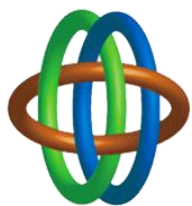


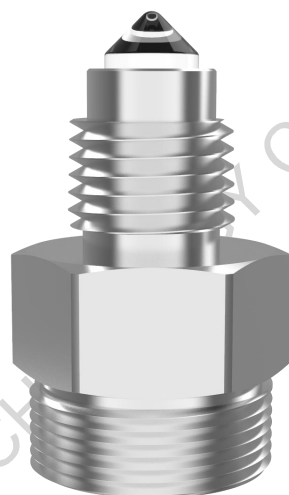
专利产品/ Patent



深圳市能点科技有限公司

SHENZHEN EPT TECHNOLOGY CO., LTD.

规格书 SPECIFICATION



WIFS-IR2102D

工业级光电液位传感器

Industrial Photoelectric Liquid Level Sensor



版本 Version: A-L

日期 Date: 2021/05/25

www.eptsz.com

www.eptsensor.com

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本规格书为相应产品作业之标准，在客户确认后，会作为生产、供货的依据。如有特殊要求，可告知联系你的市场部人员，并出具承认书。

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2. 应用领域/Application

飲水機/ Water dispenser

熱水器/Water heater

加濕器/Humidifier

醫療設備/Medical devices or equipment

需要偵測液體的電器，設備等/Electrical equipment and devices which need to detect liquid

3. 产品特征/Product Features

无机械运动部件、可靠性高

No mechanical moving components and with high reliability

防腐蚀性强

Strong corrosion resistance

液位控制精度高

High precision of liquid level control

防水等级 IP68

Waterproofing standard IP68

响应反馈时间快，安装方式灵活，易清洗避免细菌积淀滋生

Fast Response time, installation method is flexible, easy to clean to avoid bacterial accumulation

4. 电气参数特性/ Electrical Specification (Ta=25°C)

参数/Parameter		符号/Symbol	条件/Condition	最小值/Min	典型/Typ	最大值/Ma	单位/Units
直流特性/direct-current	工作电压/Working Voltage	VDD		>5	24	<25	V
	电流/Current	IDD	VDD=24V 有水状态（无负载）/in Water	>9		<15	mA
			VDD=24V 无水状态（无负载）/in Air	>9		<15	mA
	输出源电流/Output Current	IOH	VDD=24V Ta=25°C	—	<500	—	mA
响应时间/Response Time		VDD=24V Ta=25°C	—	<1	—	S	
极限值/limit value	工作温度/Operating Temperature	Topr	VDD=24V	-20	—	80	°C
	储存温度/Storage Temperature	Tstg	—	-25	—	85	°C
	工作寿命/Working Time	Wt	VDD=24V Totg=25°C	—	50000	—	h
	压力范围/Pressure Range		—	—	—	5	MPa

订购型号资料/Ordering Information

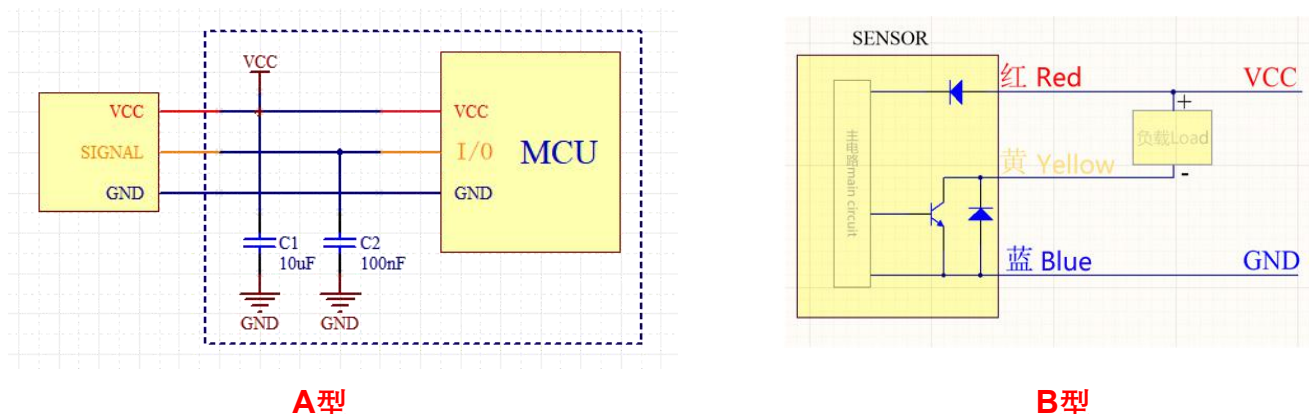
NO	子型号编码	有水状态输出电压/ Output Voltage in W	无水状态输出电压/ Output Voltage in Air	应用电路类型/ Application circuit type
1	WIFS-IR2102D PNP NC	<0.3V	>22V	A型
2	WIFS-IR2102D PNP NO	>22V	<0.3V	A型
3	WIFS-IR2102D NPN NC	>22V	<0.3V	B型
4	WIFS-IR2102D NPN NO	<0.3V	>22V	B型



