

# Model RCT-1

## Water Meter Counter

### *Self-Powered 8- Digit*



- Internal lithium battery provides up to 7 years of uninterrupted operation
- Front Panel Reset (Order with Option N to disable the reset)
- Wide temperature range: -25° to +75 ° C
- NEMA 4x/IP65 sealed front panel bezel

The RCT-1 counter is powered by an internal lithium battery, which will provide up to 7 years of continuous operation. This counter has an 8-digit LCD display with 0.30" (7.6 mm) high digits.

Using the latest in micro-electronic assembly and manufacturing techniques provides units with the reliability and dependability required for industrial service.

The RCT-1 is constructed of a rugged die-cast metal case with a clear window. The sealed front panel meets NEMA 4X / IP65 requirements for wash-down and/or dusty environments, when properly installed.

#### **Specifications:**

1. DISPLAY: 8-digit LCD, 0.30" (7.6 mm) high.
2. POWER SOURCE: Internal 3.0 V lithium battery to provide up to 7 years of continuous operation. Battery life is dependant on usage. Count and reset contacts which remain closed for long periods of time will reduce battery life.
3. INPUT: 30 Hz from switch contact or open collector transistor with a 50% duty cycle.
4. OPERATING TEMPERATURE RANGE: -25° to +75 ° C
5. CONSTRUCTION: Rugged die-cast metal case with a clear viewing window. The sealed front panel meets NEMA 4X / IP65 requirements, when properly installed.

## Electrical Connections:

There are certain considerations that should be observed when running the count wires. A length of wire can act like an antenna and the closer it is to a source of electrical noise, the more it becomes susceptible to that noise.

There are a few rules that should be followed when running these wires.

1. Never run count signal wires in the same conduit or raceway with AC power lines, conductors that feed motors, solenoids, SCR controls, heaters, etc.
2. Signal wires within enclosures should be routed as far away as possible from conductors, control relays, transformers, and other electrically “noisy” components.

**WARNING: Lithium battery may explode if incinerated. Signal input voltage should not exceed 3.0 VDC to prevent damage to the counter.**

Pulling the input to common with a mechanical or solid-state switch increments the counter. The switch load is 14 $\mu$ A (max. voltage drop 0.5V) when ON. OFF state leakage current must be less than 2  $\mu$ A.

Reed switches, mercury wetted contacts, snap action limit switches, and silver alloy relay contacts with wiping action are usually satisfactory for generating count input signals. Motor starter controllers, tungsten contacts, and brush-type contacts should NOT be used. Normally open contacts are recommended for longer battery life and greater noise immunity.