

SparkFun PIR Breakout - 1 μ A (EKMB1107112)



Passive Infrared (PIR) sensors are great for detecting motion in a small area around the sensor. The 1 μ A SparkFun EKMB1107112 PIR Breakout is a simple breakout equipped with an EKM-series PIR sensor from Panasonic[®]. The EKM-series PIR sensors are optimized for small movements to offer motion-sensing options for battery powered applications due to the very low standby current consumption (1 μ A).

PIR sensors do not return specific distance data but instead monitor for IR light coming from objects in their field of view and will activate their signal when motion is detected in their sensing area, making them perfect for applications such as turning devices on automatically when motion is detected. Applications include home and building automation for energy saving, automated on/off lighting control, security, appliances, and IoT.

Panasonic's low-profile PIR motion sensors (10.9mm versus standard 14.4mm height offer space savings for constrained designs) consist of a lens to create various detection zones, an optical filter to block non-infrared light, pyroelectric sensing elements, electromagnetic shielding to all circuitry, and an impedance converter to get an electrical signal. This PIR sensor offers digital output across 32 zones at 5m detection distance with 90° x 90° detection area.

Note: The sensitivity of passive infrared sensors is influenced by environmental conditions, so a performance evaluation test under representative conditions is recommended.

[Get Started with the SparkFun PIR Breakout Guide](#)