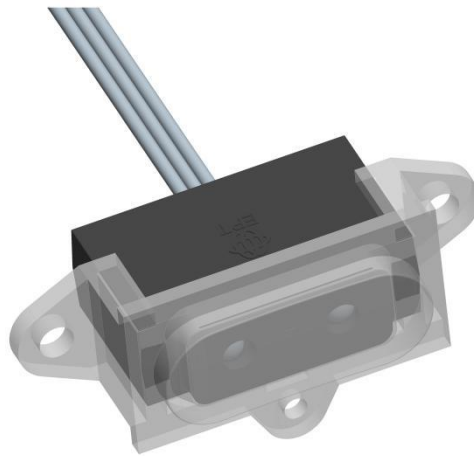


深圳市能點科技有限公司

SHENZHEN EPT TECHNOLOGY CO., LTD.

規格書
SPECIFICATION



PS-IR16D

紅外接近傳感器

Infrared proximity sensor

版本/Version : **A**

日期/Date : **2020.09.11**

www.eptsz.com

www.eptsensor.com

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本規格書為相應產品作業之標準，在客戶確認後，會作為生產、供貨的依據。如有特殊要求，可告知联系你的市场部人员，并出具承认书。

This specification is the standard for the operation of the corresponding products. It will be used as the basis for production and supply after confirmation by the customer. If you have special requirements, please contact our sales and issue an acknowledgement.

2. 應用領域/Application

自動洗手機 Automatic Hand Sanitizer Dispenser
 智能水龍頭 Smart faucet
 需要檢測物體是否接近於設備及家用電器
 Devices and household appliances that need to detect whether objects
 is in the sensing range.

3. 產品特徵/Product features

無機械部件，電子式控制，穩定性強
 No mechanical parts, Electronic control, High stability
 抗外界光干擾強
 Strong resistance to external light interference
 感應距離可定制
 Sensing Range can be customized
 體積小，安裝方便
 Small size, Easy to install

4. 電氣參數特性/ Electrical Specification (Ta=25°C)

輸出電氣狀態對應的值/Output Signal

物體狀態/Object State	輸出信號 (V) /Output signal(V)	Value/值
在感應範圍內/within sensing range	5	1
不在感應範圍內/Outside the sensing	0	0

電氣特性/Electrical Specification

參數/Parameter	符號/Symbol	條件/Condition	典型/Typ	單位/Units	
直流特性/direct-current characteristic	工作電壓/Working Voltage	VDD	5	V	
	電流/current	IDD	在感應範圍內/within sensing	<30	mA
			不在感應範圍內/Outside the sensing	<25	mA
	消耗功率 power consumption	PD	在感應範圍內/within sensing	<100	mW
不在感應範圍內/Outside the sensing			<75	mW	
輸出特性/output characteristic	不在感應範圍內/Outside the sensing	VO1	Ta = 25°C	<0.30	V
	在感應範圍內/within sensing range	VO2	Ta = 25°C	>4.6	V
	輸出源電流/output current	IOL	Ta = 25°C	10	mA
	響應時間/response time		Ta = 25°C	100	uS



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備註：實際使用時，傳感器表面盡量保持乾淨，避免有顆粒或者水珠對傳感器造成干擾。

Note: In actual use, please keep the surface of the sensor clean, to avoid the solid and the bubbles effect the sensor.

