

# BAT D/T

## Features

- Magnetic Pickup Input, Contact Closure Input, DC Pulse Input (Optically Isolated)
- Displays 5 Digit Resettable Total  
8 Digit Grand Total
- Powered From Internal Battery, External DC Supply or 4-20 mA Output Loop
- 10 Pt. Linearization
- New & Improved Isolated Scaled Pulse Output
- Intrinsically Safe Option

## Description

Featuring 5 digits of resettable total and 8 digits of grand total, the BAT D/T is a battery powered indicator capable of accepting magnetic pickup, DC pulse and switch closure inputs from pulse producing flowmeters.

## Specifications

### POWER:

#### BATTERY POWERED

Supplied with 2 C size Lithium battery pack.

#### EXTERNAL POWER INPUT

Voltage: 8.5 to 30 VDC

Current: Less than 5 mA

Supplied with 1 C size lithium battery for standby operation

Protection: Reverse Polarity Protection on DC Power Input

#### LOOP POWERED

Voltage: 8.5 to 30 VDC

Supplied with 1 or 2 C size lithium battery(ies) for standby operation

Protection: Reverse Polarity Protection on Current Loop

Loop Burden: 8.5V maximum

## Battery Life Expectancy

### RUN TIME

	Idle	2hrs/day	8hrs/day	24hrs/day
BATDT A or AC	5 yrs	4.5 yrs	3.5 yrs	2.1 yrs
BATDT A 4	5 yrs	3.7 yrs	2.7 yrs	1.5 yrs
BATDT B or C Standby Operation	2.5 yrs	2.25 yrs	1.75 yrs	1 yr
BATDT B or 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%.

## DISPLAY:

### Resettable Total Display

5 Digits (99999), 0.35" High, Display updates once every two seconds

### Grand Totalizer Display: (selectable decimal)

8 Digits (99999999), 0.2" High

Totalizer Descriptors: GAL, LIT, FT3, M3, "blank"

### Warning Displays: Low battery warning "BAT"

## ACCURACY:

±1 count

## Listing:

CE Compliant,  
CSA(NRTL/C)(File No. LR91109) (x-proof only)  
UL IS Listed

## LCD Dual Totalizer (Resettable & Non-Resettable)



- New, Attractive NEMA4 Wall Mount Enclosure with User Access to Keypad

## PULSE OUTPUT:

The pulse output advances with the least significant digit of the totalizer or decimal multiples thereof (see Pulse output divider).

Type: Isolated photomos relay

Max. voltage (off state): 30 VDC

Current (on state): 100mA

Pulse Duration: 62.5 mSec (max. output speed: 8 Hz)

Pulse output divider: User selectable, +1, +10, +100 or OFF

NOTE: Select OFF for max. battery life.

## MOUNTING STYLES:

- 0- Circuit Board - OEM option (consult factory)
- 1- Panel Mount - NEMA 4X Front
- 2- Wall Mount - NEMA 4X Enclosure with BAT D/T mounted behind clear cover
- 3- Explosion Proof - Class I, Division I, Groups B, C & D  
Class II, Division I, Groups E, F & G
- 5- Wall Mount - NEMA 4X with keypad mounted outside opaque cover

## ENVIRONMENTAL:

### OPERATING TEMPERATURE

-4°F (-20°C) to +158°F (70°C)

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

### HUMIDITY

0 - 90% Noncondensing

## INPUTS:

### MAGNETIC PICKUP INPUT

Frequency Range: 0 to 3500 Hz

Trigger Sensitivity: 30 mV p-p

Over Voltage Protected: ± 30 VDC

### OPTO-ISOLATED DC PULSE INPUT

High (logic 1): 4-30 VDC

Low (logic 0): Less Than 1 VDC

Minimum Current: .5 mA

Hysteresis: 0.4 VDC

Frequency Range: 0 to 5 kHz

Min. Pulse Width: 0.1 msec

### CONTACT CLOSURE INPUT (contact closure to common)

Internal Pullup Resistor: 100 KΩ to +3.6 VDC

High (logic 1): Open or 4-30 VDC

Low (logic 0): Less Than .5 VDC

Internal Switch Debounce Filter: 0 to 40 Hz

### RESET INPUT (contact closure to common)

Internal Pullup Resistor: 100 KΩ to +3.6 VDC

High (logic 1): Open or 4-30 VDC

Low (logic 0): Less Than .5 VDC

Minimum On : 25 msec

**K-FACTOR**

Range: 0.001 to 59999

Decimal Point Locations: XX.XXX to XXXXX

**10 Point Linearization Option**

This feature allows the user to enter 10 different frequencies with 10 different corresponding K-Factors to linearize non linear signals.

