

SL116B Motion Detecting Module With Screw

Overview

This auto-control product SL116A is based on the infrared line technology, with high sensitivity, reliability and ultra low-power working mode. It is widely used in all kinds of auto-detecting electrical equipment, particularly dry battery supplied products.

Features

- Full-automatic Sensing: When people enter into the PIR detection range, the module will drive the MOS tube. The driving current load can be less than 1A.
- Built-in Processing Chip: The module has a built-in analog-digital processing IC. The IC works with the PIR sensor, shielding RFI in the shell. It makes the product more steady.
- Built-in Analog-digital Chip: The module has a 16 bit ADC, which converts the digital signal generated by sensitive element into analog signal. And the special filter will efficiently filter all kinds of low and high frequency noise interference.
- Triggering: When the value of infrared signal detected by PIR sensor exceed the internal triggering threshold, an impulse will be generated, causing the internal chip record this signal. If the triggering signals are received continuously, the module will output high-level until the last effective triggering finish the delay time.
- Sensing Blocking Time(Default: 2.5s): The module can set a blocking time period after every output. During this period, the sensor will refuse any kind of sensing signal. The interval work between sensing output time and blocking time can be used to interval detecting products. Meanwhile, this function will effectively restrict the interference in the process of load switching.
- Optional Working Voltage: DC4-18V.
- Micro-power Consumption: When DC=3V, Quiescent current $\leq 20\mu\text{A}$.
- Long Detecting Range: 8m.
- Convenient Installation: Lens with screw and waterproof rubber ring are directly stabilised by nut.

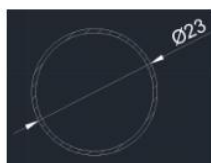
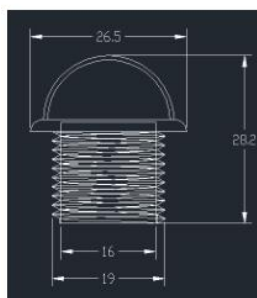
Applications

- Human sensing lamps and lanterns
- Human detecting toys
- Security product
- Auto-sensing electric devices
- Industrial automatic control
- Battery supply auto-control products

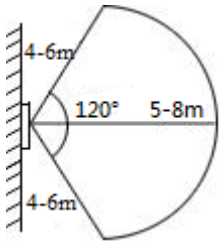
Technical Parameters

Operating Voltage	DC4-18V
Quiescent Current	≤20uA (Typical 15uA) when 3V
Voltage Output	4V-18V, ≤180mA load
Triggering Method	Repeatable triggering mode (Default)
Delay Time	Default 5s, 4-4800s adjustable
Blocking Time	Default 2.5s
PCB Dimension	15mm
Sensing Angle	<120° taper angle (Depends on lens)
Sensing Range	8m
Working Temperature	From -20° to +50°
Screw Thread Dimension	Φ 16mm / Φ 26.5mm

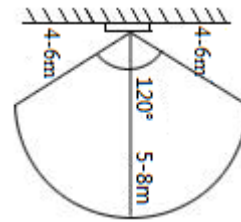
Physical Dimension



Sensing range



Wall mount



Ceiling mount

Wiring Diagram



The red wire is VCC, the black wire is OUT and the yellow wire is GND. The specification and color can be customized.

Attention

■ There is an initialization time about 10 seconds after charging the module. During this period, this module will alternately output 0-3 times. Then it starts the normal standby status.

■ To avoid receiving interference signal to generate malfunction, please don't expose the lens directly to the light or other interferences while installing. Try to avoid floating wind in the operating environment, since it will interfere the device.

■ Please notice the right direction and angle while installing. Try to parallel the square window of the module to the direction with the most human activities to reach the best sensing effect.

■ The sensing range will be shorter when the environment increases to human surface temperature (30~32°C). It's a normal outcome of temperature influence.