

## **UBITO WINK - WIEGAND IOT NODE KIT**



UBITO WINK is a DevKit which is made to provide developers with the essential components for creation of energy-autonomous devices that can detect real-world events involving moving magnetic fields and transmit measurements wirelessly to a remote monitoring system.

- No Batteries Powered by Energy Harvesting
- Wireless Up to 50 Meters
- **▶** Contactless No Mechanical Wear
- Supports External Sensors (e.g. Temperature, Magnetic Field)
- Event Triggered
- Not Sensitive to Speed
- Customizable Rotational & Linear
- Easy to Use

UBITO WINK consists of a slider mechanism with three magnets that ensure the alteration of the magnetic field for the operation of the following components:



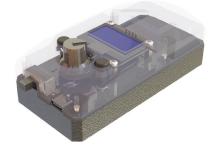
## 1 Wiegand Harvester

A transducer that generates about 10 micro-Joules of energy whenever the external magnetic field changes polarity by 180 degrees.



## 2 The Node

The Node is responsible for power management, computation, reading external sensors, and UWB (Ultra-Wide Band) communication. It transmits signals to the Base unit each time Wiegand Harvesters are triggered.



## 3 The Base

The Base (receiver) is responsible for receiving and deciphering UWB signals from the Node. It is equipped with a screen & supports multiple communication protocols, enabling seamless connectivity with computers or cloud services.



#### Features:

# Connectivity







## **Multi Sensing**







UBITO WINK transmits data between the Base and Node via UWB to the distance up to 50 meters. The Base can serve as a gateway as it supports interfaces such as WI-FI, GPIO, SPI, and USB Type-C.

Various external sensors could be connected, such as temperature, light, or magnetic field sensors.

#### Customization



## **Programmability**



UBITO WINK is customizable. Users can build their own magnetic system, experiment with linear motion (a slider is already included), or create a rotation system.

Both the Node and Base could be programmed to tailor the device for specific application cases.

Experience the future of self-powered devices with UBITO WINK. Our all-in-one solution contains everything you need to develop cutting-edge autonomous sensing technology. Harnessing the power of a Wiegand Harvesters boasting a pulse energy of 10 microjoules each, coupled with a transmitter, external sensors, and a receiver featuring a screen and various interfaces, UBITO WINK empowers you to create innovative, self-sustaining devices. Built your own mechanical setup and try Energy Harvesting in your application. Order UBITO WINK today and unlock the true potential of autonomous technology.

## 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.



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