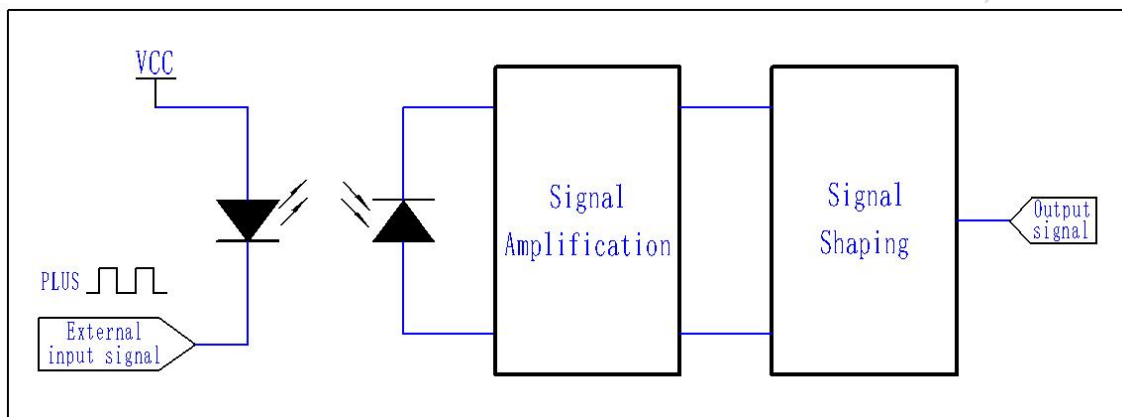# Analog proximity sensor

Introduction

Analog proximity sensor customers can input signals through MCU pins, And receives its feedback output signal. It can be meet the application requirements and use scenarios for different customers. This product integrates infrared receiver and transmitter, It has strong anti-photoelectric interference ability, stable and reliable performance and small size.

This product is suitable for detecting static obstacles (or moving obstacles). such as table lamp switch and light and dark control,switch control of various household appliances, backlight control of display screen, Intelligent lock,intelligent bathroom, toys, obstacle avoidance of robots, counting of people/vehicles, counting of assembly line products, monitoring of object proximity, and other induction control scenarios.

The induction distance and overall dimensions of this product can be customized according to customer requirements.

Functional Block Diagram

Model Naming Rules

HEG-PS-XX-X-XX

→ Product serial number
→ A:analog;D:digtal
→ Sensing distance: e.g. "10" stands for 10cm
→ Proximity sensor
→ Company name:Harbin HEG Technology Development Co., Ltd

Product Features

1、Volume：22.15mm×20.5mm×6.15mm;(Customizable)

2、Sensing distance:2-10cm;(Customizable)

3、Light immunity: strong immunity to ambient light.

Product Appearance Picture

HEG-PS-XX-A-01

Main Technical Parameters of Products

Main Parameter	Numerical Value	Unit	Remarks
Operating Voltage (DC)	3.0-5.5	V	Recommend: VDD=3.3V-5.0V
Infrared Wavelength	940	nm	IF=20mA
Signal Output Mode	GPIO	/	During standby: the pin signal is high level VDD; When triggered: the pin signal is changed from high level VDD Change to low level signal 0V
Outline Dimension	L*W*H 22.15*20.5*6.15	mm	/
Port	4P*1.0	mm	4P Horizontal SMT socket
Inductive Distance	d=2-10	cm	Customizable

Test Method
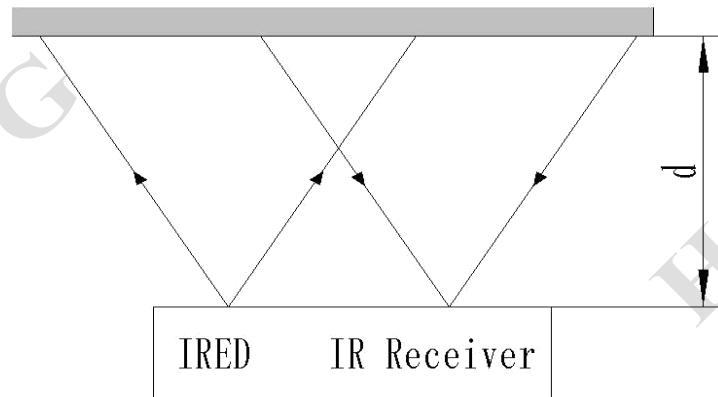
HEG-PS-XX-A-01

Instructions for Product Use

The interface socket of this module contains four pins: "G","I", "O"and"V".
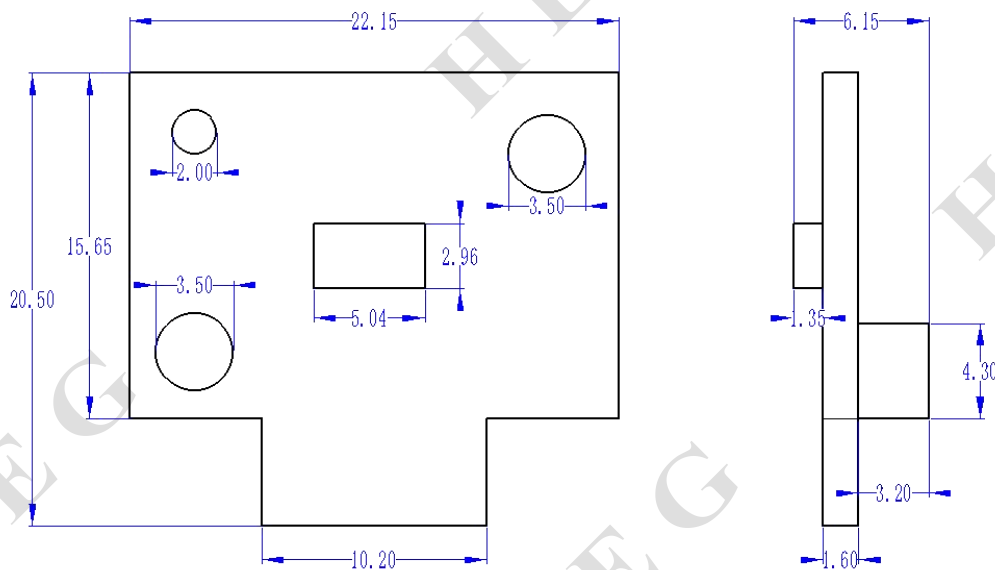
"G": GND,Negative pole of DC power supply;

"I":IR_TX,External input signal pin,the input signal is an AC pulse signa,and the recommended pulse width:$100\pm50\mu s$.

"O": OUT,An output signal pin, when the product detects the obstruction, the signal of the pin changes from a high level to a low level signal, and whether the obstruction exists is judged by detecting the level signal transformation;

"V": VCC,The DC power supply is connected to the positive pole, with 3.0-5.5V;

Note: Do not connect the positive pole and negative pole upside down to avoid burning the module.

Overall Dimension Drawing (unit: mm)

HEG-PS-XX-A-01