



无接触式管状水位信号传感器

Non-contact tubular water level sensor

[www.zisenisc.com](http://www.zisenisc.com) Email: [zisen@zisenisc.com](mailto:zisen@zisenisc.com) 0755-28289951 JACK 13692188945 v1.2

## 规 格 承 认 书

Specifications

Type 产品名称：无接触式管状水位信号传感器

Model 产品型号：ZCT-YLOQW1

Customer 客户名称：

Signed by Client	客户签名
Confirmed 确认	
Checked 审核	
Approved 批准	

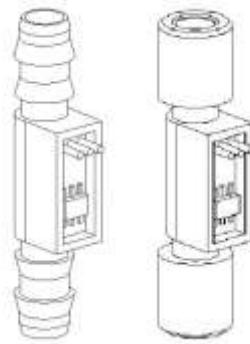
Signed by Manufacturer	生产商签名
Prepared 制定	
Checked 审核	
Approved 批准	



## 一、简介Introduction

无接触式管状水位/水量传感器，是一款内部结构简洁，无叶轮无磁铁，液体流动不受阻碍，采用无接触方式感应，对饮用水，特殊液体不造成接触污染，卡壳影响。有液体经过传感器输出低电平，无液体经过输出高电平，应用在管道内，胶管内，水箱连通的液体感应。

The non-contact tubular water level/water volume sensor is a simple internal structure, no impeller and no magnet, the liquid flow is not hindered, it adopts the non-contact method to sensing, it does not cause contact pollution and jamming effects on drinking water and special liquids. There is a liquid outputting a low-level signal through the sensor, and no liquid is outputting a high-level signal. Used for liquid sensing in pipes, hoses, water outlet ports of water tanks



## 二、特点Features

1 ) 不接触液体方式感应；

Induction without contact with liquid;

2 ) 易于拆装，集成化电路封装；

Easy to disassemble and assemble , Integrated circuit package;

3 ) 稳定性，轻量化，小型化，低成本；

Good stability, light weight, miniaturization, low cost ;

4 ) 出厂标定参数，适合单层/多层产品壁厚；

Factory set parameters, Suitable for single-layer / multi-layer product wall thickness ;

5 ) Rohs ,Reach, FDA

## 三、应用Application

1 ) 液位信号采集：防干烧，防溢报警，管道液体监测；

Liquid level signal acquisition: anti-dry burning, anti-overflow alarm, pipeline liquid monitoring;

2 ) 特殊液体传感：蒸馏，矿物质，纯净水，酒，油，奶，果浆，胶，墨等；

Special liquid sensing: distillation, minerals, pure water, wine, oil, milk, juice, glue, ink, etc;

3 ) 各类电器：饮水机，咖啡机，制冰机，空调扇，香薰机，加湿器，除湿机，

蒸汽产品，果蔬清洗机，扫地机器人，等含液体产品；

Various electrical appliances : Water dispenser, coffee maker, ice maker, air conditioning fan, aromatherapy machine, humidifier, dehumidifier, Steam clean, fruit and vegetable washing machine, Sweeping robot , and other contains liquid products ;

4 ) 智慧医院（消毒液/药剂监控），智慧农植（无人机农药喷洒），智慧城市（水量感应）；

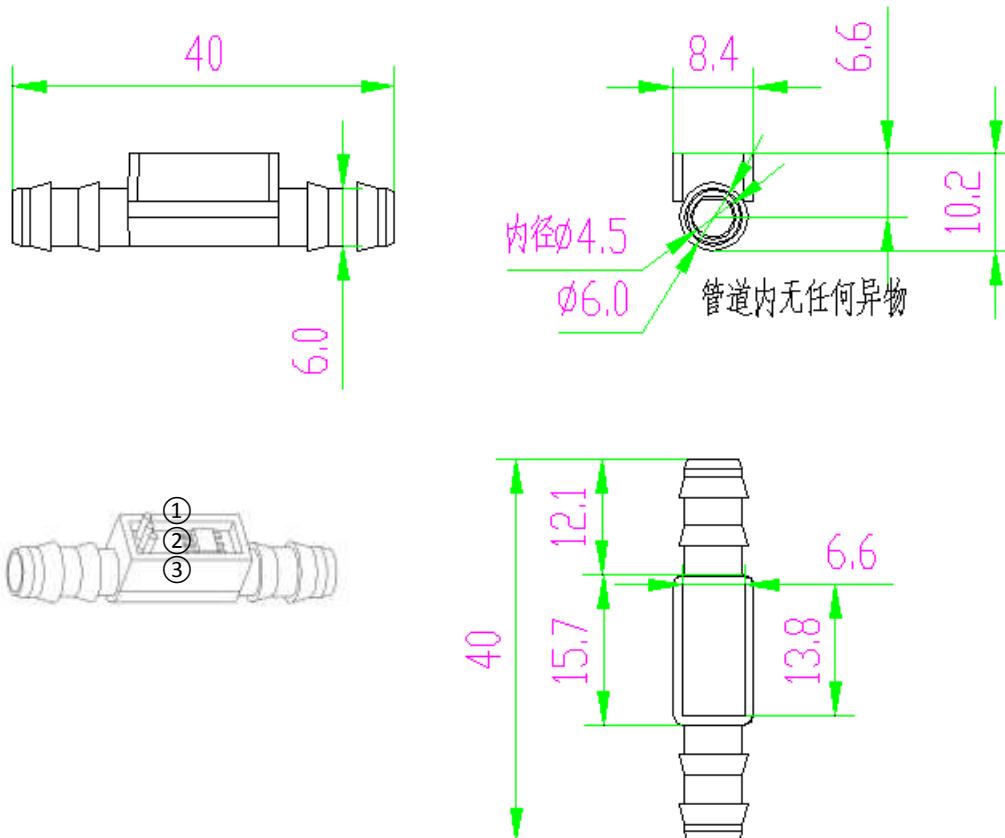
IOT: Smart hospital (Monitor sanitizer), smart farming (Spray pesticides), smart city (Rain sensor) ;

