KERNELSPHERE

SMART DOOR/WINDOW MONITORING



SMART DOOR/WINDOW MONITORING

Data Sheet



Device Features

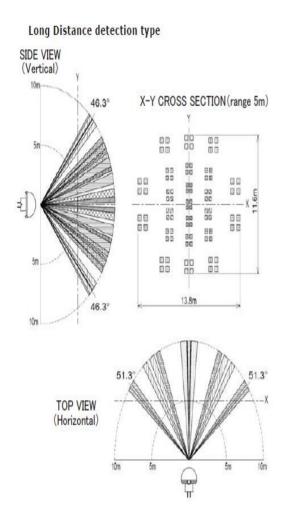
- PIR-based motion detector to sense movement of intrusion at vulnerable areas
- Detects up to 10 meters range
- Gives Alarms and notifications via SMS and Email to the registered users
- Live data monitor on web
- Historical analysis and Data management
- Map of sensors
- User control profiles
- Responsive user interface

KernelSphere' Smart Door/Window monitoring is a Low Power long-range wireless radio frequency technology (LoRaWAN) based device. This highly secured data transmission technology required for Internet of Things (IoT) applications enables real-time communication of data and analytics that can be utilized to enhance efficiency and productivity.

The device is designed with Panasonic's Passive Infrared (PIR) Sensor for detecting human presence. Once the sensor detects any human movement, the device communicates with the LoRa Gateway using the standard LoRaWAN protocol and the data is transmitted to the network server. The web application processes this data and takes appropriate action like sending SMS, E-Mail and alerts to the registered users.

Applications

- **Door Monitoring**
- **Perimeter Monitoring**
- **Security Monitoring**
- Window Monitoring
- Anti-crime Devices



Technical Specifications

Modulation	IEEE 802.15.4g
Wireless Frequency	EU 863~870 MHz / US 902~928 MHz /
Band	India 865~867 MHz / AS 923 MHz
LoRa Solution	Semtech SX-1276
Receive Sensitivity	Typ136dBm @BW=125KHz with SF=10
Transmit Power	20dBm
Number of	Configurable 64 channels (SKU-US)
Channels	Configurable 8 channels (SKU-EU)
	Configurable 3 channels (SKU-IND)
Security	AES128
Operating Voltage	2.2 V DC ~ 3.7 V DC
Operation	Battery Powered / AC Powered
Antenna Type	Internal / External
Sensor Type	Passive Infrared Motion Sensor
Current	1uA
Consumption	
Detection Range	Horizontal: 102 degree (+/- 51 degree)
	Vertical: 92 degree (+/- 46 degree)
Operation	-20°C to 70°C
Temperature	
Protection	IP65
Requirements	

About KernelSphere

Today's dynamic world demands businesses to respond quickly through realizing automation in the end-to-end procedure. IoT technology is transforming the way we connect to the devices automatically. Service providers must adopt scalable, flexible and agile models to tap the client's requirements and expectations. KernelSphere Technologies Pvt Ltd has responded to this market trend and developing robust and innovative smart city products for its customers.

Driven by over decade of industry experience, highly skilled technicians and wide geographical presence, we are continuously expanding our business worldwide and giving stiff competition to other IoT product manufacturers. We supply our products for various business verticals.

For more information about the KernelSphere solution email us at iot@kernelsphere.com

