WIRELESS LEVEL MONITORING / DATA SHEET

SS402-01
Wireless Ultrasonic Level Sensor

Low-power ultrasonic liquid-level measurement with wireless 4G-CAT1 data transmission.

Overview

- SS402-01 is a wireless ultrasonic level sensor for remote liquid-level data acquisition and monitoring.
- High-performance processors and ultrasonic ranging support stable, high-precision measurement with low power consumption.
- The source describes wireless field-data transmission to a cloud platform through the 4G-CAT1 network for Internet, PC or mobile access.
- The compact sensor assembly combines an ultrasonic probe, a controller and a cable connection for field installation.



Range	Accuracy	Network	Protocol
3 / 6 m optional	±0.5%FS	4G-CAT1	MQTT
Battery	**Life**	**Temperature**	**Protection**
3.6 V / 8000 mAh	1-3 years	-20 to +60 °C	IP65

Key Advantages

- Low-power design with stable ultrasonic ranging and high-precision measurement.
- Moisture-proof, anti-condensation and anti-leakage design; protection level IP65.
- Excellent anti-interference and anti-static properties with good long-term stability.

Application Scenarios

- Industrial process level measurement and control.
- Water conservancy, hydropower and fire monitoring.
- Urban water supply, sewage treatment and building automation.

Measurement Principle

SS402-01 uses ultrasonic sensing technology for liquid-level ranging. The source describes high-performance processing and ultrasonic ranging as supporting stable, high-precision measurement. Field data can be transmitted wirelessly to a cloud platform through the 4G-CAT1 network for remote acquisition by Internet, PC or mobile terminal.

Technical Specifications

Parameter	Specification	Parameter	Specification
Measuring range	3 m or 6 m, optional	**Transmission method**	4G-CAT1 data transmission
Communication protocol	MQTT	**Effective vertical angle**	20 ± 15°

Parameter	Specification	Parameter	Specification
Power supply method	3.6 V battery; standard 8000 mAh capacity; service life 1-3 years depending on data reporting frequency	**Power consumption**	Sleep ≤20 μA; sampling ≤1 mA for 1 s; communication average ≤100 mA for 15 s; online ≤20 mA for 60 s
Accuracy	±0.5%FS	**Operating temperature**	-20 to +60 °C
Protection level	IP65		

Output and Communication

Interface	Source-listed configuration
Wireless transmission	4G-CAT1 data transmission
Communication protocol	MQTT
Cloud access	Wireless field data transmission to a cloud platform

The source lists 4G-CAT1 data transmission and MQTT communication for wireless cloud data access.

Installation / Ranging Options

The source lists plane-ranging and hoistway-ranging options in the ordering guide. Plane ranging is listed as 0-0.28 m to 6 m, while hoistway ranging is listed as 0-0.28 m to 3 m. No separate dimension drawing or wiring diagram is provided in the supplied source PDF.

Product Selection / Ordering Information

Selection	Configuration
Base model	SS402-01 — Wireless Ultrasonic Level Sensor
Precision	±0.5%FS
Transmission option	4G-CAT1 or NB-IoT, according to source ordering options
Power supply	Battery operated, 3.6 V
Plane-ranging option	0-0.28 m to 6 m
Hoistway-ranging option	0-0.28 m to 3 m
Communication protocol	MQTT

Specify SS402-01 with the required network, power and ranging configuration. Final configuration remains subject to the source-listed options.

CONTACT / SUPPORT

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