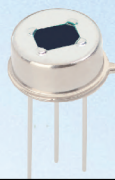


## PIR Sensors (Body Induction Sensors)

### Analog: RD Series

- Good anti-interference
- High signal-to-noise ratio
- Production 200,000 pcs/day



Window size	Optional (3×4mm, 3.8×5mm)
Output signal	analog
Sensitive elements	2×1mm, dual elements
Standard encapsulation	TO-5, 3 pins
Working voltage	3-15V
Sensitivity	≥3200V/W
Sensing distance	depends on lens

### RPTD/RDA series

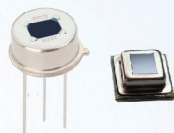
- Digital TTL signal output
- Wide voltage power supply (2.2~5V)
- Good anti-interference/anti-visible light ability



Window size	Optional (3×4mm, 3.8×5mm, 4.9×4.9mm)
Output signal	digital
Sensitive elements	Optional (dual elements, quad elements)
Pins	Optional (3, 4, 6 pins)
Working voltage	2.2-5V
Function	Sensitivity, LDR and delay time can be adjustable.
Sensing distance	depends on lens

### Semi-digital: RPTD624-3-X, RPTD-627-4-X-F

- 16-bit digital output
- Smart sensor, easy to adjust
- High sensitivity and superior signal-to-noise ratio



Window size	3×4 mm; 3×3.4mm
Output signal	16-bit digital
Working Voltage	2.5-5.5V
Current	8.0uA
Sensitive elements	2×1mm, dual elements
Standard encapsulation	TO-5, 3 pins (VDD, REL, VSS); SMD
Application	Security product, Smart home, IOT terminals

### PIR Module: ZRD09

- Automatic Induction
- Photo-resistor control(optional, not set at factory)
- Two trigger modes: L, non-repeatable trigger; H, repeatable trigger



Working voltage	5-20V DC
Static current	<65μA, @5V
Level output	High Level, 3V; Low Level, 0V
Trigger mode	Repeatable/Unrepeatable
Delay time	3-300S (adjustable)
Blocking time	Default 4s
Detection angle and distance	Depend on the Lens

## Thermopile Temperature Sensors

### Analog: MRT311S/MRT313

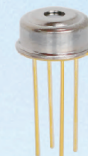
- TO-46/TO-39 metal package
- High sensitivity
- High precision NTC



Sensitive area of thermopile	1.1×1.1mm ; 1×1mm
Field of view	95 Degree; 60 Degree
Output signal	analog
Noise voltage	38 nV/Hz <sup>1/2</sup>
Noise equivalent power	0.23 nW/Hz <sup>1/2</sup> @500K, 1Hz, 25°C
Response rate	160±40 V/W; 110±30V/W @500K, 1Hz, 25°C
Temperature coefficient of resistance	0.06 %/C @25°C-75°C

### Digital: MRTD3011

- TO-39 metal package
- Full integrated digital infrared thermopile
- I2C output with internal temperature compensation



Sensitive area of thermopile	0.7×0.7mm
Field of view	54 Degree
Working Voltage	2.6-5.5V
Working temperature	-20 to 85°C
Temperature measurement range	-20 to 250°C
Temperature measurement accuracy	±1°C for below 100°C range; ±2% for over 100°C
Filter wavelength range	5.5-14um

### Digital: RTT Series



Model	RTT-D7211-A1	RTT-D7211-B	RTT-D7211-C
Recommended test distance	10cm	20cm	35cm
Field of view (50% signal)	33°	13°	5°
Description	Configure aluminum sleeve	Silicon lens	Silicon lens
Typical application case	Battery pack temperature measurement Hair dryer Constant temperature milk box	Oven Micro-wave oven	High voltage terminal Intelligent electric control box Industrial process

