DVS PIR Sensor

Overview

The Digital Video Systems PIR sensor is a low voltage infra-red sensor designed for detecting thermal movement. It can be powered by as little as 3 volts and is ideal for digital signage applications.

The trigger is active low, and so is held high (at source voltage) until the sensor triggers. The unit can also be connected to a BrightSign directly, without need of additional power. The BrightSign version of the sensor comes with a 6-pin phoenix connector to plug into a BrightSign GPIO port.

Features

- Detect a person up to approximately 4.5 meters away
- Source current up to 12 mA @ 3 V, 23 mA @ 5 V
- Onboard LEDs light up the lens for fast visual feedback when movement is detected

Key Specifications

- Power Requirements: 3 to 6 VDC; 130µA idle, 3 mA active (no load)
- Communication: Single bit high/low output
- Operating temperature: 0 to 50 °C (32 to 122 °F)

Calibration

The PIR Sensor requires a warm-up time in order to function properly. This is due to the settling time involved in “learning” its environment. This could be up to 40 seconds. During this time, the LEDs under the lens will be on and there should be as little motion as possible in the sensors field of view.

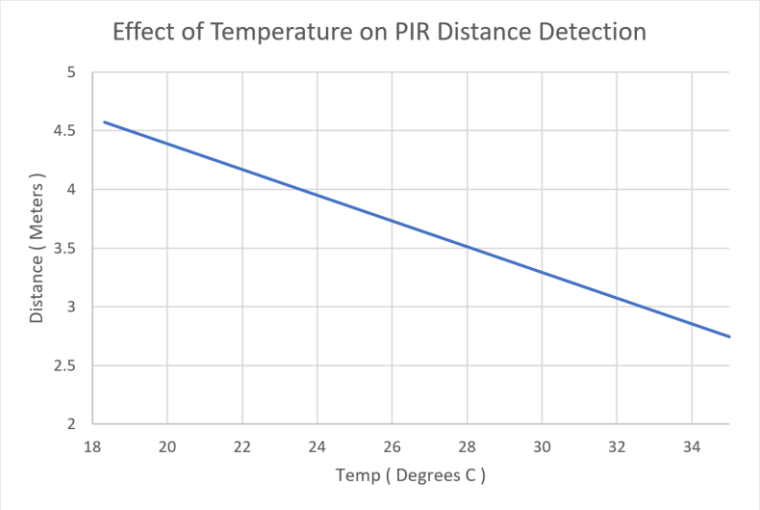
35 Church Street, Weybridge, Surrey, KT138DG T:+44(0)1932 84 64 84 E:info@dvsgroup.com

Range

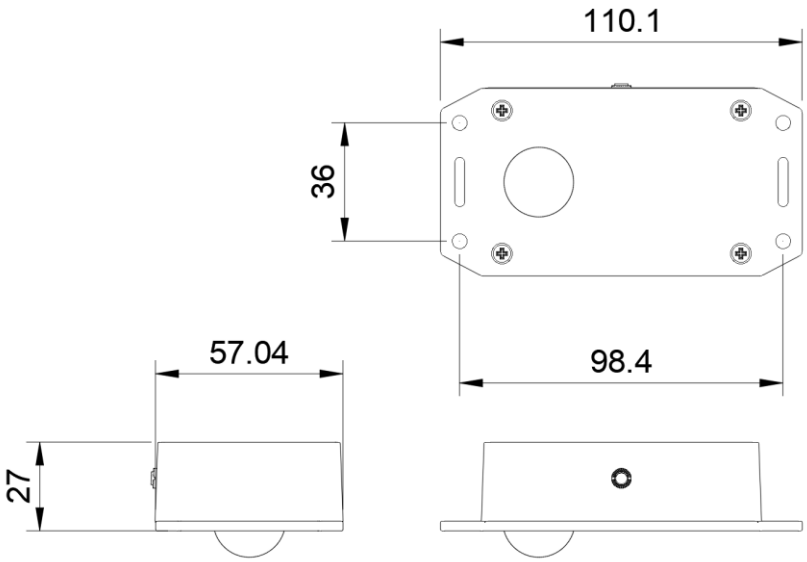
The PIR Sensor's range is affected by:

- The size and thermal properties of nearby objects
- Environmental conditions including ambient temperature and light sources

The graph below depicts the approximate effects of known temperatures on the PIR Sensor's detection range of an adult. *Note: This device is designed for indoor use. Operation outside or in extreme temperatures may negatively affect stability. Direct exposure to sunlight or other forms of radiant heating may cause undesired operation.*



Dimensions



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