

Model IT275N RATE INDICATOR & TOTALIZER



The model IT275N industrial remote totalizer/rate indicator is a battery-powered device that

provides flow totalization and rate in most engineering units. Total and rate are displayed via two 8-digit liquid crystal displays. The totalizer reset function is accomplished externally by a magnetic field to retain unit integrity while permitting complete operational control in hazardous environments. In addition, the IT275 provides an analog 4-20mA output. The 4-20mA loop control extracts no power from the loop.

Theory of Operation

The IT275 amplifies and shapes

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

Calibration

Field calibration is accomplished by incorporating a calibration factor based on the turbine K-factor. The calibration factor is entered via 5 BCD switches for both total and rate functions.

Model IT275N Specifications

Display:

Two 8-digit LCD 0.3"

Total indicator: 8-digitRate indicator: 5-digit

Power input:

Internal AA Lithium battery

Battery life: typically 4yr @24hr./day and max flowrate

Flowmeter input:

Frequency: 0-10KHz

Sensitivity: 50mV-36V sine or square wave. (field adjustable)

Impedance: 10Kohms

Analog output:

4-20mA factored current loop output

- No load on loop

Accuracy:

Totalizer indicator: ±1 count

Rate indicator: ±1%

Engineering units:

Any engineering unit is available. Input factoring: .0000001-1.9999

Temperature:

Operating: 40-121°F(40-85°C) Storage: 85-257°F(65-125°C)

Enclosure:

FM Approved, CSA Certified

Class I, Division1, Groups B, C, & D Class II, Division 1, Groups E, F, & G

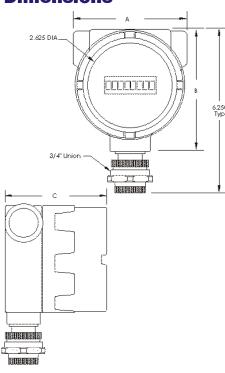
NEMA 4

Weight: 2.5lbs.

Mounts directly on flowmeter

Magnetic Reset

Dimensions



Unit	Α	В	С	
IT150N	4.500	4.500	3.500	
IT200N	4.500	4.500	3.500	
IT275N	4.500	4.500	3.500	
IT300N*	5.00	5.00	4.75	i

*Note. The IT300N is provided with two holes in the body not shown in the above figure which allow panel mounting. The holes are 5.25" apart and approx. 2.5" from the top of the unit.