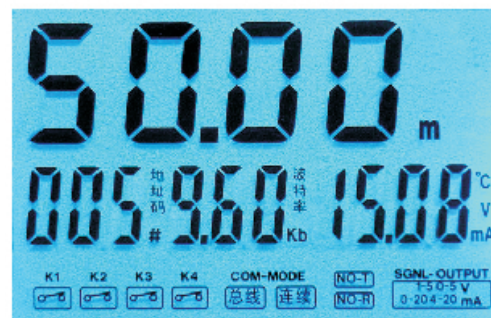# General Compact Ultrasonic Liquid Level Meter
GUT800

Unit：mm

Waterproof Cover

Waterproof Connectors

Fillet Of Screw

Thread M68*2.0mm

Sensor

109

178

M68×2.0

LED/LCD display screen

IN:V+
GND
OUT:4~20mA/1-5V
OUT:RS485-A
OUT:RS485-B
OUT:JO
OUT:JK

Connection Terminal
Display Interface
Button

▲ LED Display

Connection Terminal
Display Interface
Button

▲ LCD Display

Connection Terminal
Display Interface
Button
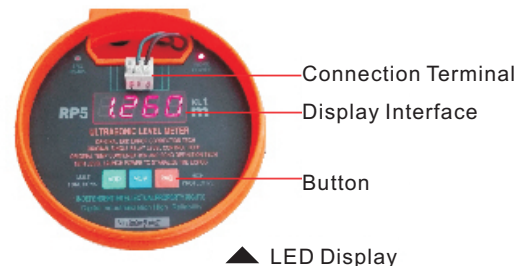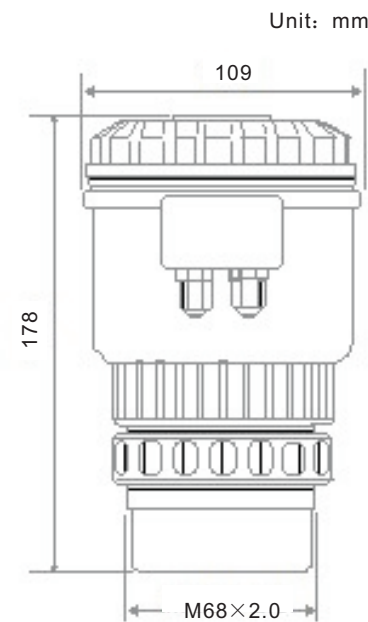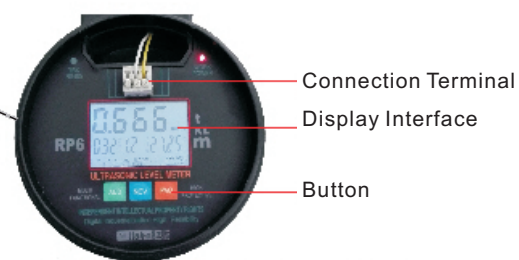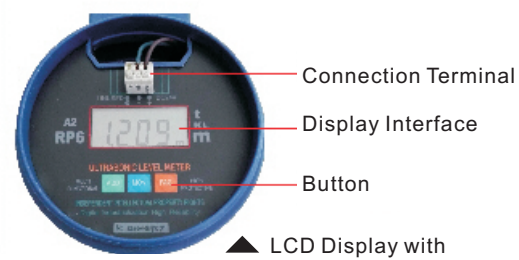
▲ LCD Display with 2-wire output signal

Product Introduction
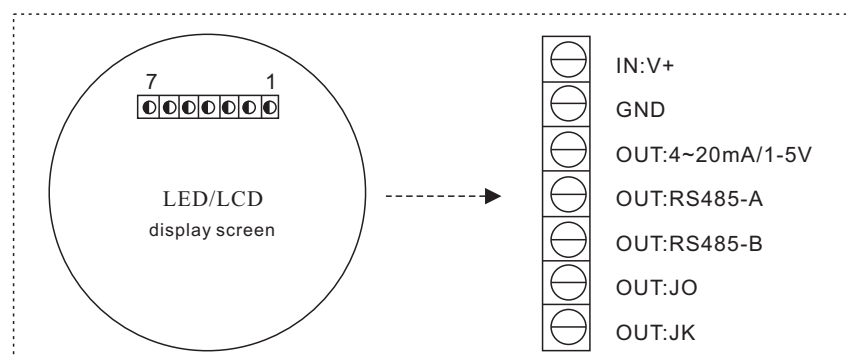
GUT800 General compact ultrasonic liquid level meter is high protection class and multi-function type measuring instrument. It is all sealed guard and up to IP68 protection class and suitable for high temperature environment. With a wide range of temperature compensation and the original ERD interference intelligent recognition system, the measurement can achieve high accuracy and stability. It can be used to measure distance or level, and the value would displayed in LED or LCD and transmitted a great distance.

Features

◆ Can display different informations include level, weight, temperature, output current / voltage, limit switches, level address, etc.

◆ Setting function of display stability, display resolution d = 1cm, d = 1mm (optional) With 4mA, 20mA digital adjustment function, it is easy to debug

◆ Select the transmit power level between 1-15, with setting function of detection period 10-100 times per second.