5 ) 其他应用：other apps.

#### 四、参数Parameter

电压Voltage	5v Typical ( 2.5~5.5VDC )
电流Current	5v 285uA 3.3v 230 uA
迟滞Response	$\pm 0.25\%$ FS
输出Output	Low level(liquid active)
感应距离 Distance	间隔的管道壁厚 Pipe wall thickness
间隔介质Spacer medium	塑胶 Plastic
液位误差 Deviation	19-39°C $\pm 2$ mm Max $\pm 3$ mm
防护等级Protection level	IP64
工作温度 Work temp	-30~85°C
材料耐温Withstand temp	芯片Chip 85度，封胶Glue120度，胶壳plastic 120度
电磁测试ESD test	H.B.M3000V M.M300V C.D.M1000V
闩锁测试Latch-up test	Input test 25mA-100mA Voltage18V
重量weight	2g

#### 五、外型尺寸Dimension



## 六，安装说明

### Wiring and installation instructions

#### 1. 引线端子 Lead terminal

序号	项目Pin	定义Definition	线材Wire
1	GND	Ground	26# 1007
2	VCC	3.3-5v Input	26# 1007
3	OUTPUT	Analog level	26# 1007

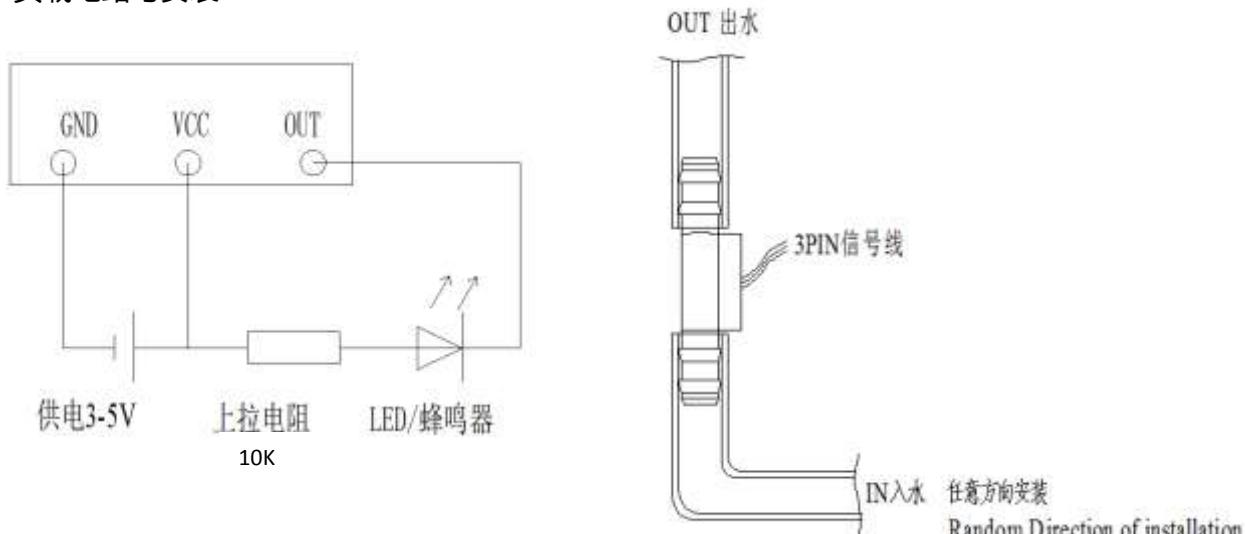
备注：当传感器检测到液体/物体时，输出低电平信号。

当检测到无液体/物体离开时，输出高电平信号。

Note: When the sensor detects liquid, it outputs a low-level signal.

When the sensor detects that there is no liquid, it outputs a high level signal.

#### 2. 负载电路与安装 Electronic circuit and installation method



## 七，注意事项 Matters need attention

---避免将传感器置于小于感应距离的2倍距离，并紧贴被测物体；

---为保障传感器不受损伤，不可带电操作；

---端子接反，超出额定值，将造成电子元件损坏；

---产品存放与运输，请远离化学污染源；

---请参照规格书技术标准执行。

- within the sensor's two times sensing distance, do not have other objects to trigger it by mistake;

- In order to protect the sensor from damage, it is not allowed to operate with electricity;

- Reverse connection of the terminals, exceeding the rated value, will cause damage to electronic components;

- Store and transport the product, please keep away from the source of chemical pollution;

- Please refer to the technical standards of the specification for implementation.