



packetMOTION

The **packetMOTION Sensor** is a device used to detect motion, particularly that of people, using doppler radar microwave technology. With this device, users can identify which locations have presence of people, and know whether an area is occupied or not.

The device is useful for security operations as it sends alerts if a motion is detected in restricted areas or when movement is detected at a specific time when no person should be in the area. It can also be interfaced with other devices and equipment that should only operate if there are no people in the room, or alternatively, if there are people in the room.

When motion is detected, the **packetMOTION Sensor** will inform users of the detection by sending an alarm to the user via LoRaWAN®. The alarm will be received through a dashboard, and possibly other alarms such as text and email. The information can then be used to integrate with the previously described equipment.

Features

- Doppler Radar Microwave Motion Detection
 - Detection Range of 7 meters
 - Trigger Time of 2 seconds
- Various Alarms
 - Dashboard
 - Customizable Alarms (*Text, Email, etc.*)
- Large Variety of Applications
 - Security
 - Integration with other devices
- LoRaWAN® compatible
- Optimized as IoT end-node

Applications

- Security
- IoT Systems

Technical Specification

LoRa

Device	S76S
Integrated MCU	STM32L073xZ
Integrated RF IC	SX1276
Frequency	868Mhz
Antenna	Internal
Range	Up to 15k
RF Power	+25dBm

Doppler Radar Microwave Motion Sensor

Model	RCWL-0516
Detection Range	7 meters
Trigger Time	2 seconds
Transmitted Frequency	3.181GHz

Electrical Characteristics

Power Source	Wall Adapter
Operating Current	< 3mA

Physical

Operating Temperature	-20°C to +70°C
Storage Temperature	-40°C to +105°C
Protection Grade	IP68 (<i>enclosure only</i>)
Dimension	LoRa Device: 62 x 110 x 33 mm
Setup	Can be: Adhesive, Wall-mounted