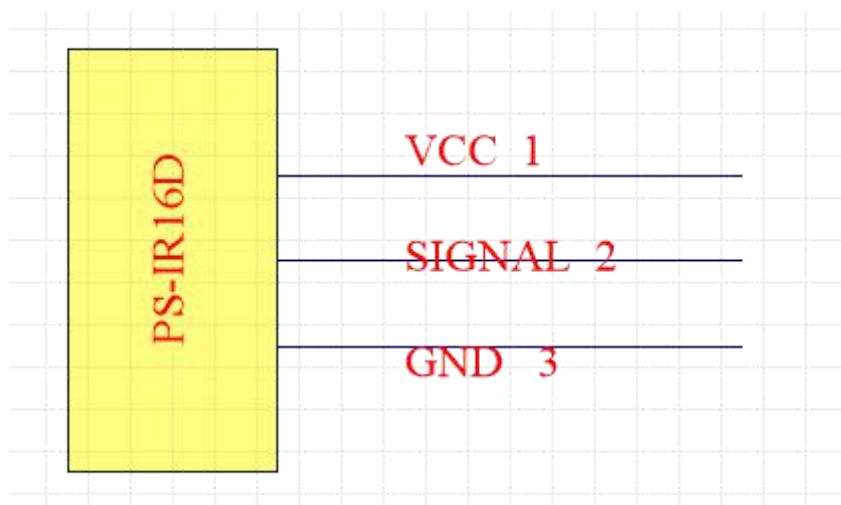
5. 極限參數/Absolute Maximum Rating

參數/Parameters	符號/Symbol	規格/Specification
感應範圍/Sensing range/	mm	10±5~80±20mm
工作溫度/Working Tem/	Topr	-20°C-75°C
儲存溫度/Storage Tem	Tstg	-20°C-85°C
壽命/Working life	T	50,000 h
工作濕度/Working Humidity	%rh	<70

6. 推薦電路及電氣特性/Recommended Circuit & Electrical Characteristics

當檢測物體在檢測範圍內，此時信號輸出為高電位；當檢測物體離開或者未在檢測範圍內，此時信號輸出為低電位，具體參數如下圖所示。

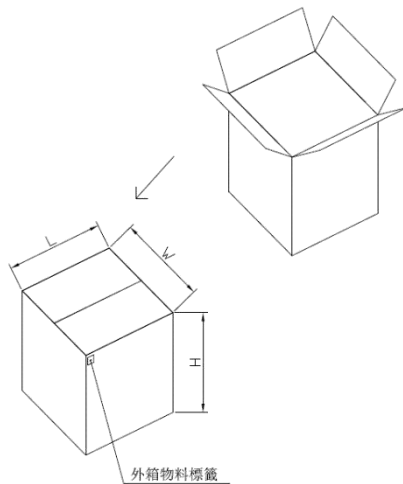
When the object is within sensing range, the output signal is high voltage; when the object is not within sensing range, the output signal is low voltage. The specific parameters are shown in the figure below.



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7. 包裝/ Package



說明：

1. 外箱尺寸：34X27.5X33.5 CM

1箱產品數量：800 PCS

2. 包裝盒尺寸：33.5X13.5X8 CM

1盒產品數量：100 PCS

Description:

1. Outer box size: 34X27.5X33.5 CM

one box product quantity: 800 PCS

2. Packing box size: 33.5X13.5X8 CM

one box of products: 100 PCS

8. 尺寸和推薦安裝/Outline Drawing and Recommended installation



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1 2 3 4 5 6

A

A

B

B

C

C

D

D

E

E

F

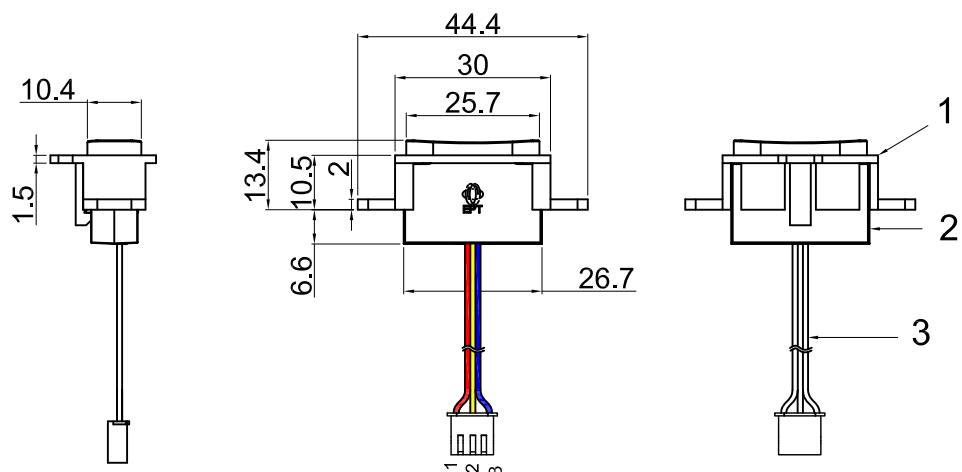
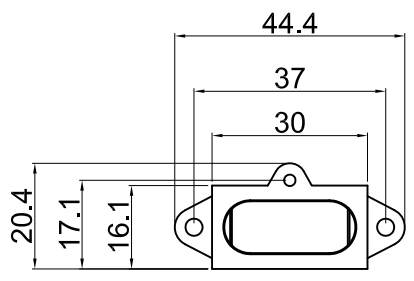
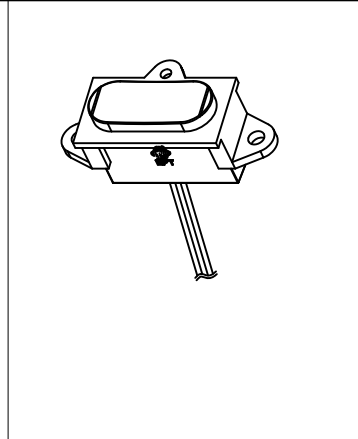
F

