

PRODUCT OVERVIEW

LEVEL MEASUREMENT

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UL105 High Accuracy Ultrasonic Level Sensor

Profile

UL105 Ultrasonic Level Transmitter is developed based on 30 years of experience in industrial measurement and control specifically for low-cost, small installation space. It features features strong anti-interference performance; free setting of upper and lower limits and online output regulation, on-site display, optional analog, switching value, and RS485 output and easy connection with main unit. uses SMD components and ASIC which is developed together with the United States partner. All these features realize a concise and smart level transmitter.

It features wide work voltage, backup and recovery parameter setting, the range of analog output can be adjusted freely; it supports custom serial port data format and increment/difference distance measurement is optional to measure air space or liquid level and other choices are provided depend on user's requirement such as 2 NPN, 2 relay output, voltage output,RS485output, and explosion-proof version.



Specifications

Model Parameter	UL105					
Measuring Range	1m, 2m					
Pressure Type	Gauge pressure; Negative pressure; Absolute pressure optional					
Blind Area	<0.06m,<0.15m					
Output	4~20mA	1~5V/1~10V	RS485 (Modbus)	3NPN		
Power Supply	12-24Vdc					
Accuracy	±1mm,±2mm					
Operating Temperature	Ordinary temperature					
Working pressure	atmosphere pressure					
Power consumption	<1.5W					
Frequency	20KHz~350KHz					
IP rating	IP65 (standard); IP68 by customized					

Dimension



Wiring

1. Wiring diagram of current (voltage) output connecting with secondary instrument

Level meter





2. Serial output connecting with PC



3. NPN output wiring diagram



Installation Notes

1. Sensor should be placed where there is no obstacle between emission surfaces and measured liquid, it also

should be far way from feeding ports, as the figure below.



2. Tank shape should be considered. Some types of container bring second echo, especially conical and spherical tank. A good installation place will solve the problem, as the figure below.





through the installation hole or flange, as the figure below.

4. If the liquid to be measured has sewage, afloat impurities or fluctuation, use a wave guide and the diameter of the wave guide should over 120mm, as the figure below.



ORDER INFORMATION

P/N					
UL105	1	3	1	0	1
SELECTION					
Range	1=1 m 2=2 m				
Output	3=4-20mA 5=0-5V				
Power supply	1=12Vdc 2=24Vdc				
Pressure type	0=50 ℃ 1=-1060 ℃ 2=-2070 ℃				
Cable length	1=Cable 1.5m X=Cable X m				