**ANALOG OUTPUT OPTION:**

Type: 4-20 mA follows flow rate, Two wire hookup

Scaling: scaled per second, minute or hour.

0.000 to 59999 (selectable decimal)

Accuracy: 0.15% Full Scale at 20° C

Temperature Drift:

50 ppm/°C Typical

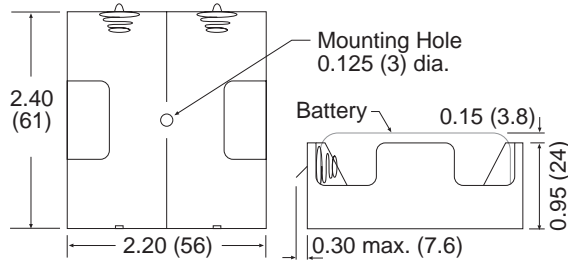
200 ppm/°C Worst Case

Reverse Polarity Protected

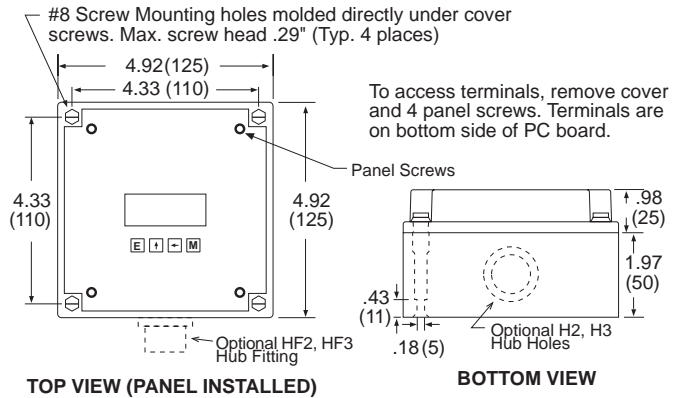
**NOTE:** The BAT D/T uses the 4-20 mA loop power as its power source when this option is used. The battery is still required to power the display.

