

Datasheet

Rev. 0.3

NETVOX TECHNOLOGY CO., LTD.

Add: No. 21-1 Sec. 1 Chung Hua West Road, Tainan, Taiwan

Tel: +886-6-2617641, 2654878

Fax: +886-6-2656120

<http://www.netvox.com.tw>

Notes:

Hardware Version: 2.0

Copyright©Netvox Technology Co., Ltd.

This document contains proprietary technical information which is the property of NETVOX Technology and is issued in strict confidential and shall not be disclosed to others parties in whole or in parts without written permission of NETVOX Technology.

The specifications are subjected to change without prior notice.

Introduction

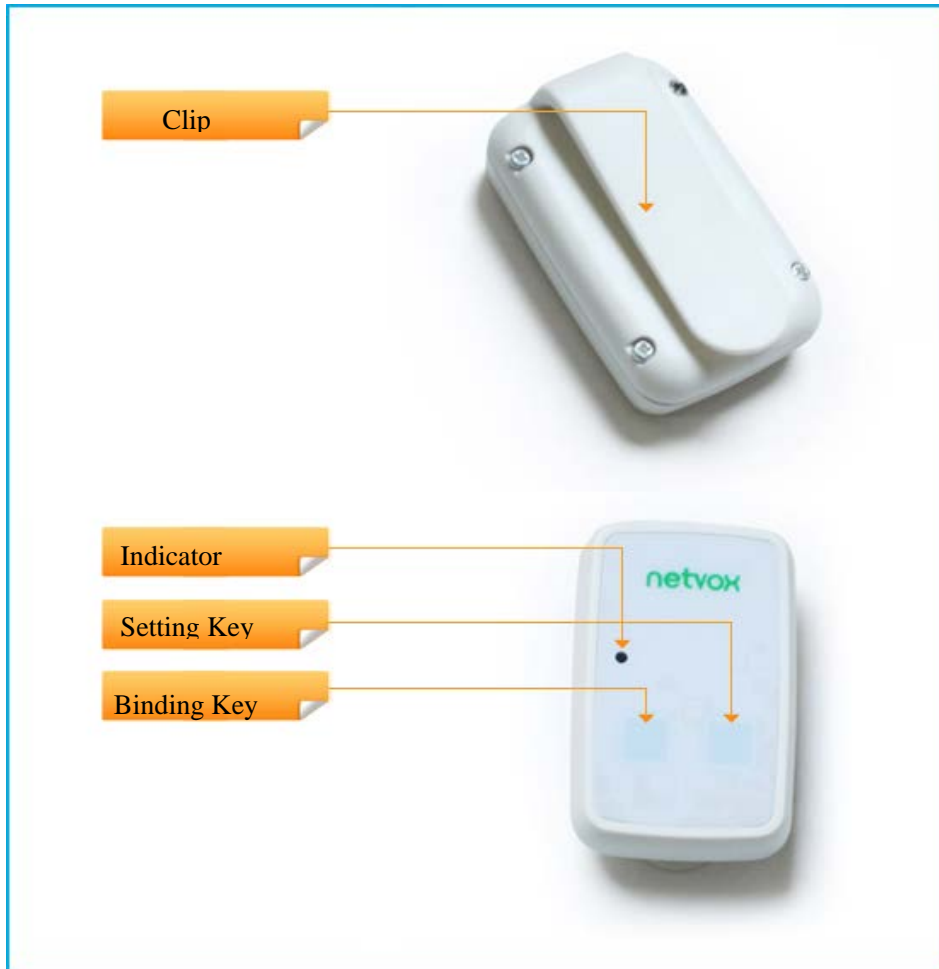


Fig.1 Z307 Appearance

Z307 is ZigBee enabled fall sensor and emergency button. It can be worn on waist to detect fall on an elderly people and young children. When fall is detected, it sends alarm message to a pre-registered security system (CIE). This CIE would then instruct other devices in the network to sound or silent alarm with light strobe.

Z307 acts as an end-device in the network which does not perform permit-join other devices to join into the network as a coordinator or a router does.

Main Feature

- Complies with ZigBee Pro™ protocol specification
- 2.4GHz ISM band, a total of 16 channels
- 3.7V rechargeable lithium-ion battery
- Wireless induction charging method
- Operating voltage range: DC + 3.5V ~ + 4.2V
- Wireless communication distance of 200 meters linear distance in open field
- High-sensitivity 3-axis acceleration value output
- Can be applied to the detection of object movement, patient care and so on.

Electric Parameters

Input power	rechargeable lithium-ion battery (250mAh/3.7V)
Working power	DC+3.5V ~ +4.2V
Recharging method	4.2V constant voltage charging, current <50mA, charging time of about 5h.
Current after charging	5mA
Standby current	12uA/3.7V
Working current (max)	80mA/3.7V

Frequency Parameters

Frequency range	2.4~2.4835 GHz
Channel number	16 (ISM 11 th ~26 th channels)
TX power	7dBm
Rx sensitivity	-101dBm
Antenna type	Build-in antenna
Communication range	200M (linear distance in open field)
Data transfer rate	250Kbps
Spread Method	DSSS (O-QPSK)

Physical Parameters

Sensor Dimension	46.3mm x 39.5mm x 14.4mm
Working Temp.	-10°C — 50°C
Storage Temp.	-40°C — 85°C
Humidity	<95%RH
IP level	IP66