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5. 推荐应用电路/Recommended Application Circuit



6. 应用及检测/Application & Detection

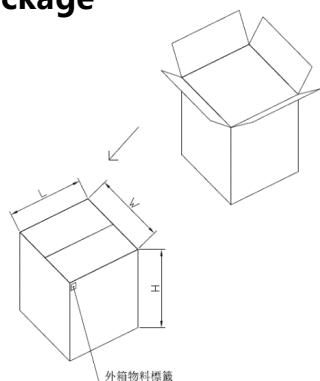
将液位传感器按下述方式之一安装，再将其按如上电路连接，信号端将输出与水位状况一致的电压信号，此信号作为液位传感器高度控制信号接入 MCU（单片机）A/D（模数转换）口，当液位超过临界液位而淹没传感器本体时，此时信号输出为低电压，当液位低于临界液位而显露传感器本体时，此时信号输出为高电压，具体参数如上表所示。

Install the level sensor according to one of the following modes (8. Recommended Installation) and connect it according to the circuit above (5. Recommended Application Circuit), The signal end will output a voltage signal consistent with the water level. This voltage signal is used as the height control signal of the liquid level sensor to be accessed to the A/D (analog-to-digital conversion) port of the MCU (microcontroller). When the liquid level is over the critical level and the sensor body is submerged, output voltage signal is low voltage; When the liquid level is below the critical level and the sensor body is exposed, output voltage signal is high voltage. Specific parameters please refer to above table (4. Electrical Specification).

注意/Notice:

1. 长期使用过程中，棱镜表面因液体杂质产生污垢，轻微的污垢不会影响到传感器的效能，如有严重的污垢产生，导致棱镜整体覆盖，需要提前告知特殊性，以便我方技术部做优化处理。
 2. 传感器在阳光直射下会受到干扰，请安装在避免阳光照射的位置内。
1. During long-term use, the surface of the sensor will be dirty due to liquid impurities. Slight dirt will not affect the performance of the sensor. If there is serious dirt covers all the surface of sensor, please inform us the particularity in advance for our technical department to do optimize treatment.
 2. The sensor will be affected when exposed to direct sunlight. Please install it away from direct sunlight.

7. 包装/ Package



说明:

1. 外箱尺寸: 34X27.5X33.5 CM
1箱产品数量: 800 PCS
2. 包装盒尺寸: 33.5X13.5X8 CM
1盒产品数量: 100 PCS

Description:

