

Description

The liquid turbidity sensor is composed of an infrared transmitting module, a receiving module, a temperature compensation module, a signal output module and a CPU microprocessor.

Different turbidity liquids have different attenuation to infrared light, and the receiving end deduces the turbidity of the measured liquid by calculating the attenuation of infrared light.

This product has automatic temperature compensation function, which is more accurate and can output analog or digital turbidity signals for users to choose.



Applications

This product is suitable for dishwashers, washing machines and other application scenarios that need to detect liquid turbidity.

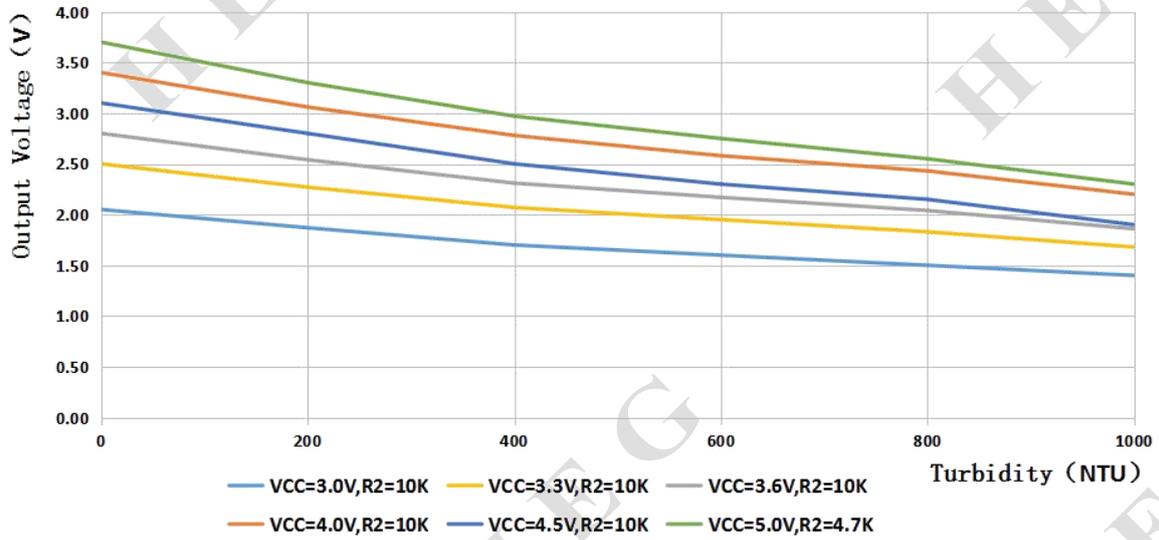