G

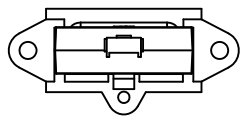
G

H

H



VCC RED 1
SG YELLOW 2
GND BLUE 3



耐溫 <small>Temperature resistance</small>	80°	耐壓 <small>Withstand voltage</small>	300V
鍍錫 <small>Tin plating</small>	*	長度 <small>Length</small>	*
UL線規 <small>UL wire gauge</small>	*	UL編號 <small>UL number</small>	*
顏色 <small>Colour</small>	*	線號 <small>Line number</small>	*

線材規格
Wire specification

腳距 <small>Foot distance</small>	2.5	孔數 <small>Number of holes</small>	3
顏色 <small>Colour</small>	White	型號 <small>Model</small>	XHB

端子規格
Terminal Specifications

3	線材 <small>Wire</small>	1	
2	感測器主體 <small>Sensor body</small>	1	
1	外殼 <small>Shell</small>	1	
編號 <small>NO.</small>	名稱 <small>Name</small>	數量 <small>QTY</small>	備註 <small>P.S.</small>

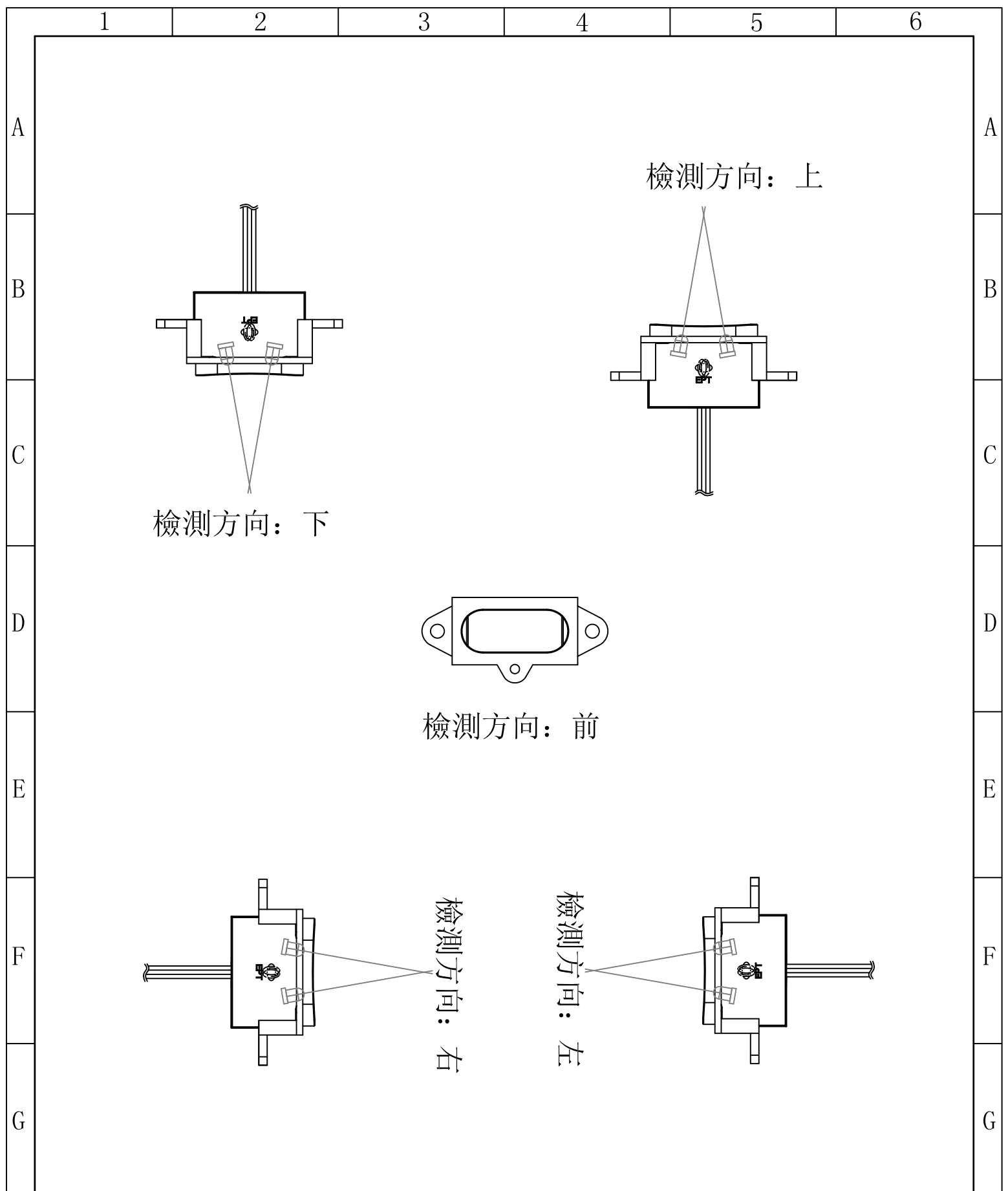
設計 <small>Designer</small>	Chen	材料 <small>Material</small>	*	單位 <small>Unit</small>	mm
檢查 <small>Checked</small>	Chen	表面處理 <small>Finish</small>	*	比例 <small>Scale</small>	*
審批 <small>Approver</small>	Wei	數量 <small>Quantity</small>	*	篇幅 <small>Size</small>	A4
一般公差 <small>Tolerances</small>	0-10	±0.25	0.8	備註 <small>Remarks</small>	*
	10-35	±0.35		視圖 <small>View</small>	
	35-70	±0.45			



