### **GUT600**

#### Description



The external level gauge uses the sonar ranging principle to measure the liquid level inside the container from the outside of the container. Realized non-contact measurement of the liquid level in the closed container. The sensor probe is installed directly below the bottom of the outer wall of the container, and there is no need to open a hole in the container, so it can be installed without stopping production. It can accurately measure the level of various toxic substances, strong acids, strong bases and various pure liquids in high temperature and high pressure closed containers.

Production process Control

0.01% high accuracy

- New temperature calibration
- Unique pipe calibration

Full range level tracking

Minimum dead zone 30mm

- Anti-precipitation
- · Double wall thickness

Greatly save your costs

External installation

- No downtime, no drilling
- · 24-hour after-sales support

#### Principle of Operation

The time is taken for the signal to be transmitted and then received from the liquid surface. Signals from the transducer are fed into the processor and then processed by patented algorithm to calculate the height of the liquid according to the formula:



$$H = v \times (\frac{t}{2} - \frac{t_{\rm g}}{2}) \times \alpha$$

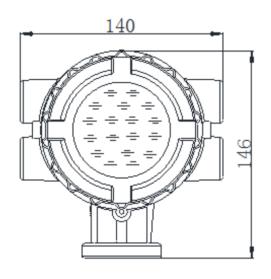
- H: height of the liquid
- v: velocity of sound in the liquid
- t: time between transmitted and received signal
- ts: propagation time in the tank wall
- $\boldsymbol{\alpha}$  :liquid compensation factor

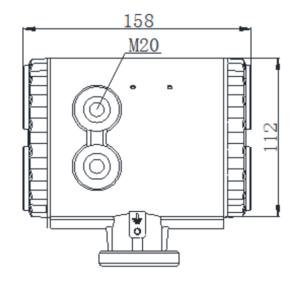
#### These liquild level can be measured.

Any medium you can tell us freely!

, ,	,		
Butadiene	Propylene	LPG	Propane
Liquid ammonia	Methyl alcohol	Methylbenzene	Butadiene
98% sulfuric acid	Diesel/Gasoline	Aviation kerosene	Naphtha
liquid chlorine	lso-butane	Epoxypropane	Acetone
Sulfuretted hydrogen	Styrene	N -butane	Xylene
Silicon tetrachloride	Tert-butylamine	Chloroform	Acetaldehyde
Hydrogen fluoride	Hydrofluoric acid	Butane	Hydroxy nickel

## **Dimension(unit:mm)**

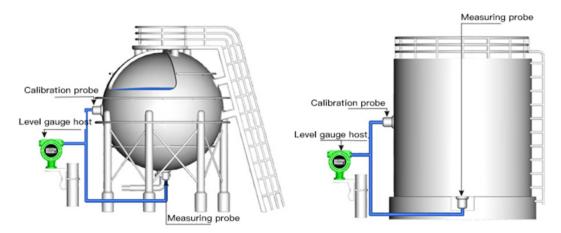




# **Specifications**

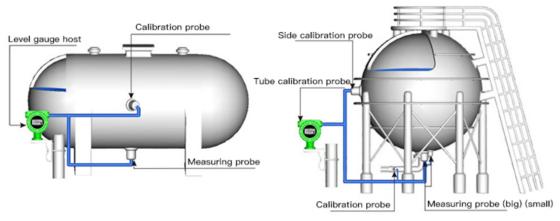
Power	Two wire / DC 24V	
Measure Range	3m, 5m, 10m 15m, 20m,30m, 50m	
Precision	10 mm	
Display Resolution	1 mm	
Output	4~20mA, Hart, Max Load 500Ω	
Communication	RS485, Hart, Modbus	
Alarm Relay Output	AC 250V 5A / DC 30V 5A	
Processor Temperature	-20°C~+70°C	
Sensor Temperature	-50°C~+100°C	
Hazardous Area Approval	ExdIICT6	
Protection Rating	IP67	
Display	128 x 64 LCD	
Electricial Connector	G1/2 or M20 x 1.5	
Max Sensor Length	30 m	
Weight	2 KG	
Dead Zone	5% of range (Max)	

#### Installation



Installation and calibration for ball tank

Vertical tank installation and calibration



Horizontal tank installation and calibration

Install without stopping production