

The SRO100 Programmable Digital Indicator/Frequency Counter may be used in any application requiring a programmable frequency counter with a scaled output. The SRO100 also includes a configurable power supply and measurement interface for use with other GMH Engineering products including the Delta DRS1000 Non-Contact Speed Sensor and the HFW80 Fifth Wheel.

The SRO100 has an easy-to-read, backlit LCD display with six large digits. Besides displaying the measured value, the unit can record Max/Min readings and register Hi/Lo alarms with an audible beeper. The easy-access front keyboard provides straightforward menu navigation. Multiple configurations may be saved in non-volatile memory with password protection.

The SRO100 can communicate with other intelligent systems via its built-in RS-232 and RS-485 serial communication ports, enabling an external device to receive measurements and to control multiple SRO100 units.



Features

- 6 Digit, scaleable counting
- Up to 1 MHz input frequency
- Pulse input
- RS-232 or RS-485 serial communication
- External sensor power supply port
- Max/Min, Hi/Lo monitoring
- Large, backlit LCD for easy readability
- Easy access front keypad

Typical Applications

- Speed and distance measurements
- Fluid flow
- Shaft speed measurement
- Speedometer, tachometer
- Pulse counting
- RF frequency counting

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Specifications

Input: Pulse 0-12 V single-ended,
0-5V nominal differential;
2V nominal switching threshold

Frequency Measurement:
Range: 1-999999 Hz
Resolution: 1 Hz
Accuracy: 20 ppm (overall error)
Transition Rise/Fall Time: 30 ms max
Update Rate: 1 Sample/sec
Smoothing: 1,2,4,8 Sample averaging

Scale Factor Calibration: 2 pt linear

Serial Communication:
Baud Rates: 1200,2400,9600,19200
Protocols: RS-232 and RS-485
32 unique, user-selectable addresses

Display Options: Lead zero blanking; decimal pt.;
engineering units; beep on/off; backlighting on/off

Supply Voltage: 6.0 - 16.0 Vdc (match sensor if using
External Sensor Power Port without Option 1)

Supply Current: 30 mA; 50 mA w/backlighting
(not including external sensor requirements):

External Sensor Power Port:
SRO100 Supply voltage (1A max) or
optional 5Vdc regulated (400mA max)

Temperature Range: 32°F to 120°F (0°C to 50°C)

Weight: 0.5 lb. (.227 kg.)

Wiring Information

RS-232 (DB-9 Connector):
RX: pin 2
TX: pin 3
GND: pin 5

Input (Screw Terminal Block 1):
External Sensor Ground: pin 1
External Sensor + Power: pin 2
+ Signal In: pin 3
- Signal In: pin 4

Power/RS485 (Screw Terminal Block 2):
Ground: pin 1
+ Power: pin 2
RS485A Serial: pin 3
RS485B Serial: pin 4

(Screw terminals located inside housing)

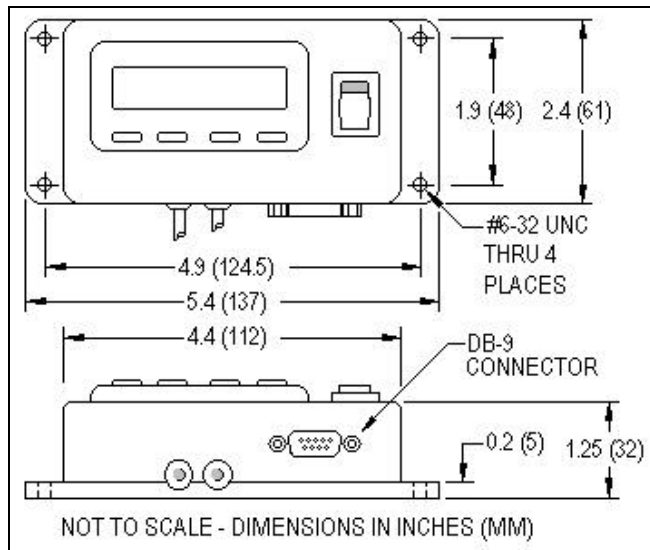


Figure 1 - SRO100 Dimensions

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