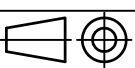


能點科技有限公司
EPT technology co., LTD

產品名 <small>Product Name</small>	PS-IR16D	日期 <small>Date</small>	20-09-11
頁面內容 <small>Page content</small>	產品圖	版本 <small>REV</small>	A
圖號 <small>DWG NO.</small>	*	頁數 <small>Pages NO.</small>	1/3

1 2 3 4 5 6



設計 Designer	Chen	材料 Material	*	單位 Unit	mm	 能點科技有限公司 EPT technology co., LTD			
檢查 Checked	Chen	表面處理 Finish	*	比例 Scale	*				
審批 Approver	Wei	數量 Quantity	*	篇幅 Size	A4	產品名 Product Name	PS-IR16D	日期 Date	20-09-11
一般公差 Tolerances	0-10	±0.25		備註 Remarks	*	頁面內容 Page content	產品圖	版本 REV	A
	10-35	±0.35				圖號 DWG NO.	*	頁數 Pages NO.	2/3
	35-70	±0.45							

9. 出貨檢驗標準/ Shipment inspection standard

	1	2	3	4	5	6					
A							A				
B							B				
C							C				
D							D				
E	<p>感應範圍/ Sensing range</p> <p>Sensing object: hand</p>					<p>感應範圍：最近距離$10\pm 10\text{mm}$ 最遠距離$80\pm 40\text{mm}$</p> <p>Sensing range: Shortest distance $10\pm 10\text{mm}$ Farthest distance $80\pm 40\text{mm}$</p> <p>檢測物體：手 Sensing object: hand</p> <p>因傳感器感應距離對不同顏色物體檢測會有差異，請聯繫你的服務專員，制定合適的檢測範圍。 Because the sensing range of the sensor will be effected by object color, please contact our sales to determine the suitable sensing range.</p>	E				
F							F				
G							G				
H	設計 Designer	Chen	材料 Material	*	單位 Unit	mm	<p>能點科技有限公司 EPT technology co., LTD</p>	H			
	檢查 Checked	Chen	表面處理 Finish	*	比例 Scale	*					
	審批 Approver	Wei	數量 Quantity	*	篇幅 Size	A4	產品名 Product Name		PS-IR16D	日期 Date	20-09-11
	一般公差 Tolerances	0-10 10-35 35-70	± 0.25 ± 0.35 ± 0.45		備註 Remarks	*	頁面內容 Page content		產品圖	版本 REV	A
			視圖 View			圖號 DWG NO.	*	頁數 Pages NO.	3/3		
	1	2	3	4	5	6					