Mounting installation

Blind area
The Max.range
Detect the effective range
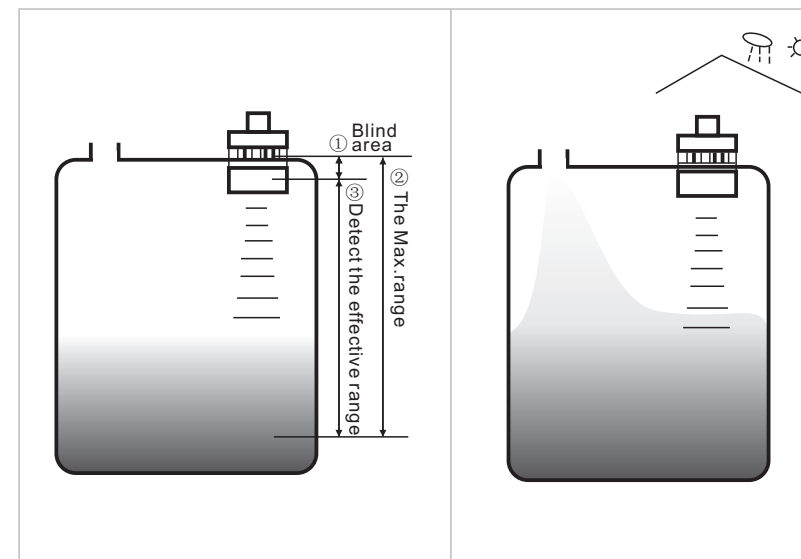
1. Measure reference surface is the bottom line of sensor
2. Highest solid level cannot enter into the blind area
3. Level measurement should avoid the feeling hole, aim the smoother level surface
4. Better use sun/rain shade when mounting in out field
5. When mounting, sensor should be kept distance 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.

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Non 2-wire Output Signal

Ultrasonic sensor	Low power-sensor	Middle power-sensor	Large power-sensor		
The Max. range	≤5m	≤7m	≤10m	≤12m	≤15m
Blind area	Standard: 300mm	400mm	500mm	600mm	800mm
	OEM:200mm	/	/		
Power supply	Standard: DC24V	DC24V	DC24V	DC24V	DC24V
	OEM: DC12V,AC220V	OEM:DC12V,AC220V	/		
Beam angle	15°	12°	9°		
Operating frequency	38K±10Khz	55K±10Khz	40K±5Khz		
Accuracy	Standard: ±0.5%F S or ±5mm; (at 25℃, Absolutely flat target under the condition of standard)				
	OEM: FS≤1m, accuracy can be ±1mm FS≤2m, accuracy can be ±3mm FS≤15m, accuracy can be ±0.25% FS				
Output signal	Standard: 4-20mA (3 wires)				
	OEM: 4-20mA(4 wires), 0-20mA, 0-5v, 1-5v 0-10v, 1-10v (both signal can not be customized DC12v)				
	Just support GUT800: Rs485, RS232(MCU protocol, PC protocol, Mod-bus protocol) 1-3pcs relay(AC220V can not be customized); 1-3pcs NPN switch signal; Multi-mode output: analog quantity+serial port; analog quantity+switch; serial port+switch; analog quantity+serial port+switch signal				
Measuring mode	Standard: Distance mode, the distance of ultrasonic sensor surface to measuring target surface				
	User setting: Level mode; the distance of level surface to level bottom(the bottom of tank) NOTE: Ensuring the distance of sensor surface to the level bottom is the actual mounting height, otherwise might be have installation error.				
Working temp.	Standard: -10~60℃				
	OEM: Negative Temp. -20℃,-30℃, -40℃; Positive Temp. 70℃,80℃				
Display Mode (Optional)	4-digit LED tube display				
Wiring Mode	Quick connect type terminal				
Installation	Screw type or sifter clamping ; screw size: M68*2.0mm				
Protection class	IP66, OEM of IP67, IP68				
Working environment	Normal pressure, non-explosion-proof; non-corrosive environment				
	OEM: anti-explosion symbol Exia II AT3 (DC12 V,range≤10m) The material sensor housing: PTFE for large power sensor Strong in corrosion resistance				
NOTES	When level range ≥15m, equip with other type ultrasonic sensors				

2-wire Output Signal

Ultrasonic sensor	Low power-sensor	Middle power-sensor	Large power-sensor		
The Max. range	≤5m	≤7m	≤10m	≤12m	≤15m
Blind area	Standard: 300mm	350mm	500mm	600mm	800mm
	OEM:200mm	/	/		
Power supply	Standard: DC24V	DC24V	DC24V	DC24V	DC24V
Beam angle	15°	12°	9°		
Operating frequency	38K±10Khz	55K±10Khz	40K±5Khz		
Accuracy	Standard: ±0.5%F S or ±5mm; (at 25℃, Absolutely flat target under the condition of standard)				
Output signal	Standard: 4-20mA (2 wires)				
Measuring mode	Standard: Distance mode, the distance of ultrasonic sensor surface to measuring target surface				
	User setting: Level mode; the distance of level surface to level bottom(the bottom of tank) NOTE: Ensuring the distance of sensor surface to the level bottom is the actual mounting height, otherwise might be have installation error.				
Working temp.	Standard: -10~60℃				
	OEM: Negative Temp. -20℃,-30℃; Positive Temp. 60℃,70℃				
Display Mode (Optional)	4-digit LED tube display				
Wiring Mode	Quick connect type terminal(can be customized cable outlet about 1m)				
Installation	Screw type or sifter clamping ; screw size: M68*2.0mm				
Protection class	IP66, OEM of IP67, IP68				
Working environment	Normal pressure, non-explosion-proof; non-corrosive environment				
	OEM: The material sensor housing: PTFE for large power sensor Strong in corrosion resistance				
NOTES	When level range ≥15m, equip with other type ultrasonic sensors				

Product Case

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