

Digital PIR Motion Sensor**SE0105**

- **Small form factor**
- **3.3–15V power rating**
- **5m max. range depending on circumstances**
- **Inbuilt Fresnel Lens with 110° detecting angle**
- **Low current drain (<1mA)**
- **Preset delay and sensitivity**



Manufacturer's Code: SB00422A-1

Description

The Digital PIR Sensor is a passive infrared motion detector, perfect for home automation. This module comes with preset sensitivity and high/low delay which makes it perfect for plug n' play-style home automation.

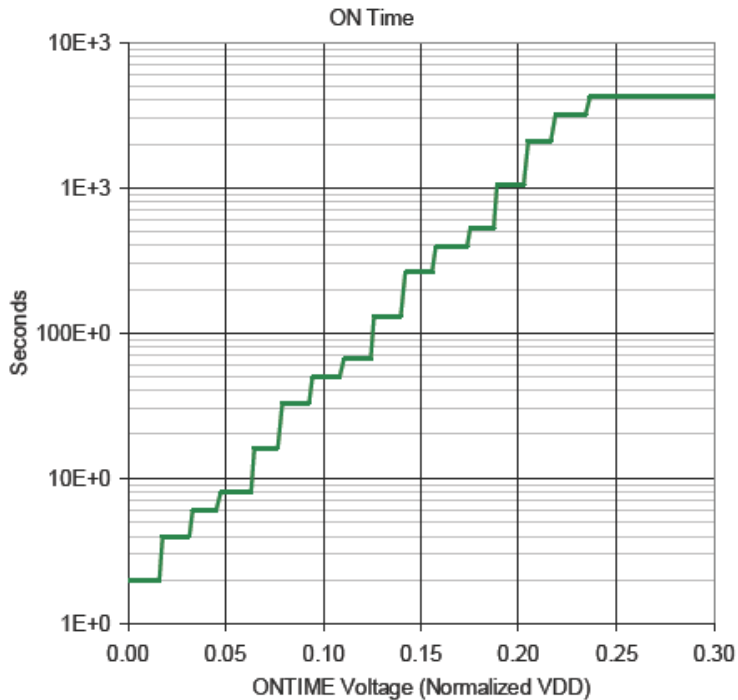
Some of the fun projects it can be used for include:

- Turning a light on when someone enters a room
- An automatic doorbell
- An automated cat flap.

The inbuilt Fresnel lens gives the sensor a max range of 5m, depending on the circumstances of use, as well as a 110° range of vision.

Specifications

Dimensions	18 x 10mm
Supply Current	DC3.3V–15V
Current Drain	<1mA
Voltage Output	Signal high: 3V; Standby output: 0V
TTL Output	Can be directly connected to microcontroller or logic device
Delay time	2s–70 min. (adjustable)
Operating Temperature	-20°C to +60°C
Infrared Sensor	Dual element, low noise, high sensitivity
Detecting Range	3–5m
Detecting Angle	110°
Lens Diameter	13.5mm



Graph 2: REL Output On Time in seconds vs. ONTIME pin voltages normalized to VDD.

Note: Due to the high sensitivity of the PIR sensor device, it is not recommended to use the module in the following or similar conditions:

- A)** rapid environmental changes
- B)** strong shocks or vibrations
- C)** in a place where there is obstructing material (eg. glass) through which IR cannot pass within detection area.
- D)** exposed to direct sunlight
- E)** exposed to direct wind, e.g. from a heater or air conditioner