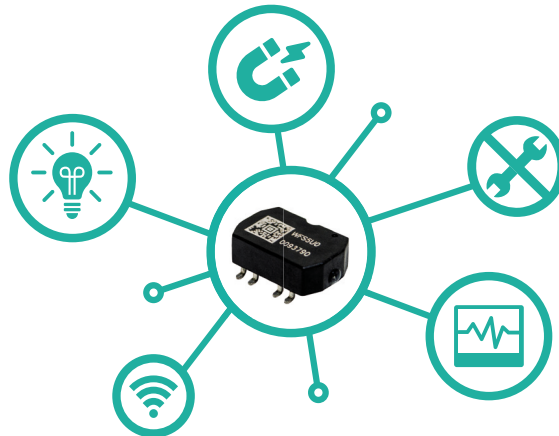


## WIEGAND SENSORS



### Self-powered Magnetic Sensing and Pulse Energy Harvesting in One Package

Wiegand sensors offer bipolar magnetic sensing and pulse energy generation without the need for any external voltage or current, making them the perfect magnetic sensors for low-power and energy-independent applications.

#### > Millions of Pulses, no Reduction in Energy

Pulse energy is unaffected by repeated and continuous use over time

#### > Consistent Energy at Low-Frequencies

Guaranteed minimum energy level independent of magnetic field change frequency

#### > Zero Mechanical Wear

No mechanical elements & non-contact sensing

#### > High Signal Noise Ratio

High slew rate & pulse voltage provide superior SNR to other magnetic sensor technologies

#### > High Triggering Frequency

Consistent pulse width means events can be differentiated at frequencies up to 40kHz

#### > Self-powered Sensing

No electrical energy is required to generate signals

### Applications

Wiegand sensors are used in a number of applications exploiting the pulses either as signals and/or for energy harvesting. Already implemented effectively in flowmeters and multi-turn rotary encoders, the advent of ultra-low power electronics and ultra-efficient integrated circuits has opened up a wide range of new applications for this uniquely useful little wire.

#### Power Transmission / Harvesting



- > Wireless Power Transmission
- > Kinetic Energy Harvesting

#### Pulsing / Metering



- > Flowmeters
- > Tachometers
- > Proximity Sensors (Intrinsically safe)

#### Condition Monitoring



- > Preventative Maintenance
- > Autonomous Wireless IoT Sensor Units

#### Event / Rotation counting



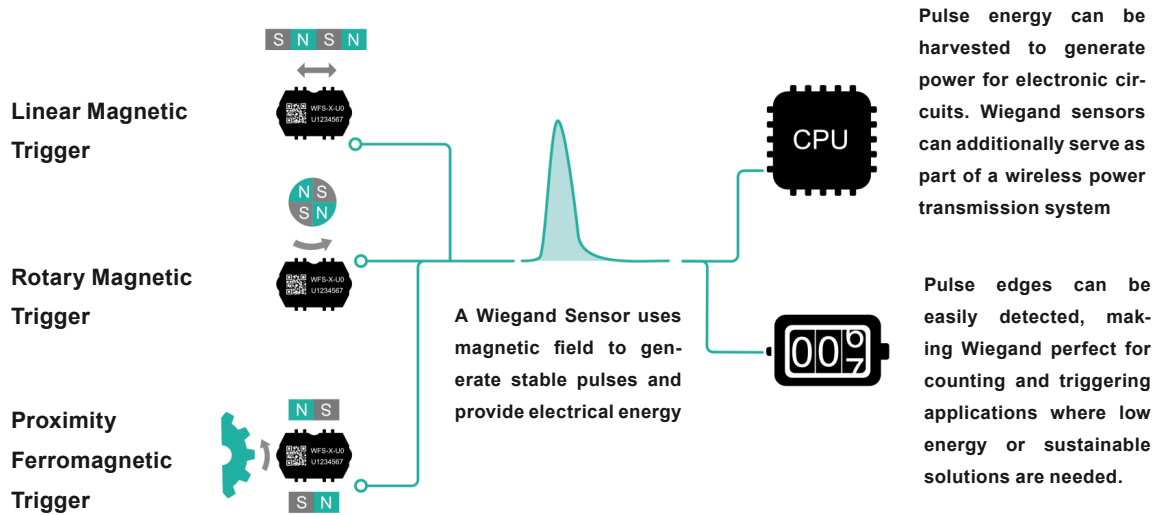
- > Rotary Encoder
- > Self-Powered Event-Counting



## WIEGAND SENSORS

### Functionality and Implementation

Wiegand sensors offer a combination of functionality, with a single pulse used either for magnetic sensing, or to power ultra-low power electronics, or even both. Alternatively, successive pulses can be stored to offset the energy demand of circuits. The pulse energy generated is consistent regardless of the frequency or speed of the field change - distinguishing the process from that of other inductive technologies - and can be achieved in a variety of implementations.



### The Wiegand Experts

UBITO builds on the significant expertise and over 15 years' experience of its 'sister' brand POSITAL, manufacturing Wiegand wire and sensors in industrial automation. Leveraging on the existing stable supply chain and consistent production quality, UBITO now brings Wiegand technology to a wide range of new solutions, applications and industries.



For more information and samples contact one of our local team

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