# PSM02-1/-2/-3/-4 4 in 1 Multi-Sensor

#### **Z-Wave series**

SPEAKS 굳



Patented product

#### Features

- (1)Door/window (2)PIR (3)illumination and (4)temperature functions in one sensor
- Adopt newest Z-wave 400 series chip, support multichannel operation and higher data rate (9.6/40/100kbps)
- Higher output power (+2.5dBm output power as compared to -2.5dBm 300 series Z-wave module) to enhance the communication range
- 1500mA CR123A lithium battery to guarantee 2 year battery life
- Built in light sensor while applied to light control
- Adopt Z-Wave protocol to secure the success of wireless two way communication
- With Tamper proof protection
- Easy install
- Low battery indication
- Z-Wave V6.02
- Z-Wave Certificated No PSM02-1 ZC08-13050003
- Auto report the open/close status and battery status
- FCC part15.249 / EN300 220-1/ certification
- NCC

#### Introduction

The 4 in 1 multi-sensor is designed to meet the requirement of

integrate 4 sensors into one housing, the 4 kind of sensors are (1)Door/window (2)PIR (3)illumination and (4)temperature

The detector can be used as a security device or home automation device. When the detector is cooperated with security appliances, the (1) Door/window or (2) PIR sensor act as an alarm detector. Alternatively, when the detector is worked with Z-Wave controller, the detector can be set to perform the role of home automation device by detecting both changes in PIR motion detect or door/window open close signal with percentage of illumination lux levels.

One home automation scenario is, once night falls, the percentage of ambient illumination is lower than preset value. If a person moves within or across the devices field of vision, a trigger radio signal will be transmitted so as to turn connected lightings for better illumination. Another scenario is to combine (1) Door/window (2) PIR (3) illumination sensors to recognize people is coming in or going out and turn the light on/off automatically.

The temperature sensor can detect the environment temperature so as to adjust heater or cooler to achieve preset temperature or detect the abnormal environment temperature (like freeze sensor or fire sensor) to send the warning message

Power	Operating Voltage	3V CR123A
	Standby current	48 uA
	Operating current	37mA
	Low battery voltage	2.6V
RF	Frequency -1/-2/-3/-4	868.42 (EU) / 908.42(USA) / 922.5/923.9/926.3(Taiwan/JP)
		/ 921.42(AU) MHz
	Regulation	FCC part15.249 / EN300 220-1
	Distance	min. 40m indoor min. 100m outdoor
Mechanical	Weight	52 g
	Dimension (W x H x D)	Detector 28 X 96 X 23 mm
		Magnet. 10 X 50 X 12 mm
Battery	CR123A	1500mAh
	Battery life	> 2 years
Environment	Operation Temperature	Normal environment temperature -10~ 40° C to have
		better PIR and battery performance
	Humidity	85%RH max
Temperature	Detect range	-10 ~ 70° C
Illumination	Range	0 ~ 500 lx
PIR detection	Horizontal	0° 8~10m
angle		90° 6~8m
Hardware	Magnetic gap(Open→Close)	28 mm
	Magnetic gap(Close→Open)	30 mm

#### Specification



unit:mm

## Dimension



### **Application:**

PSM02 is a special device combining both PIR and Door/window functions.

The benefits of combining Door/window with PIR in one sensor can be observed in the following scenarios:



A. The ambient lighting would be lower than default setting value after sunset. If the PSM02 was installed on the inner side of door in the house, PSM02 would detect coming in people, then the light would be turned on for the better illumination by radio transmission. Furthermore, PSM02 can be applied in a bathroom and it may turn on/off light and fan automatically.

B.PSM02 can be taken as a portal chime at front desk of hotel or restaurant by sending out signal to IP-Gateway PSC01 as reminder which can be connected with speaker to turn the volume up. It can be kept silent when customer leaving.





#### PSM02-1/-2/-3/-4

C.For SMEs (**Small and medium enterprises**), PSM02 plays an important role in working hours and non-working hours. When non-working hours, PSM02 plays as security motion sensor, protects the office from intruders. At working hours, PSM02, 4 in 1 sensor, can be applied to curtain or heater/cooler controller for energy saving issue; although some people may use thermostat to control heater/cooler however, PSM02 sensor can be smarter choice. Since it can detect the people's, activities, and shutdown machine when no one exists or no movements.



D. In the past, a digital home starter KIT includes many different sensors with very high price. Right now, Using the 4 in 1 patented sensor and a 4 in 1 gateway PSC01 (Siren + speaker + light + IP based controller) carry out home "security" + "safety" + "automation" in one box and provide customer full experience of digital life and flexibility in installation with affordable price.





# **Application:**

Home Security Home Automation Philio Technology Corporation www.philio-tech.com



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