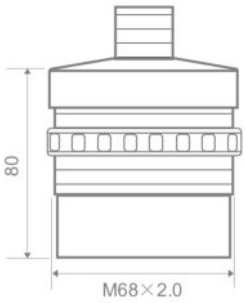
OVERVIEW

SUL801 Ultrasonic level (distance) transmitter is specially designed for multi measuring points, small installation space, equipment matching and other application conditions. It integrates ultrasonic sensor, temperature sensor, ultrasonic servo circuit and transmission circuit. It adopts SMD chip components and self-developed ASC special chip, making the whole circuit very compact and simple; All the circuit boards are gilded, with internal electromagnetic shielding and software digital filter (industrial grade) leaving the factory for 48 hours, high and low temperature and electrical aging, so that they have high stability and long-term reliability. The shell is made of NLEPF synthetic material with strong texture and good acoustic characteristics. It has exquisite and beautiful appearance. It can be selected as waterproof, dust-proof, anti-corrosion type, or explosion-proof type, which can adapt to most working conditions. When the transmitter is fixed on the liquid tank, wall, moving arm or instrument shell, there is no need for tools such as gongs, screwdrivers, etc., as long as there is a round hole or screw hole, so that the installation is very fast and stable, and the maintenance and disassembly is very convenient! Product application: small space, low cost, liquid level, distance measurement; matching ultrasonic open channel flowmeter probe.



MAIN FEATURES

- Designed for application conditions such as multiple measuring points, small installation space.
- Using SMD chip components and self-developed ASC special chip, making the whole circuit very compact and simple.
- Internal electromagnetic shielding and software digital filtering (industrial grade) factory 48 hours high and low temperature and electrical aging, high stability and long-term reliability.
- The shell is made of NLEPF synthetic material with strong texture and good acoustic properties.

SPECIFICATION

Maximum range	5m, 10m, 15m (optional according to working conditions)
Non-detection zone	≤ 300 ~ 800mm (according to the configuration of sensors)
Power supply	DC24V / 300mA, or customized
Full angle of beam	15, 12 ° and 9 ° according to configuration of sensors
Display mode	Without display
Accuracy	Better than ± 0.5% F · S, or customized 0.3%、0.2%
Output signal	4 ~ 20mA, or RS485, or customized
Entry cable	Waterproof joint
Working temperature	-10 ~ 50 ° C, or customized
Application environment	Atmospheric pressure, non explosion proof, non corrosive environment
Installation	Screw hole screw in type installation or screw ring clamping type installation
Protection level	IP65, or customized
Explosion proof	Can be customized intrinsically safe explosion-proof ExiaII AT3

OUTLINE CONSTRUCTURE

→ Best Material

Quality engineering plastics
Using ultrasonic transmitter
Using high-quality waterproof cables

→ Features

High detection and measurement accuracy
Support multiple signal output
Multi-range measurement range is optional
Small beam angle design

→ Comprehensive protection design

IP66 protection level, dust-proof and waterproof washing, high protection level can be customized.

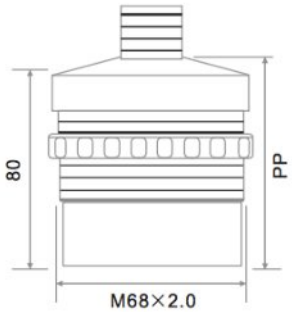
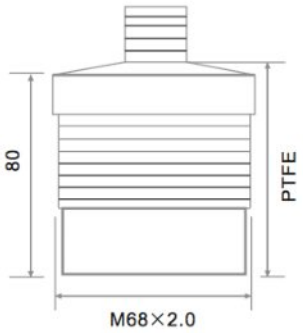
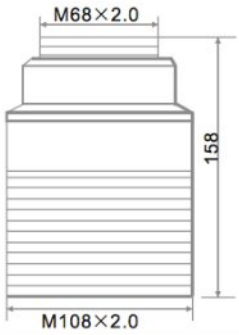
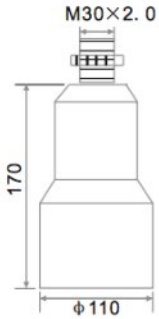
→ Multiple installation options

Supports M49x1.5mm screw hole screw-in installation and coil clamp installation for easy installation