**DIMENSIONS:**

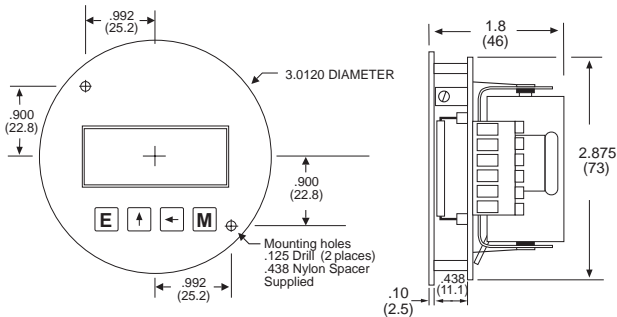
**BATPACK**



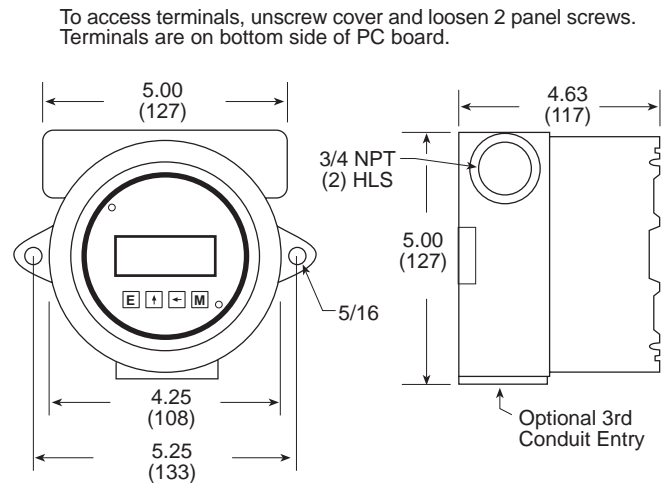
**BATDT-2**



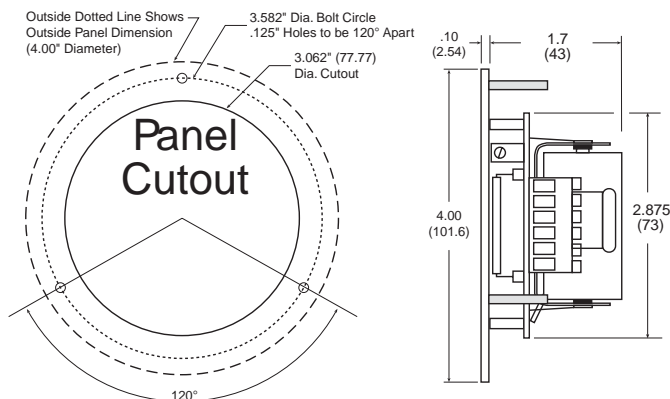
**BATDT-0**



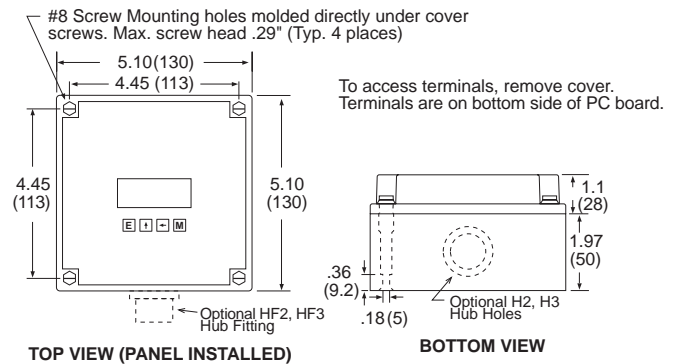
**BATDT-3**



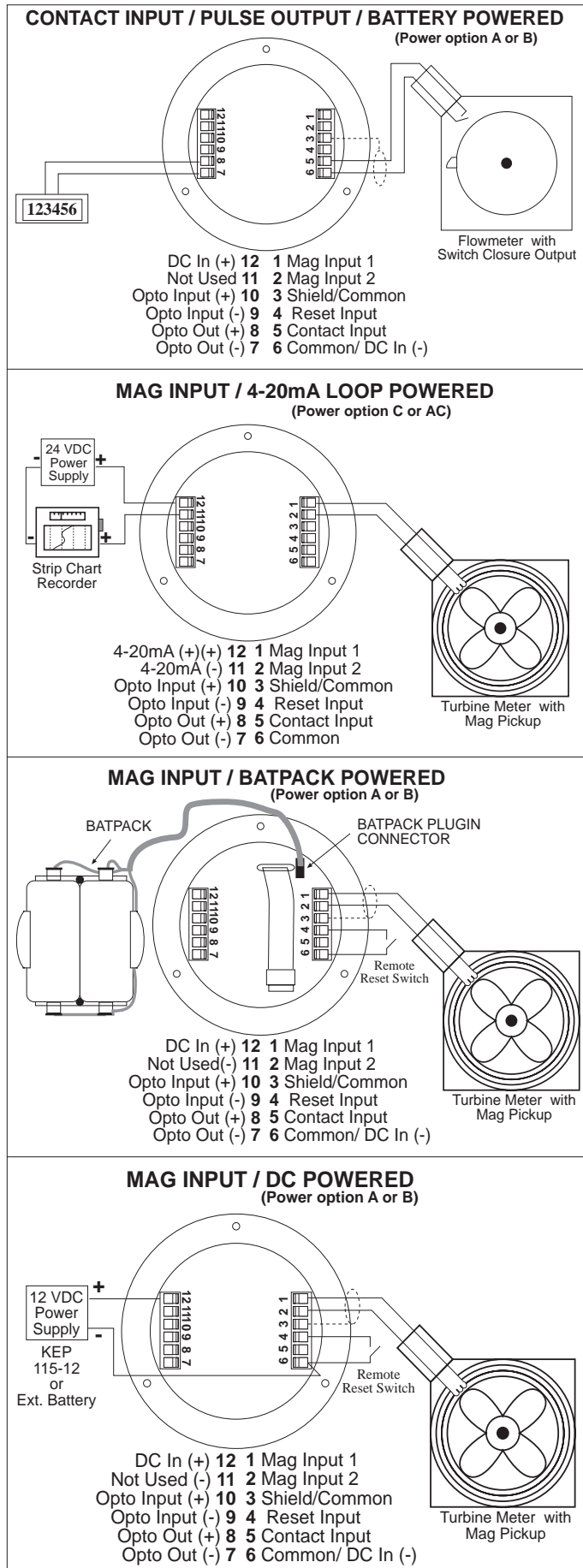
**BATDT-1**



**BATDT-5**



## Typical Wiring:



## Ordering Information

