



Kessler-Ellis Application Note F042

## Ten BATR/T Frequently Asked Questions and Best Kept Secrets

### Q1: How do I calculate a Pulse Input type K-Factor?

A1: For Pulse Inputs the Count K-Factor is equal to the number of pulses per unit of measure which is determined by the flowmeter. (This Information is typically on the flowmeter calibration sheet or stamped on the flowmeter itself).

The K-Factor is Calculated as follows:

Flow Total Indication = Sum of Input Pulses / (Factor x Factor Multiplier)

The Rate Time is menu selectable: You will have the option of choosing Seconds, Minutes or Hours which adds the appropriate multiplier into the equation. See Below.

Flow Rate Indication = (Input Frequency / (Factor x Factor Multiplier) x Time Scaler

### Q2: What is the Battery Life Expectancy?

A2: The Life Expectancy Table is listed below.

#### Battery Life Expectancy

##### RUN TIME

	Idle	2hrs/day	8hrs/day	24hrs/day
BATR T A	5 yrs	4.5 yrs	3.5 yrs	2.1 yrs
BATR T A 4	5 yrs	3.7 yrs	2.7 yrs	1.5 yrs
BATR T B/C Standby Operation	2.5 yrs	2.25 yrs	1.75 yrs	1 yr
BATR T B/C External or Loop Power	10 years			

All of the above values are calculated with the pulse output ON.  
Turn the pulse output OFF to prolong battery life up to 30%.

### Q3: What is the factory code to unlock the unit should I forget my password?

A3: The Factory back door code for the BATRT can be obtained by contacting the factory.

### Q4: What is the operating temperature of the unit?

A4: The Operating Temperature of the BATR/T is listed below.

#### OPERATING TEMPERATURE

-4°F (-20°C) to + 158°F (70°C)

Extended Temp: -22°F (-30°C) to + 158°F (70°C)

**Q5: What is the Accuracy of the BATR/T?**

A5: The BATR/T is accurate to 0.01% Reading, +/- 1 Count.

**Q6: Is the BATR/TM Nema 4X rated?**

A6: Yes, the BATR/T front panel is Nema 4X rated. This rating is also comparable to the European standard IP65.

**Q7: What can I view with the BATR/T?**

A7: The user can view the Rate and Total of flow on the Two Line Display. The Rate would be on the top line and the Total would be on the bottom line of the display.

**Q8: What type of memory does the BATR/T use?**

A8: The BATR/T has a battery backed memory and is capable of storing program and count data for the life of the battery. The unit also has a "BAT" warning that will activate on the display when the battery reaches the end of its useful life.

**Q9: How Do I reset the BATR/T?**

A9: The flow total may be cleared by the front panel or by a contact closure on the remote reset terminal to circuit common. To reset the unit from the front panel, the following sequence is required:

Press **M** "CLr tot" will be displayed (if the panel lock is on, the display will prompt "Ent Code"). Enter the proper code to advance to the **CLr tot** prompt)

Press **E** To clear the total. Unit will return to operation

**Q10: How do I Wire the Flow Inputs?**

A10: Below you will find typical wiring diagrams to help you wire a flowmeter to the BATR/T.

