

INTRUSION

SENSOR

RPS1M



■ MAIN PURPOSE

Intrusion Sensor-RPS1M can be used to detect whether a door, window, gate, hatch or any another premises is opened or closed using a magnetic detection mechanism.

■ PRINCIPLE OF OPERATION

RPS1M is a magnetic contact sensor that use new disruptive LoRa long range technology. It transmit information and data to the server depending on existing condition (open/close), and/or pre-configured algorithm. It is low battery consumption device is long lasting which ensures optimum usage. Thanks to small sizes, it can be installed everywhere and will occupy a minimum space. The transmission is direct to a central server via LoRaWAN network infrastructure that can be programmed to trigger an alarm system. Thanks to innovation, this wireless sensor is more reliable and precise and can used at different applications.

MAIN FEATURES

1. Open/Close alarm event
2. Open/Close heartbeat status
3. Environmental temperature status
4. Battery voltage status
5. Event archive (future)
6. Wireless range up to 10 km*
7. LoRaWANTM Class A compatible
8. Improved interference immunity
9. Improved power management for longer battery life
10. Encrypt-RF™ Security (Diffie-Hellman Key Exchange + AES-128 CBC for sensor data messages)
11. Battery Life: up to 10 years**

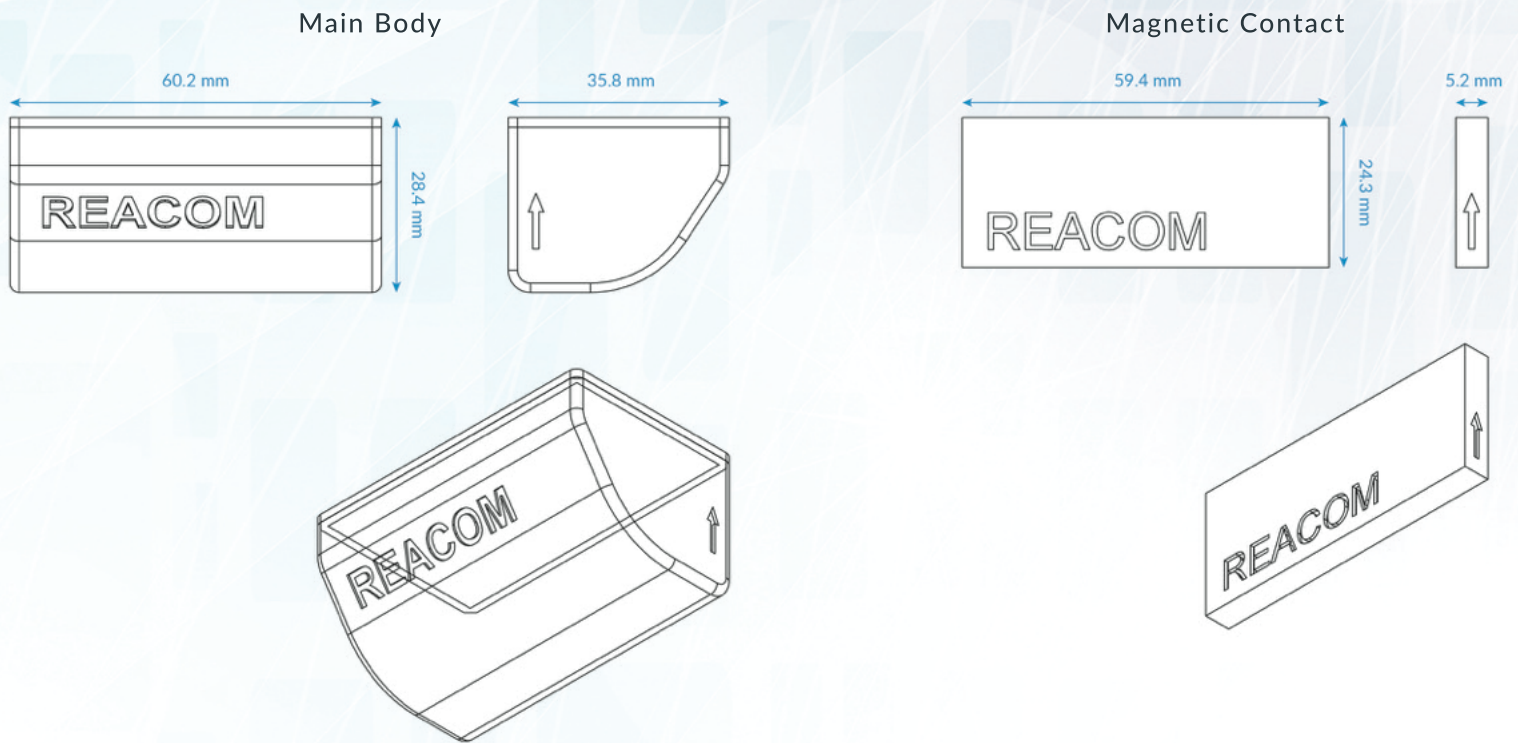
EXAMPLE OF APPLICATIONS

1. Residential and Commercial door, window, gates access
2. Bank's owned closure properties access monitoring
3. IT server rooms and closets
4. Freezer and cooler doors
5. Shipping cargo bay door monitoring
6. Garage door monitoring
7. Restricted area monitoring

*Conditions: no obstacles, direct line-of-sight conditions

**Conditions: temperature ~25° C, 20 triggers/day, txpower=13 dBm, LoRa spreading factor SF=10

Sensor can be produced and may be preconfigured with loaded by Reacom's software, that is user friendly, and can be easily integrated to any Third-Party online monitoring and notification System to view data, set alerts, etc.***



TECHNICAL SPECIFICATIONS

ELECTRIC

Input Power.....	1x3.6V Li-SOCl 2 battery
Working Voltage.....	DC 2.4V~3.6V
Standby Current.....	4uA/3.0V
Transmitting Current (max)....	33 mA / 3.0V / 13 dBm
Receiving Current (max).....	15 mA / 3.0V
Low Voltage Threshold	2.4V
Battery Voltage	
Measurement Accuracy.....	± 0.1V

FREQUENCY

TX Power.....	13 dBm ± 1d Bm
Rx Sensitivity.....	-133 dBm
	(LoRa, Spreading Factor=7-12)
	Bit Rate=5470-293 bps)
Antenna Type.....	Build-in antenna
Data Transfer Rate.....	0.3 kbps~50 kbps

PHYSICAL

Main Body Dimension.....	60x36x29mm
Magnet Dimension.....	59x24.3x5.2mm
Weight.....	43.8 g
Operating Temperature.....	-20° C ~ 55° C
Environment Humidity Range....	<90% RH (No condensation)
Storage Temperature.....	-40° C ~ 85° C

Communication Range.....	10 km (line-of-sight, the actual transmission distance depends on the environment)
Spread Technique.....	LoRa/FSK
Available Frequency.....	EU863-870
	Other regional bands can be configured before shipment

***Optional