

TECHNOLOGY

**HOLYKELL®**

**UE2000 /  
US8000 / US9000**

**LEVEL**  
• DATASHEET •

1. Pressure Measurement   **2. Level Measurement**   3. Temperature Measurement  
4. Flow Measurement   5. Display & Control Instruments

**UE SERIES** Explosion Proof Type Ultrasonic Level Meter

**US SERIES** Universal Type Ultrasonic Level Meter

## Profiles



### UE2000(Explosion Proof Type)



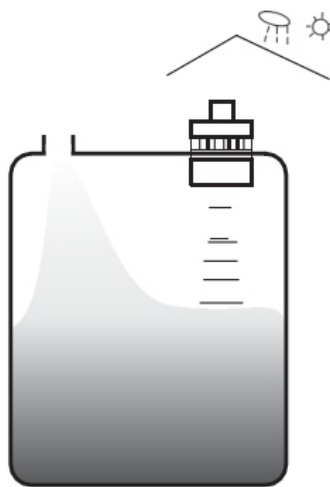
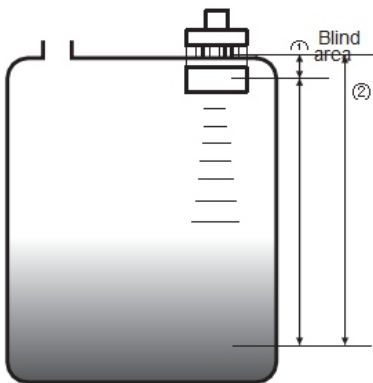
### US9000 (Segregated Type)



### US8000 (Integrative Type)

HOLYKELL's Ultrasonic level meter have beautiful appearance, stability performance; explore proof design and good measurement function. Isolated power supply by industrial instruments, all of the output, input lines with lightning protection, overvoltage, over current protection circuit functions. Transmitter function of small, weak energy, high sensitivity, bearing small; a complete sensor system can accurately complete the objects in different environments continuous non-contact measurement; small blind, high accuracy, wide application, send and receive integrated, which can accurately receive weak echo signals to ensure the accuracy and reliability.

## Installation



1. Measurement 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.

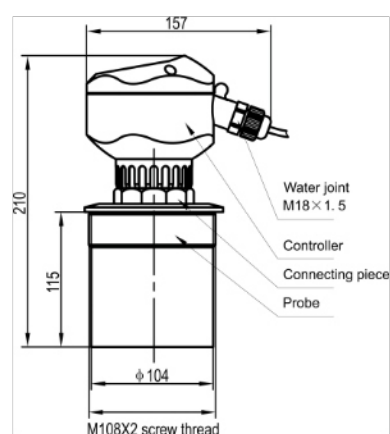
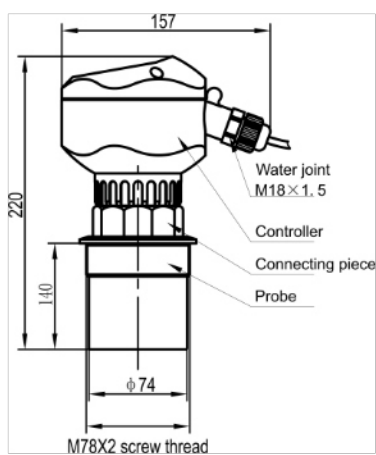
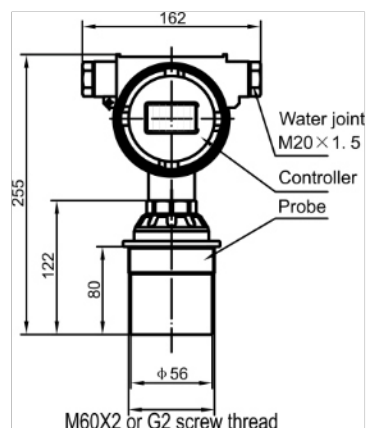
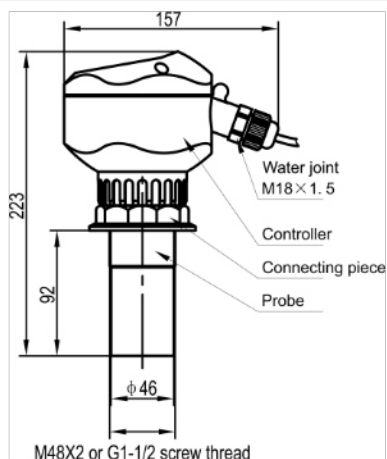
### Features

