

AS01-QY1 Instruction Liquid Level Detection Module

1. Description:

The module operates by detecting changes in the capacitance of liquids to determine the liquid level height or the presence of liquid.

2. Product Features:

- * Small size, low cost
- * No mechanical movement, no wear and tear
- * Non-contact, better sealing and safety
- * Capable of detecting multiple types of liquids:
water, alcohol, cooking oil, etc.

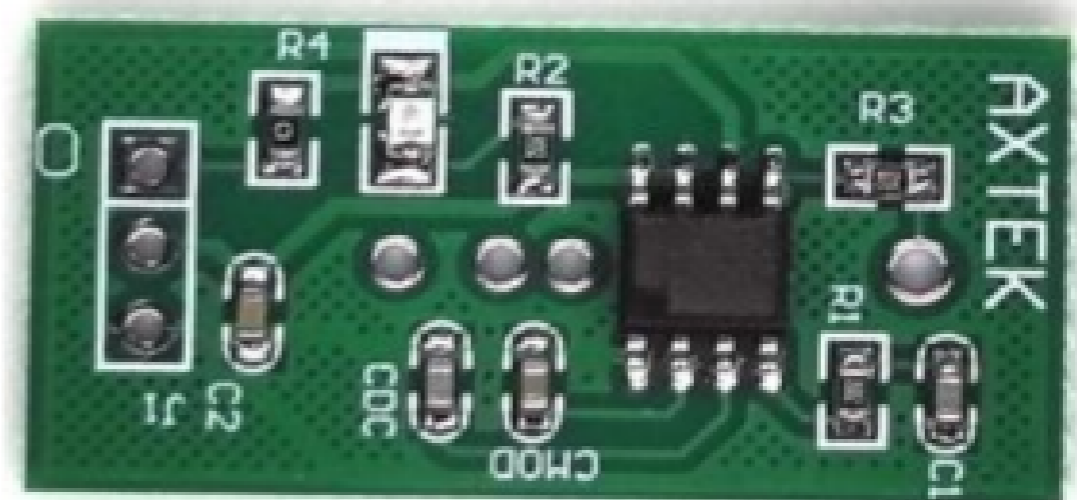
3. Module Specifications:

- 1) **Module PCB Size:** 30mm x 15mm
- 2) **External Power Supply and Water Level Signal Terminal Hole Spacing:** 2.54mm (can connect wires, pin headers, or other 2.54mm spacing terminal based on application needs.)
- 3) **Port Definitions (refer to PCB markings):**
 - * **0:** Water level signal output (low level for water presence, high level for no water)
 - * **-:** Connect to power supply negative
 - * **+:** Connect to power supply positive; operating voltage range: 3.0V - 6.0V
- 4) **Usage requirement:** Designed for containers with flat surfaces, with the sensing surface required to maintain direct contact with the container during operation.
- 5) **PCB Design:** **There is no reverse connection protection on PCB, the power supply positive and negative poles should not be reversed, otherwise it is easy to burn out.**
- 6) **Important Reminder :** This module has no defined sensing PAD; it can be chosen based on actual application needs, such as copper film, springs, etc.

4. Application

- Intelligent floor scrubber, sweeping robot
- Water purifier, water dispenser, direct drinking machine
- Coffee machine, juicer
- Alcohol meter
- Chemical material containers or other liquid containers

5. Module Appearance Image



6. Electrical Characteristics:

Electrical Parameters: TA=25°C

Characteristic	Symbol	Conditions	Min	Typical	Max	Unit
Operating Voltage	Vdd		2.5		6.0	V
Current Consumption	Idd	VDD = 5.0V		0.68		mA
		VDD = 3.0V		0.47		
Power-On Initialization Time	Tini			120		ms
Output Resistance (NMOS open-drain)	Zo	Low Level		510		Ohm
		High Level		10K		
Output Sink Current	Isk	VDD = 5V			10.0	mA
Response Time	rt			24		ms

7. Other Notes

* The module's sensitivity, terminal arrangement, and structure can be adjusted based on customer application requirements. For any questions during use, please feel free to contact us for technical guidance.

* This document is for reference only. Updates to new modules, such as PCB and components optimizations, may not necessarily be synchronized with this documentation.