Programmable by front panel switches or serial interface. Multiplier.

Sensitivity: Sine wave/pulse input only

Minimum signal 150mVRMS

Maximum signal 115VAC without damage to circuitry.

Input impedance 100Kohm. Threshold adjustable from the front panel with a small screw driver.

Display: Six .56" high-efficiency red LED's with decimal points. Decimal points are programmable with front panel switches. LED's to indicate status of limits

Optional: In addition to the six .56" LED's, two sets of six .3" LED's can be added to display two rates

Front Panel Controls: 4 push buttons and 6 indicator LED's.

Optional: Six thumbwheel switches for setting limits.

Remote Control Input: 4 remote inputs duplicate pushbutton functions

Outputs:

Two from "C" relays for alarm outputs. Contact rating .25A at 28V.

Optional: RS232/RS485 interface. Baud rate - 75, 150, 300, 600, 1200, 2400, 4800, 9600-8 data bits, 1 stop bit, no parity.

Suitable with printer output, programmable print times of 2 times/sec. to once every hour in one second steps.

Optional: TTL compatible parallel BCD or natural binary.

Analog output: (Optional) 0-10VDC @ 1mA. Resolution of D/A is 16 bits (65000 counts) and the update rate of the D/A is 10 times per second. Zero point and 10V points are programmable from the front panel. The number for the 10V point may be a positive or negative number.

Input Power: 115VAC $\pm 10\%$, 50 - 400Hz, 5 watts maximum

Options 230VAC $\pm 10\%$, 50 - 400Hz 5 watts maximum

DC Power 5 VDC and 10 - 30 VDC, 600mA maximum

Operating temperature: -20° to $+60^{\circ}$ Celsius.

Power Loss Protection: Solid state memory stores all setup parameters and limits during power loss.

I/O Method: Three prong power entry module (IEC)

25 pin "D" connectors for all I/O except serial interface

6 pin phone jack for RS232 or RS485 serial interface

Case Size: "B" see page 39.

OPTIONS

- 01 RS232 (mating connector supplied)
- 02 RS485 (mating connector supplied)
- 03 Quadrature input with z-reference input (single channel only) (6101C only)
- 05 5VDC Input power
- 06 Parallel BCD or natural binary output. TTI Compatible. Price of option drops to \$45 if ordered with option 10 or 18. (Not available on 6109C) (mating connector supplied)
- 08 4 - 20mA output
- 09 Analog output: 0 - 10VDC
- * 10 Thumbwheel switches to set limit *option 10 and 18 cannot be ordered together.
- 11 Differential line receiver (single quadrature channel only) for 03 option
- 12 10 - 15VDC power
- * 18 Dual Display
- 24 10 - 30VDC Input power

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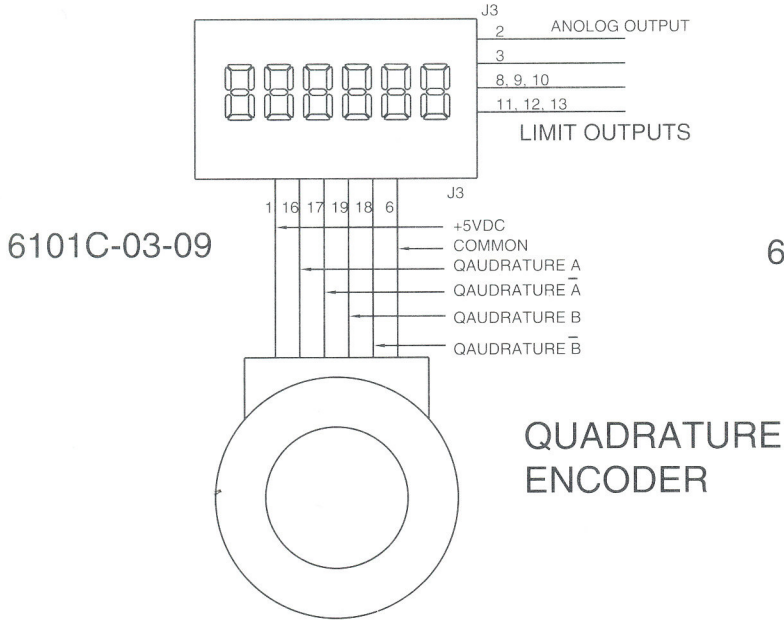
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MODELS