→ Multi-type output optional

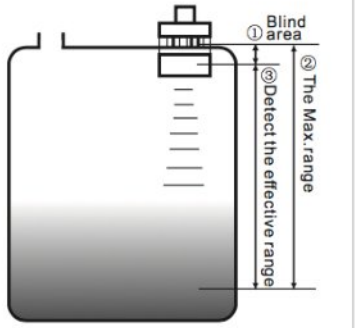
4 ~ 20MA three-wire system (default)
4 ~ 20MA two-wire system
4 ~ 20MA four-wire system
1 ~ 5V. RS485 and other signal outputs

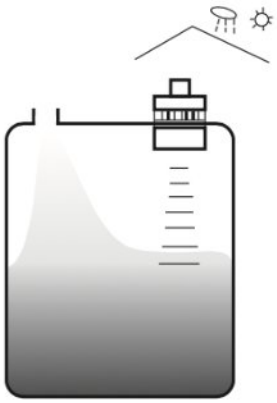
MORE MODEL TYPES

 	Housing material:sensor surface was packaged, waterproof, corrosion resistance Max range: 10m, 12m, 15m Dead zone: 600-1000mm Beam angle: 9 Degree Accuracy: ±0.5%F.S. Output signal: 4-20mA three wire, optional Operating temp: -10~60C, optional
 	Housing material: PTFE, high ability of corrosion resistance Max range: 10m, 12m, 15m Dead zone: 600-1000mm Beam angle: 9 Degree Accuracy: ±0.5%F.S. Output signal: 4-20mA three wire, optional Operating temp: -10~60C, optional Protection class: IP66, optional Mounting size: M68*2mm
 	Max range:20m, 30m Dead zone: 1000-1200mm Beam angle: 9 Degree Accuracy: ±0.5%F.S. Output signal: 4-20mA three wire, optional Operating temp: -10~60C, optional Protection class: IP66, optional Mounting size: M68*2mm, M108*2.0mm
 	Max range:40m, 50m Dead zone: 1200-1500mm Beam angle: 9 Degree Accuracy: ±0.5%F.S. Output signal: 4-20mA three wire, optional Operating temp: -10~60C, optional Protection class: IP66, optional Mounting size: M30*2mm

INSTALLATION ATTENTIONS

1) Measuring range and Requirements of blind zone.
2) Media type to be measured (Liquid or solid, such as: Water, sewage, mud, gasoline, diesel oil, toluene, sulfur dioxide, ore, coal, cement, soybeans, wheat, corn, flour etc.)
If it is liquid: Is there liquid steam, mist, foam, wave, stirring, floating objects;
If it is solid: Is there a dust, granular or powder media is.
3) The minimum ~ maximum temperature and pressure of media.
4) Corrosion of media. If it is placed inside the jar, the jar needs to know the material, and if there is corrosion of the lining.
5) The need for anti-corrosion, explosion-proof, to split or an integrated one.
6) Working environment: exposure to the pond, cover the pond, lying tank, vertical tank, tank, pot is through atmospheric pressure and so on.





1. Measure reference surface is the bottom line of sensor
2. Highest solid level cannot enter into the blind area
3. Level measurement should avoid the feeling hole, aim the smoother level surface
4. Better use sun/rain shade when mounting in out field
5. When mounting, sensor should be kept distance to the wall surface because of beam angle of ultrasonic wave.
6. When measuring the object level, the feeding hole should be avoided to prevent the ultrasound echo being interfered.

ORDER GUIDE

SUL801- ①-②-③-④-⑤-⑥

① Range	
1 Meter	01
2 Meter	02
....	
15 Meter	15

⑥ Cable Length	
1 Meter	01
2 Meter	02
....	

② Water Proof	
IP66	A
IP65	B
IP67	C
IP68	D

⑤ Temperature	
0...50 °C	T
-10...60 °C	T1
-20...70 °C	T2

③ Output	
Current Output (4-20mA 2 wires)	A2
Current Output (4-20mA 3 wires)	A3
Current Output (4-20mA 4 wires)	A4
Switch output (1 or 2 switches)	N1/N2
Relay (Upper & Lower alarm)	R1
Voltage output (0-5V)	V0
Voltage output (1-5V)	V1
Digital RS485(MCU Protocol)	R4
By Customized	X

④ Power Supply	
DC12V/max 300mA	U1
DC24V/max 300mA	U2
DC12V/max 300mA Ex	Ue