# **JENG IoT Solutions**

# Buzzon Button (model 2021)

#### IoT

Internet of Things is a network of physical objects ('things') for the purpose of connecting and exchanging data with other devices and systems. The buzzon is an IoT device using LoRaWAN technology.

#### LoRa

LoRa (Long Range) is a Low-power wide-area network (LPWAN) protocol which allows small data packets to be transmitted and received wireless. LoRa uses the (open) ISM frequency band. The technology can be utilized in a commercial LoRaWAN network or via your own private (local) LoRaWAN network.

### About JENG IoT

JENG IoT is a Dutch company designing full turn-key IoT solutions. From sensors, dashboard apps, data analysis till full integration in your IT infrastructure.



- The Buzzon (model 2021) is a remote wireless trigger based on the LoRaWAN<sup>®</sup> LPWAN IoT protocol
- Button for outdoor usage in the public space (vandalism proof)
- No need for external power supply, no need for maintenance and has a battery lifetime up to 10 years
- Mountable to walls and all pole sizes by using adaptable construction layers
- Easy to use
  - Recognizable by design & color
  - Handicapped people
  - Pressable by gloves, elbow etc. (button sticks out)

The wireless Buzzon has many Use Cases in which it applicable, few examples below:

**Bus stop**. The buzzon is used by a waiting passenger to signal "I am waiting". The busdriver can be real-time informed that a passenger is waiting. This can be applied to e.g. abandoned stops, busdriver does not have clear sight due to darkness or busstops allocated at highways.

Full bin. The buzzon can be placed at a public bin. People walking by can push the button to indicate that the bin is full and needs to be emptied. The civil workers are notified and can schedule to empty the bin. BI (Business Intelligence) and data analysis can easily filter false detections.

### Emergency button.

Traffic – e.g. (temporary) bike buttons. For cyclists and pedestrians buttons are other used to signal their presence and control the traffic. The buzzon is very suitable to replace the traditional buttons, especially in temporary traffic situations. A local LoRaWAN gateway is installed easily and can be integrated with (exisiting) traffic management systems (Modbus over Ethernet). For more information contact JENG.

Supported by:



Ministerie van Infrastructuur en Waterstaat



This product is co-developed between **Dalsro IT** (Sweden), **KoHartog B.V.** and **JENG IoT B.V.** (The Netherlands). The Buzzon product is under development and the specifications and information as provided in this specifications are subject to change without notifications.

## Turn kay adjutions

A full turn-key solution in which the Buzzon is integrated in your your environment - wireless real-time button events – is one of the JENG services.

#### IoT PaaS

The Buzzon events can locally (within the vicinity in which the Buzzon operates) be handled or be processed in the cloud. This depends on the Buzzon Use Case. JENG and partners offer an IoT Platform-as-a-Service in which your Use Case can be realized.

### Inhouse development

Other devices and IoT solutions can be in house developed in order to add value to your company.

In case you are interested go to our website <a href="www.jeng.io">www.jeng.io</a> for more information about our products and services.

# **Key Features**

- Long Range Wireless communication (up to 15km)
- Easy to mount and install
- · Mountable to poles and walls
- LoRaWAN® compatible and CE certified
  - 868MHz band
  - OTAA (Over The Air Activation)
  - Secure communication
  - Class A
- Battery (replaceable): 2400mAh (3.7V Lithium-thionyl chloride)

Battery working time: 10 years

Buzzon pushes: 200.000x (LoRa SF7)

Connector: JST

Ultra low power

Standby: 2µA

Transmit: 44mA

- Fully integrated internal antenna
- Automatic low battery detection and status reporting
- Temperature sensor included (-25°C to 60°C)
- IP68
- IR3 rated housing. Vandal-resistant PP housing / glasfibre enhanced
- Operating Temperature: -25°C to 60°C
- Working Environment: Outdoor

## Packaging

- Product Dimensions: 75mm x 132mm x 49mm
- Product Weight: 480 gram (incl. battery)

AVAILABLE SERVICES

IoT solutions (turn key)

Full dashboard app

Device development

Technical support

Online interface

Advice and consultancy

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