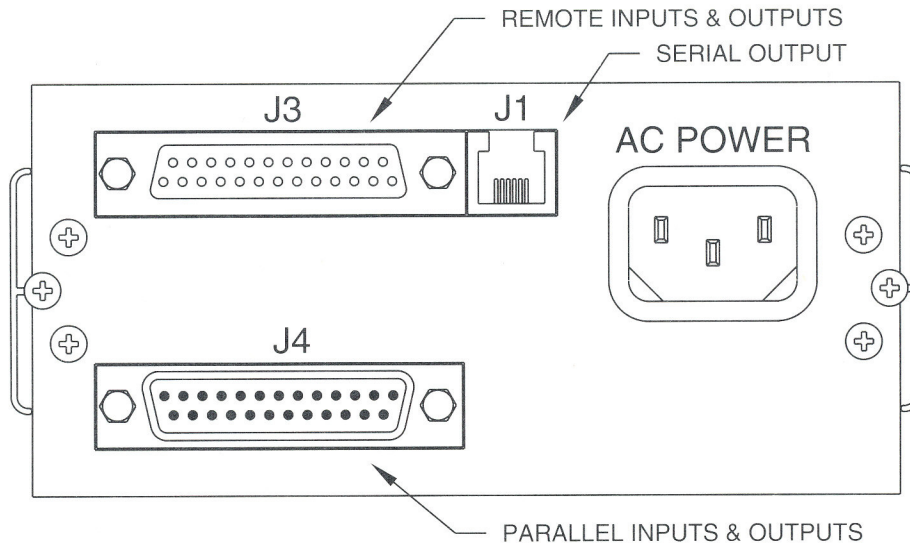
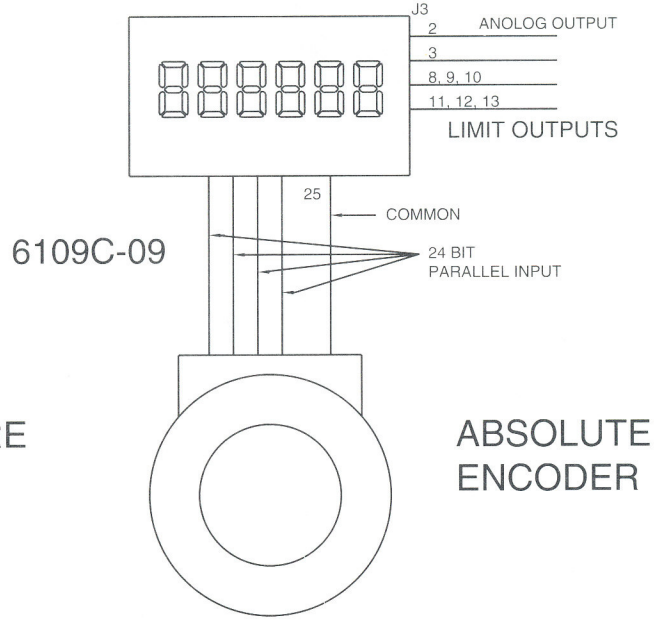
- 6101-03 Bi-directional totalizer with quadrature interface.
- 6104C Rate Indicator.
- 6109C Parallel Input

5 foot power cord and mating connector for J3 supplied with all base units

TYPICAL CONNECTIONS OF A QUADRATURE ENCODER WITH DIFFERENTIAL OUTPUTS TO THE MODEL 6101C-03-09



TYPICAL CONNECTIONS FOR AN ABSOLUTE ENCODER TO THE MODEL 6109C-09



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