

SPONSLER INDUSTRIAL SERIES BATTERY POWERED ELECTRONIC DEVICES

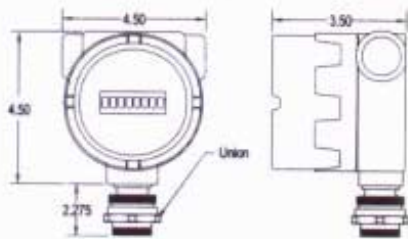
Sponsler Battery Powered Totalizers/Rate Indicators can display in most engineering units and are designed to operate efficiently in harsh industrial environments. State of the art circuit technology provides small power drain allowing long service life for internal batteries. These units can be mounted directly on the flowmeter or be remotely mounted. Our Electronic Instrumentation and components are guaranteed for quality and state of the art efficiency.

Features:

- Mounts remote or directly on flowmeter
- Reset externally initiated
- Field programmable
- Enclosure: FM Approved,
C.S.A. Certified
Class I, Groups B, C, D;
Class II, Groups E, F, G
Nema 4
- Approx. Weight:
IT150N, IT200N, IT275N = 2 lbs.
IT300N = 7 lbs.



Model Selection:



Model IT150N Totalizer

A battery powered device that provides flow totalization in any engineering unit. Total is displayed via an 8-digit liquid crystal display. Reset of the totalizer is accomplished externally by a magnetic field. This particular feature retains the unit integrity in hazardous environments.

The IT150N provides one digital output. The scaled pulse output is an open drain configuration in which the pulse amplitude assumes the level of the host device.

The IT150N amplifies and shapes the incoming pulses generated by the turbine's response to flow. The amplified pulse train is then scaled and divided to produce a totalized display in the desired engineering unit.

Specifications

Input Signal: Frequency 0-2500Hz
Amplitude 50mV-36V sine or Squarewave
Impedance 10K ohms

Display: LCD, 8 digit, 0.3" characters

Output: Factored pulse output via open drain @ 1 A
2ms pulse for each increment of the totalizer

Accuracy: +/- 1 count

Models IT150N, IT200N, IT275N

Typical Features:

Input Voltage: Internal AA lithium battery (operating life 3 years)

Sensitivity Field Adjustable

Reset Externally Initiated

Model IT200N Rate Indicator

A battery powered device that provides flow rate in any engineering unit. Rate is displayed via a 6-digit liquid crystal display. Selection of the reset function is accomplished externally by a magnetic field. This particular feature retains the unit integrity in hazardous environments.

The IT200N provides one digital output. The scaled pulse output is an open drain configuration in which the pulse amplitude assumes the level of the host device.

The IT200N amplifies, shapes and factors the incoming pulses generated by the turbine's response to flow. The amplified pulse train is then divided, factored by a phase locked loop (PLL) and combined with a crystal timebase circuit for absolute accuracy.

Specifications

Input Signal: Frequency 0-2500Hz
Amplitude 50mV-36V sine or Squarewave
Impedance 10K ohms

Display: LCD, 6 digit, 0.35" characters
Leading zero blanking

Output: Factored pulse output via open drain @ 1 A
2ms pulse for each unit of rate

Accuracy: +/- 1%

Model IT275N Totalizer/Rate Indicator

A battery powered device that provides flow rate per minute and totalization in most engineering units. Total and rate are displayed via two liquid crystal displays. The totalizer reset function is accomplished externally by a magnetic field. This particular feature retains the units integrity while permitting complete operational control in hazardous environments.

The IT275N provides an analog interface output. The IT275N amplifies and shapes the incoming pulses generated by the turbine's response to flow. The amplified pulse train is then factored and divided to produce a totalized display. In the rate circuit, the divided pulse train is factored by a phase locked loop (PLL) and combined with a timebase circuit for absolute accuracy. This configuration permits the calibration factor to be universal for total & rate displays.

Specifications

Input Signal: Frequency 0-2500Hz, amplified
20mV-28V sine or squarewave
Impedance 10K ohms

Display: Totalizer-LCD, 8 digit, 0.3" characters
Rate Ind.- LCD, 6 digit .35" characters
Leading zero blanking on rate indicator
Input factoring .00000001-1.99999
allows totalization and rate per minute in most engineering units.

Output: 4-20mA control loop
5-56V loop voltage
4-20mA representation proportional to flow
Independent zero & span adjustments
Loop control circuitry consumes no power from loop.

Accuracy: Totalizer +/- 1 count
Rate indicator +/- 1%
4-20mA output 0.3% F/S

Model IT300N Linearized Totalizer/Rate Indicator

A battery powered device that uses an input from a turbine flowmeter to display rate and total. The unit features a 4 1/2 digit rate with an 8 digit LCD totalizer. Rate and total are displayed simultaneously. The IT300N can be powered from an internal battery, external DC power supply, or 4-20mA output loop. The unit factors and divides the pulse to get rate indication and total in most engineering units.

10 point linearization is available to enhance accuracy and extend a flowmeters linear flow range. The IT300N provides pulse and analog outputs. Analog 4-20mA follows the rate display and has an accuracy of .15%. The output is reverse polarity protected. The output pulse advances with the least significant digit of the totalizer. The reset function is accomplished by internal push button or external contact closure.

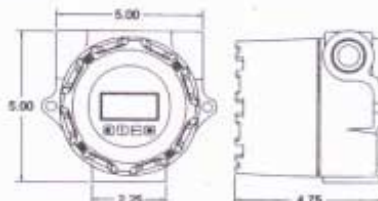
Specifications

Input Voltage: Supplied with 2 C size lithium battery pack
Ext.DC or Loop Powered: 8.5-30VDC

Inout Signal:: Frequency: 0-3500Hz
Sensitivity: 30mVp-p

Display: Totalizer: LCD, 8 digit, .2" high
Totalizer descriptors: GAL, LIT, FT3, M3, "blank"
Rate Indicator: LCD, 4 1/2 digit, .35" high updates every 2 secs
Rate descriptors: SEC, MIN, HRJ
Warning: Low battery indicator

Output: Analog: 4-20mA, representation proportional to flow rate.
Digital: Factored pulse proportional to flow total
Opto-isolated open collector transistor
Max. Output speed 10Hz
Pulse duration selectable 500, 250, 125, or 62.5msec
Pulse output divider user selectable, 1, 10, 100



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