Parameters of Performance

Ta=25°C

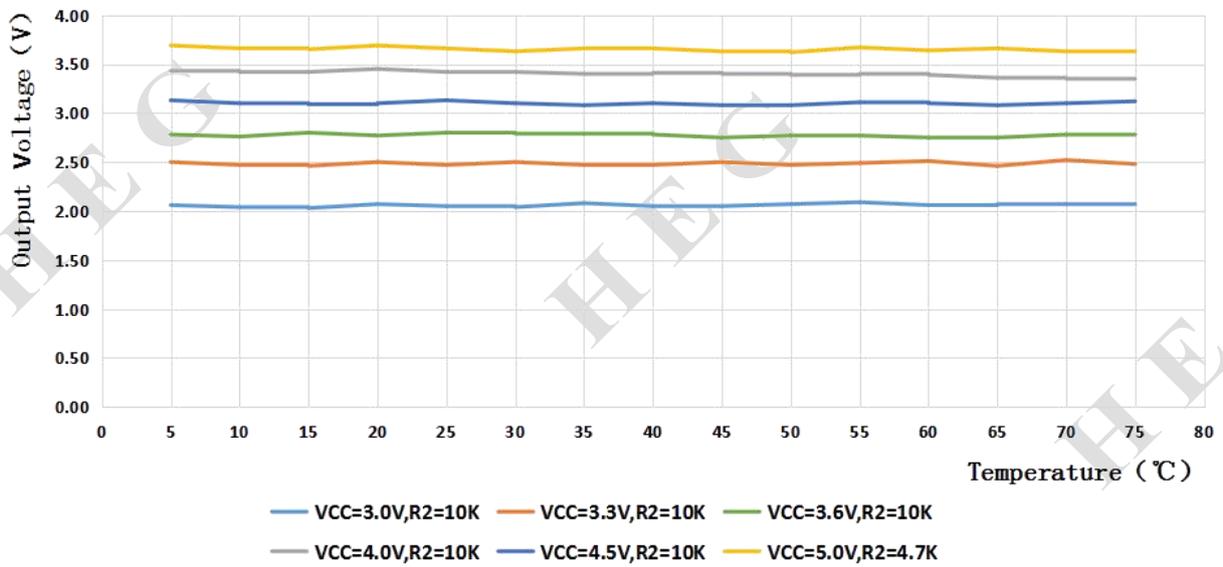
Parameter	Symbol	Numerical Value	Unit	Test Condition
Supply voltage	VCC	3.0~5.0	V	
Current consumption		Typical values: 8	mA	VCC=5.0V
Analog signal output (optional)	Aout	0~5.0	V	VCC=5.0V
Digital signal output (optional)	Dout	8-bit standard serial port Baud rate:9600 Data format(0~4095):XXXX	/	No parity check bit
Ratio Range	Ra	0~1000	NTU	
Insulation Resistance		D.C 500V over 100	MΩ	
Insulation Voltage		A.C 1800, be endured during	V	
Operating Temperature	Topr	-20~+75	°C	
Storage Temperature	Tstg	-30~+100	°C	

Characteristic Curve

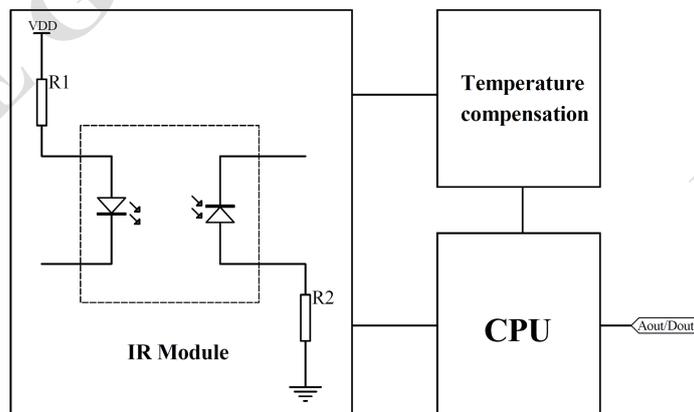
1. Turbidity vs. Output Voltage (Temperature=25°C)