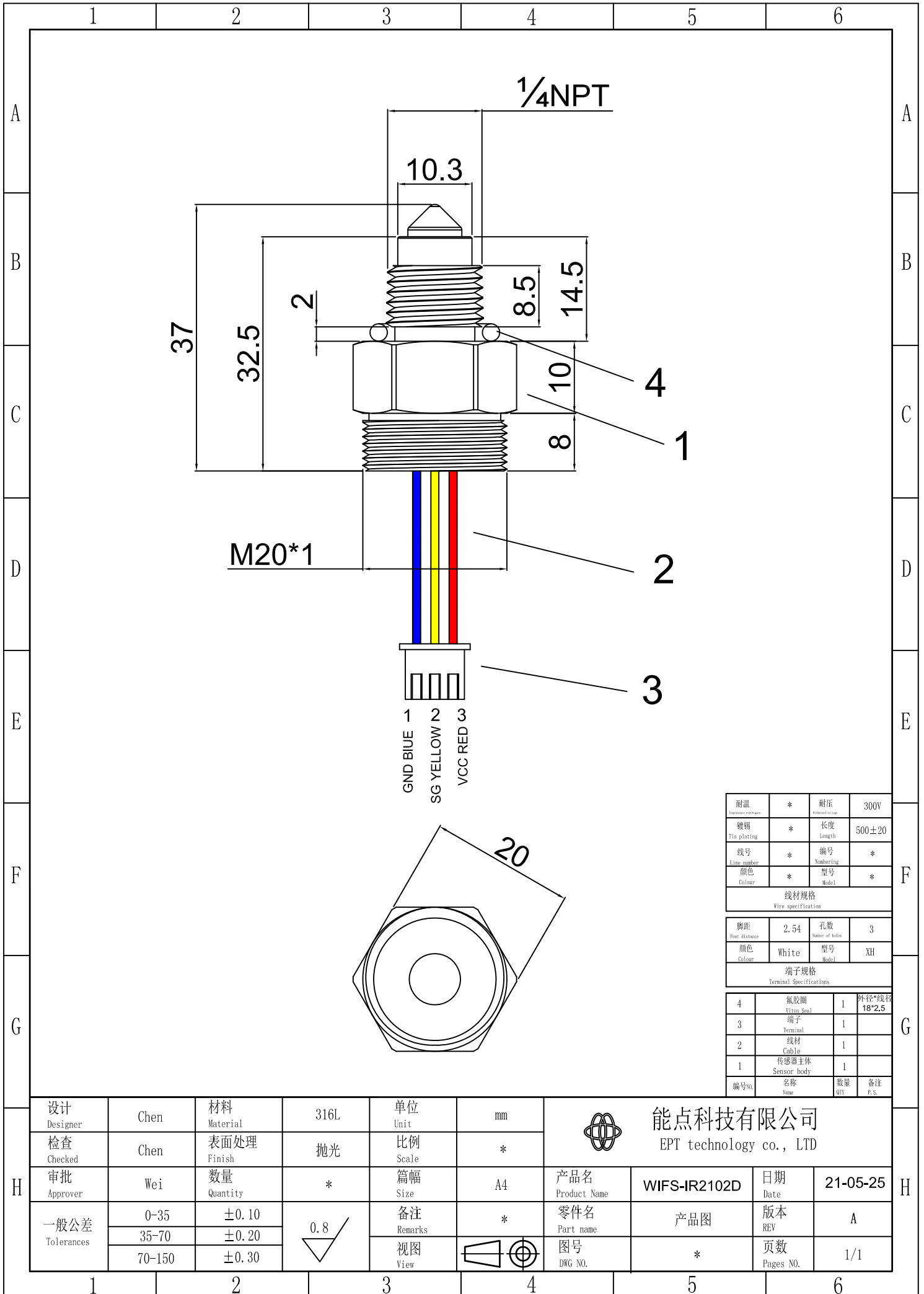
1. Outer box size: 34X27.5X33.5 CM
one box product quantity: 800 PCS
2. Packing box size: 33.5X13.5X8 CM
one box of products: 100 PCS



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8. 尺寸和推荐安装/Outline Drawing and Recommended Installation



耐温 Insulation temperature	*	耐压 Rated voltage	300V
镀锡 Tin plating	*	长度 Length	500±20
线号 Line number	*	编号 Numbering	*
颜色 Colour	*	型号 Model	*
线材规格 Wire specification			
脚距 Foot distance	2.54	孔数 Number of holes	3
颜色 Colour	White	型号 Model	XH
端子规格 Terminal Specifications			
4	氟胶圈 Viton Seal	1	外径*线径 18*2.5
3	端子 Terminal	1	
2	线材 Cable	1	
1	传感器主体 Sensor body	1	
编号No.	名称 Name	数量 Qty	备注 F.S.

设计 Designer	Chen	材料 Material	316L	单位 Unit	mm	 能点科技有限公司 EPT technology co., LTD	
检查 Checked	Chen	表面处理 Finish	抛光	比例 Scale	*		
审批 Approver	Wei	数量 Quantity	*	篇幅 Size	A4	产品名 Product Name: WIFS-IR2102D 日期 Date: 21-05-25	
一般公差 Tolerances	0-35	±0.10		备注 Remarks	*	零件名 Part name: 产品图	版本 REV: A
	35-70	±0.20		视图 View		图号 DWG NO.:	页数 Pages NO.:
70-150	±0.30					*	