



## Features:

Particularly designed for high security application, A6 adopts the displacement identification technology and full range anti-mask technology. Hidden-installation keeps the intruder unknown the installation site. This can prevent intentional damage to the sensor; and it greatly enhances the anti-burglar performance of system. This professional design can be used in high security applications such as museums, exchequers, archives etc.

- The patented Dual Microwave with MRD displacement identification technology: Adopts cutting-edge Phased Array Radar technology to analyze and recognize the shape and relative displacement speed of any intruding objects. It can accurately recognize the differences between the moving human body and the interferential objects such as swaying plants, swaying wet clothes etc., thus to prevent false alarms.
- The original MRD-PLUS technology: the change of the ambient temperature will not affect the detection range at all
- The original 100% hidden-installation: The sensor can be completely hidden behind the picture or anything but metal, suitable for the highest level of security applications such as museums, exchequers, archives etc.
- Full range anti-mask (FAMS) technology: the detection performance won't be affected by any following conditions:
  - 1. Spray any material on the surface of sensor
  - 2. Mask the sensor by any thing
  - 3. Mask the intruder 100% with any materials within the detection area
- Adjustable detection sensitivity
- Digital temperature compensation: Can auto adjust detector to ensure effective detection range and stable frequency
- Self-adaptive circuit: The built-in high performance industrial-grade microprocessor can analyze the surrounding environment on the startup of the motion sensor, then optimize and adjust the operational parameter to ensure a reliable, stable and effective detection
- White light immunity: Free from any light
- PhotoMos relay
- Five mounting methods: Include 86 mounting with bottom shell
- Optional bracket: SMB20, SMB30

## **Certificates:**

■ CE, CCC









## Specifications:

■ Detection mode: MRD-Plus Dual-microwave system + Active Infrared detection technology

■ MRD Anti-false alarm index\*: >95% (tested in Toparm lab, simulating all kinds of harsh environment, traditional dual-tech sensors <4%)

■ Microwave frequency: 10.525GHz, 10325GHz, compliant with FCC standard

■ Detection sensitivity: 1m ~ 15m adjustable

Detection Range: 15m × 15mAnti-mask range: 0 ~ 15m

■ Working temperature: -25°C ~ +55°C

■ Relative humidity: 5% ~ 95% (non-condensing)

Auto temperature compensation: Digital temperature compensation

■ Power supply: 9.5V ~ 15V/DC/18mA

Alarm output: PhotoMos relay NC contacts, 35V/DC/150mA/MAX

■ Tamper output: NC contacts, 60V/AC/500mA

■ Response speed: 0.2m/s ~ 2m/s

White light immunity: Free from any light
RF immunity: 52V/m, 10MHz ~ 1,000MHz

■ Dimensions:  $86 \times 86 \times 28$ mm

■ Weight: 150g

## MRD technology sensor Vs. Traditional dual tech sensors

	<b>A</b> 6	Traditional PIR & Microwave sensors
Anti-false alarm index*	≥95%	<4%
Identify human and object	Yes	No
Hidden installation	Yes	No
Anti-mask function	Yes (0 ~ 15m)	No or ≤ 20cm (if with this function)
Temperature interference	Not affected (within working temperature range)	Affected, $< -10^{\circ}$ C or $32^{\circ}$ C $\sim 36^{\circ}$ C
White light immunity	Free from any light	<10,000 lux
Alarm response speed	Quick	Slow
Rated current	14mA	More than 25mA
Routine maintenance	No need	Need
Price	Same as other sensors or even lower	

<sup>\*</sup>Anti-false alarm index (Tested in Toparm lab, which is specially for MRD\* Dual-Microwave sensors): 95% is the index of anti-false alarm capability of the MRD sensor under the environment which easily causes false alarms, such as direct sunlight, oblique sunlight, swaying branches, 1 mm  $\sim 100$  mm/h of rainfall and the wind at speed of  $0 \sim 40$  km/h. (Tested under the same conditions, the Anti-false alarm index of the traditional dual-tech sensors is <4%).