**PIR (Passive Infrared) sensor**

The **passive infrared sensor** (**PIR sensor**) is an electronic [sensor](https://en.wikipedia.org/wiki/Sensor) that measures [infrared](https://en.wikipedia.org/wiki/Infrared) (IR) light radiating from objects in its field of view. They are most often used in PIR-based motion detectors.

All objects with a temperature above [absolute zero](https://en.wikipedia.org/wiki/Absolute_zero) emit [heat](https://en.wikipedia.org/wiki/Heat) energy in the form of radiation. Usually this radiation isn't visible to the [human eye](https://en.wikipedia.org/wiki/Human_eye) because it radiates at infrared wavelengths, but it can be detected by electronic devices designed for such a purpose.

The term *passive* in this instance refers to the fact that PIR devices do not generate or radiate energy for detection purposes. They work entirely by detecting infrared radiation emitted by or reflected from objects.

 