

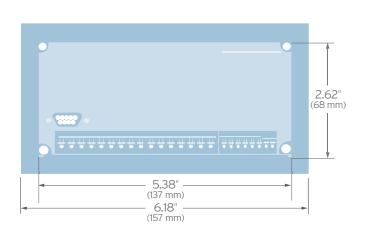
## Model 121 Indicator

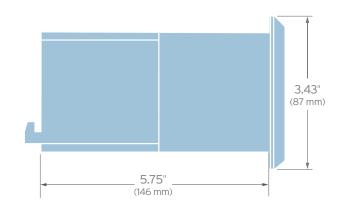
## **FEATURES**

- 8 digit rate display with Hi/Lo alarms
- · 8 digit totalizer
- Isolated 0-20mA or 4-20mA output programmable to flow rate, total, temperature, or density
- 16 point linearization for improved accuracy
- Two stage batching set points with solid state relays and programmable auto restart
- Mass conversion via external temperature or density input
- Accepts a frequency, voltage, or current input signal
- RS-232 serial port with Windows programming interface
- Programmable display of any engineering units
- Security password(s) for operator and supervisor level control
- 110 Vac powered
- Accessory power user selectable 5, 12 or 24Vdc
- Front panel sealed to NEMA 4 rating
- UL rated and CE approved



## **DIMENSIONS**





## Model 121 Indicator

**INPUTS** 

Power (internally fused):

Model 121-200: 85 to 127 Vac 50/60 Hz

Control Inputs:

Menu select: Start, Stop, Reset, Lock, Inhibit, Alarm

Acknowledge, Print

Input scan rate: 10 scans per second

Logic "high": 4 to 30 Vdc Logic "low": 0 to 0.8 Vdc

Input Impedance: 100 k  $\Omega$ 

FLOW INPUTS:

Analog: 0-10 Vdc, 0-5 Vdc, 1-5 Vdc, 4-20mA, 0-20mA

Update rate: 5 updates per second minimum

Automatic Fault Detection: Signal over/under-range, current

loop broken

Calibration: Self Calibration and Auto-zero continuously

Over voltage Protection: 50 Vdc

Pulse: Menu Select: Pull up Resistance, 10k  $\Omega$  to 5 Vdc or

Pull down resistance,  $10k \Omega$  to Common

Trigger Level: Logic On: 3 to 30 Vdc

Logic Off: 0 to 1 Vdc

Count Speed: 0 to 20 kHz

Over Voltage Protection: 50 Vdc

Compensation Input:

Menu select: Temperature, Density or not used

Update rate: 1 update per second, minimum

Resolution: 16 bit

Automatic Fault Detection: Signal over/under-range, current

loop broken, RTD short/open

Available ranges: 0-10 Vdc, 0-5 Vdc, 1-5 Vdc, 4-20 mA,

0-20 mA, 100 Ohms DIN RTD

**OUTPUTS** 

Relay Outputs (qty. 2)

Menu select: Low Rate, High Rate, Batch Pre warn or Batch

Set point

Contacts: Form C, rated at 250 Vac or 30 Vdc at 5 amps.

**Analog Outputs** 

Menu select: Volume Rate, Compensated Volume Rate, Mass

 $Rate, Temperature, Density, Volume \ Total, Compensated$ 

Volume Total or Mass Total.

Type: Isolated Current Sourcing, 4-20 mA or 0-20 mA

Maximum load: 1000 Ohms

Isolated Pulse Outputs

Menu select: Volume, Compensated Volume or Mass

Type: Open collector, maximum "On" current 125 mA,

maximum "Off" voltage 30 Vdc.

Pulse Duration: Scalable

**ACCESSORY POWER** 

AC powered units:

User selectable 5, 12, 24 Vdc @ 100 mA

COMMUNICATIONS

The serial port can be used for printing or data logging.

Device ID: 01-99

Baud Rate: 300, 600, 1200, 2400, 4800, 9600, 19200

Parity: None, Odd, Even

Handshaking: None, software, hardware

Print Setup: Configurational print list and formatting

**ENVIRONMENTAL** 

Temperature: 0 to 50°C (32 to 122°F) Operating

- 40 to 85°C (-40 to 165°F) Storage

Maximum Relative Humidity: 80% at 31°C, decreases

linearly to 50% RH at 40°C Front Panel: Sealed to NEMA 4