ULTRASONIC LEVEL MEASUREMENT / DATA SHEET

SS402-06

Low Range Ultrasonic Level Meter

Compact ultrasonic sensor for low-range non-contact distance measurement.

Overview

- SS402-06 is a low-range ultrasonic level meter for non-contact distance and level measurement.
- High-performance processors and quality components support stable operation, long service life and low power consumption.
- The compact sensor uses ultrasonic sensing technology for reliable measurement without contacting the medium.
- The 30-2000 mm range and 30 mm blind spot support close-range level measurement.
- Data transfer is available through TTL (UART) or RS485 (Modbus-RTU), as listed in the source material.



Range **30-2000 mm**	**Accuracy** **±(1 cm + 0.3%FS)**	**Transfer** **TTL / RS485**	**Blind spot** **30 mm**
Supply **3.3-5 VDC**	**Temperature** **-15 to +60 °C**	**Protection** **IP65**	**Upload** **100 ms**

Key Advantages

- Small blind area and fast response time.
- Strong anti-interference and anti-static performance.
- Stable, reliable data output with low power consumption.

Application Scenarios

- Industrial process level measurement and control.
- Water conservancy, hydropower and fire monitoring.
- Building automation, water supply, sewage treatment and low-power applications.

Measurement Principle

SS402-06 uses ultrasonic sensing technology for non-contact distance measurement. High-performance processors and quality components are used to support stable operation, low power consumption and reliable measurement across the listed low-range applications.

Technical Specifications

Parameter	Specification	Parameter	Specification
Reference temperature	25 °C unless otherwise specified	**Measuring range**	30-2000 mm
Transfer method	TTL (UART); RS485 (Modbus-RTU)	**Power supply**	3.3-5 VDC
Automatic upload cycle	100 ms	**Accuracy**	±(1 cm + FS × 0.3%); accuracy varies with the emission angle
Power consumption	Peak current: ≤40 mA	**Operating temperature**	-15 to +60 °C
Protection level	IP65	**Blind spot**	30 mm

Output and Communication

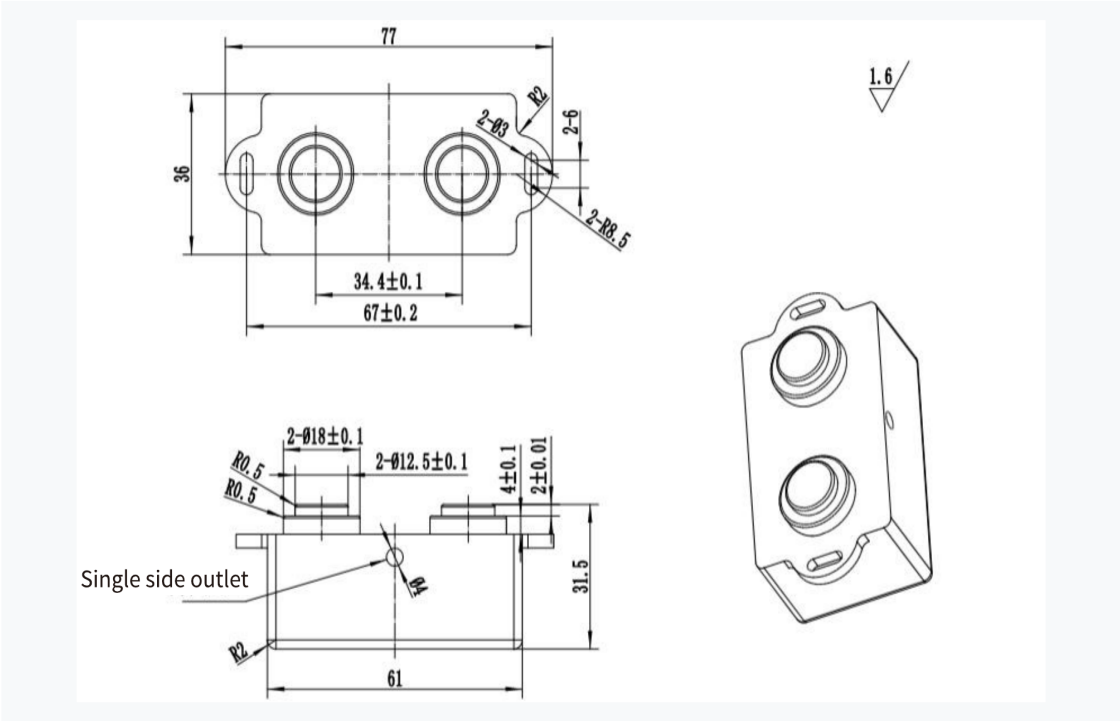
Interface	Configuration
TTL (UART)	Serial data transfer
RS485	Modbus-RTU serial communication

The source material lists TTL (UART) and RS485 (Modbus-RTU) transfer methods.

Electrical Connection

Outlet / Cable color	Signal / Definition
1 — Red	VCC — 3.3-5 VDC power supply+
2 — Yellow	TXD / 485A — Data sending
3 — White	RXD / 485B — Data reception
4 — Black	GND — Power supply ground

Mechanical Dimensions / Installation



Source dimension drawing for the sensor housing. Dimensions are shown in millimetres and include a 77 mm overall width, 36 mm overall height, 61 mm body length, 34.4 ±0.1 mm and 67 ±0.2 mm spacing references, plus mounting and outlet details.

Product Selection / Ordering Information

Selection	Configuration
Base model	SS402-06 — Low Range Ultrasonic Level Meter
Precision code	4: ±(1 cm + 0.3%FS)
Output code	4: RS485; 5: TTL (UART)
Power-supply code	5: 3.3-5 VDC; 6: 5-12 VDC
Range code	6: 30-2000 mm
Product configuration	Low-range ultrasonic sensor with cable

Specify SS402-06 with the required precision, output, power-supply and range configuration. Final configuration remains subject to the listed options in the source material.

CONTACT / SUPPORT

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