

Wireless Pulse Counter

PULSE
COUNTER



Technical Overview

General Description

The OEM RF Wireless Pulse Counter can be used with dry contact, switch or closure mechanisms to count the number of actuations occurring in a given time frame. This sensor is offered with two setup options for either single input or multi input (4 inputs).

Features

- 3 ft. leaded wires.
- Single and multi input versions available.
- Can integrate with switch and closure mechanisms.

Principle of Operation

The OEM Wireless Pulse Counter is an electronic counter that counts how many times a pulse is detected on the input wires when there is contact between the two wired end points. It can easily be integrated into existing mechanical switches or contact plates. Sensor is collected in the Online Sensor Monitoring System and can send alerts via SMS text or email when a given number of pulses has been reached within a set time frame.

OEM Sensor Core Specifications

- Power: 3.0 V coin cell battery
- Communication: RF 900, 868 and 433 MHz
- Antenna: 4" wire antenna
- Operating Temperature: -40° to 85°C (-40° to 185°F)
- Device Range: 250 - 300 ft. non-line-of-sight*
- Only 1 inch by 1 inch


* Actual range may vary depending on environment.

Applications

- Water, gas and air flow meters.
- Door access counter.
- Turn style counting.
- Forklift seat switches.
- Button or switch integration.
- Production line tracking.

For more product information, to get a quote, or to place an order, please contact our sales department at 801-561-5555.

Technical Specifications

Supply Voltage	2.0 - 3.6 VDC *
Current Consumption	0.7 µA (sleep mode), 2 mA (radio idle/off mode), 2 mA (measurement mode), 25 mA (radio RX mode), 35 mA (radio TX mode)
Operating Temperature Range (Board Circuitry and Battery)	-20°C to +60°C (-4°F to +140°F) **
Certifications	 900 MHz product; FCC ID: ZTL- RFSC1 and IC: 9794A-RFSC1. 868 and 433 MHz product tested and found to comply with: CISPR 22:2008-09 / EN 55022:2010 - Class B and ETSI EN 300 220-2 V2.4.1 (2012-05).

Pulse Counter Specifications	Single Input	Multi Input
Number of Inputs / Counters	1	4
Counter Bit Depth	16 bit	16 bit
Detection Wires	High Impedance (2-Wire)	High Impedance (5-Wire)
Counter Operation	Positive and / or Negative Edge Pulses	
Transition Counting	Every Level Transition High to Low & Low to High	Does Not Count Transitions
Compatibility	Open Collector NPN Switches Mechanical Switches	
Transactions per Counter Input	65,000 Max / Heartbeat (Transmission)	
Max Input Pulse Rate	20 Hz (20 / second) (4 or less / second recommended) ***	

* Hardware can not withstand negative voltage. Take care connecting a power device.

** At temperatures above 100°C, it is possible to lose programmed memory.

*** High pulse count rates can severely impact battery life.