- 1.Support M78\*2 mm threaded into type installation and coil clamping type installation, the installation more convenient
- 2.Many model output optional customizable 4-20ma three-wire system, 1-5v, RS485 more customizable
- 3.Less than 9°C Beam angle design ,Resolution 3mm, less than 200ms responsible time to make sure more accuracy
- 4.Wide range of application,Sealed high-temperature toxic volatile,flammable and explosive of strongly corrosive liquid medium level measurement of non-contact ultrasonic sensors
- 5.Housing adopts the NLEPE synthetic material IP66 waterproof,Anti-Skid,Anti-corrosion,Anti-explosion structure
- 6.High quality terminal blocks ,Excellent anti-jamming is strong, long term stability and durability

### Specification

Functions	Integrative Type	Segregated Type
Level Range:	Standard Type: 5M, 10M, 15M, 20M,30M, 50M.	5M, 10M, 15M, 20M, 30M, 50M, 70M.
Accuracy:	0.25%-0.5%F.S	0.25%-0.5%F.S
Blind Zone:	0.25-0.8m	0.25-1.2m
Working Pressure:	2 Bar (Explore Proof Type is 5 Bar)	2 Bar
Resolution:	3mm or 0.1%F.S (Max of them)	3mm or 0.1%F.S (Max of them)
Display:	English language display: Level measurement, distance measurement, transmission value, ambient temperature, echo state, alarm display, algorithm selection.	English language display: Level measurement, distance measurement, transmission value, ambient temperature, echo state, alarm display, algorithm selection.
Analog Output:	4 ~ 20mA/750Ω load resistance (2 wire) 4 ~ 20mA/250Ω load resistance (4 wire) 1 ~ 5 V (3 wires);0 ~ 5 V (3 wires);0 ~ 10 V (3 wires)	4~20mA/750Ω load resistance 1~5 V (3 wires);0~5 V (3 wires) 0~10 V (3 wires)
Relay /Alarm Output:	AC 250V/ 8A; DC 30V/ 5A; State programmable (optional for 4 wire)	AC 250V/ 8A; DC 30V/ 5A; State programmable (optional)
Power Supply:	24VDC 120mA 12VDC (available to offer power by motor, battery or solar power and so on.)	220VAC+15% 50Hz 24VDC 120mA 12VDC (available to offer power by motor, battery or solar power and so on.)
Environment Temp:	Meter: -20 ~ +60°C Sensor: -20 ~ +80°C	Meter: -20 ~ +60°C Sensor: -20 ~ +80°C
Communication:	Rs485 Communications (optional)	Rs485 Communications (optional)
Explore Proof:	Ex(ia)IICT6	Not available
Water Proof:	Standard Type: IP66	Meter: IP65      Sensor: Ip68
Cable of Sensor:	Null	Standard: 10 Meters, Max to 200 Meters
Sensor Installation:	By level range and model code	By level range and model code
Store Request:	Temperature: -20 ~ +80°C Pressure: atmospheric pressure Humidity: ≤90%RH Others : Non-corrosive gases (optional corrosion probe) or steam, no vibration.	Temperature: -20 ~ +80°C Pressure: atmospheric pressure Humidity: ≤90%RH Others : Non-corrosive gases (optional corrosion probe) or steam, no vibration.

## Dimensions



## Wiring connection

Electronic Wires Connection		
Current	Red	Vcc+
	Yellow	Signal+
Voltage	Red	Vcc+
	Yellow	Signal+
	Black	GND
RS485	Red	Vcc+
	Yellow	RS485A
	White	RS485B
	Black	GND

### How to Order

Part Number Selection Table

Selection Type	UE2000	02	A	U1	A2	T1	002
Model	UE2000(Explosion Proof Type) US8000 (Integrative Type) US9000 (Segregated Type)						
Range	01= 1 Meter 02= 2 Meters ..... 15= 15 Meters						
Water Proof	A= IP66      B= IP65      C= IP67 D=IP68						
Power Supply	U1=DC12V/max 300mA U2=DC24V/max 300mA (UE3001) Ue=DC12V/max 300mA Ex						
Output	A2=Current Output (4-20mA 2 wires) A3=Current Output (4-20mA 3 wires) A4=Current Output (4-20mA 4 wires) N1/N2=Switch output (1 or 2 switches) J1 = Relay (Upper & Lower alarm) V1=Voltage output (0-5V) V2= Voltage output (1-5V) R=Digital RS485(MCU Protocol) X=By Customized						
Temperature	T= 0...50 °C T1= -10...60 °C T2= -20...70 °C						
Cable Length	001= 1 Meter	002= 2 Meters	X= By Customized				

### Application