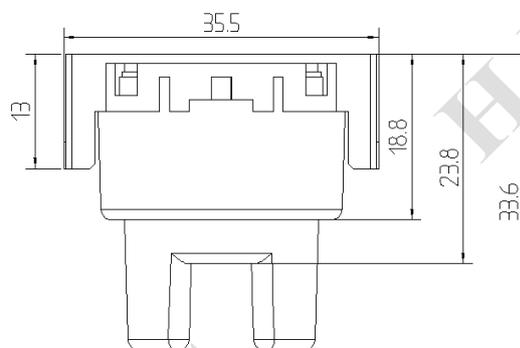
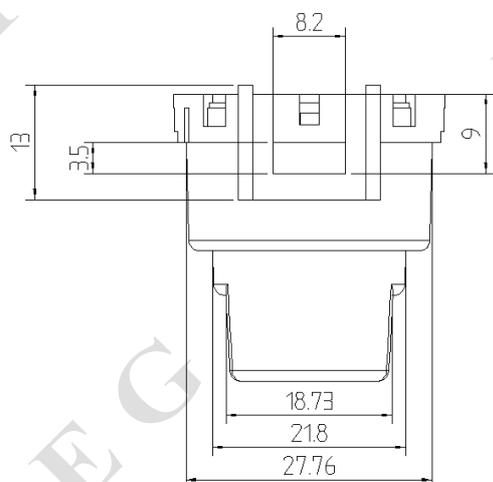
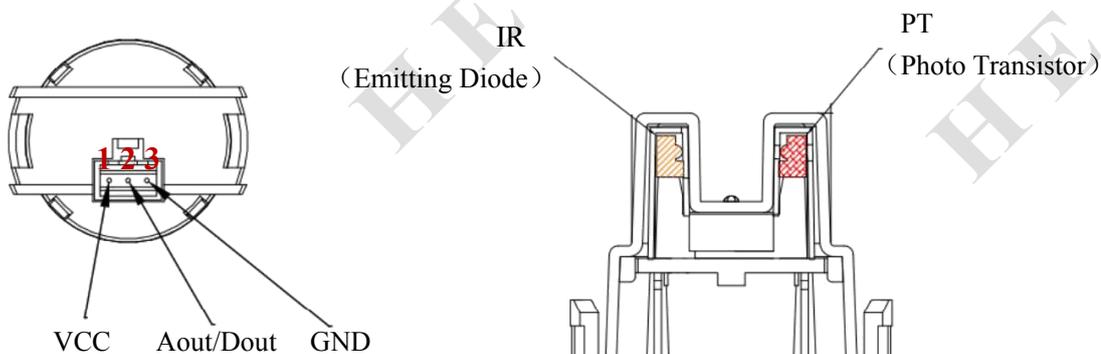
2. Temperature vs. Output Voltage (Turbidity=0NTU)

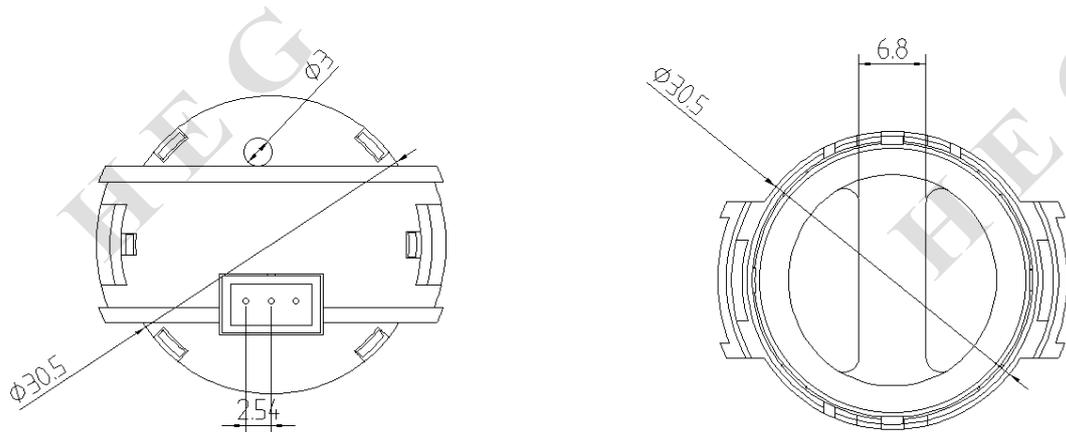


Schematic Diagram



Structure



**Notes:**

1. The sensor is not waterproof, so it cannot be completely immersed in liquid, and only the transparent part of the device can be placed in liquid.
2. When wiring, please pay attention to the polarity of the power supply to prevent the sensor from being burnt out by reverse connection of the power supply. Before power-on, please pay attention to the voltage to prevent the sensor from being burnt out by excessive voltage.
3. This sensor is suitable for the measured liquid with continuous temperature change. For the liquid with sudden temperature change, the sensor should measure after reaching the heat balance.