

TECHNOLOGY

**HOLYKELL®**

**HU-TM**  
**LEVEL**  
• DATASHEET •

- 1. Pressure Measurement   2. Level Measurement   3. Temperature Measurement**  
**4. Flow Measurement   5. Display & Control Instruments**  
**6. Wireless Monitoring System   7. Velocity Measurement**

# HU-TM

## Non-intrusive Ultrasonic Level Gauge

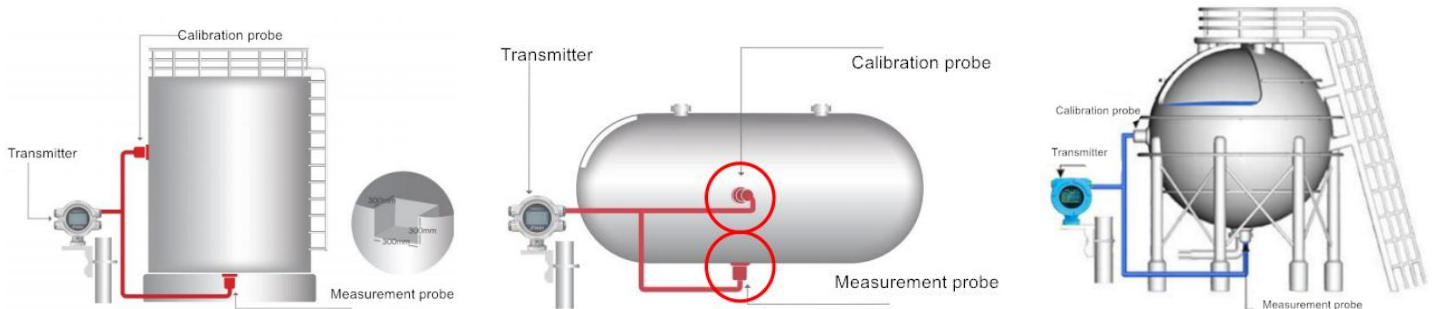
### Profile



HU-TM non-intrusive level gauge is an instrument that uses sonar distance measurement principles to measure the liquid level inside a container from the outside (bottom). This product achieves completely isolated measurement.

The level gauge breaks away from the traditional method of contacting the container by opening it, realizing true non-contact measurement of the liquid level inside a sealed container. The sonar sensor (probe) is installed directly below the container's outer wall (bottom), eliminating the need to drill holes in the container. It is easy to install and can be done without stopping production. It provides precise measurement of various toxic substances, strong acids, strong bases, and pure liquids inside high-temperature, high-pressure sealed containers

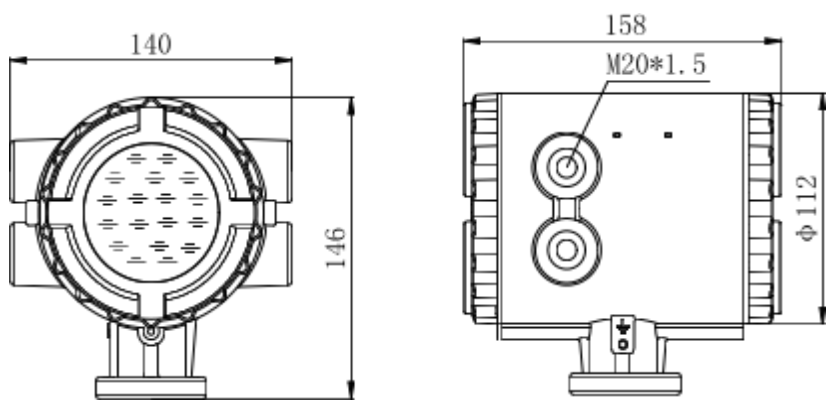
### Installation



### Specifications

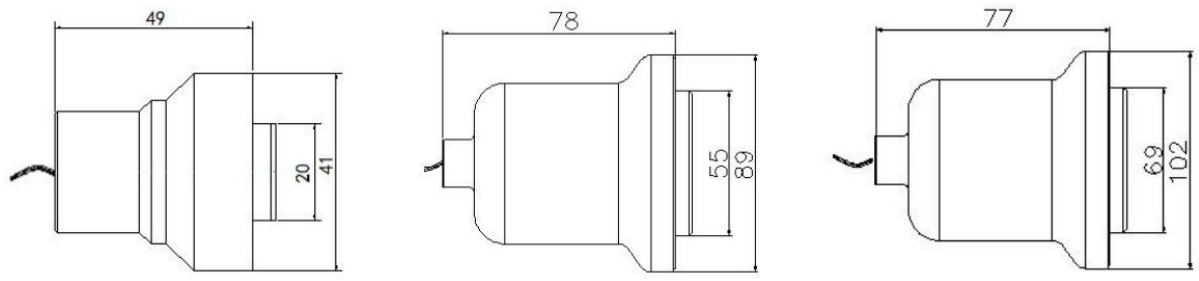
Non-intrusive level gauge	Two-wire system	Four-wire system
Range	5m, 10m, 20m, 30m, 40m, 50m	
Display resolution	1mm	
Short -term repeatability	1mm	
Measurement error	±1‰FS, ±2‰FS, ±5‰FS	
Temperature measurement range	-45°C ~ +100°C	
Temperature measurement accuracy	1°C	
Migration amount	±9.9 m	
Signal output	4 ~ 20mA (Max load 500Ω), HART, Modbus	
Power supply	DC24V( 22V~36V )	DC 24V(18V~30V )
Power	1W	10W
Communication	RS-485, Infrared, HART, Modbus	
Relay alarm output	DC 30V 5A	
Host operating ambient temperature	-20°C ~ +70°C ( below -20°C or above 70°C need to be customized)	
On-site displayed ambient temperature	-20°C ~ +70°C	
Probe operating ambient temperature	-20°C ~ +70°C (below -20°C or above 70°C need to be customized)	
Operating ambient humidity	(0% to 95%) RH	
Explosion-proof	Ex db II C T6 Gb	
Enclosure Protection	IP67	
Liquid level display	128×64 LCD display	
Blind area	For ideal working condition, the blind area is 3cm, the specific value is determined by the complexity of the working condition	
Electrical interface	M20×1.5 (F), 1/2 NPT (F)	
Probe to host cable length	5m, 10m, 20m, 30m	
Host weight	2KG	
Host dimensions	Length 160mm x width 140mm x height 150mm	

**Host Outline and Dimensions**



Host outline and dimension(unit, mm)

**Probe Outline and Dimensions**



Small level probe sensor

Medium level probe sensor

Large level probe sensor

### How To Order

<b>HU-TM</b>	<b>02</b>	<b>T</b>	<b>H</b>	<b>F</b>	<b>N</b>	<b>D</b>	<b>S</b>	<b>O</b>
Selection Type								
Range	01= 0~5m 03=0~20m 04=0~40m X=By customized	02= 0~10m 03=0~30m 05=0~50m						
Signal type	T=Two-wired F=Four-wired X=by customized							
Tank type	H=Horizontal storage tank V=Vertical storage tank S=Spherical storage tank VH=Vertical horizontal tank E= Others							
Tank material	F=Ferromagnetic N=Non-ferromagnetic							
Temperature range	N=Normal temperature (-20°C~70°C) H=High temperature (70°C~200°C) L=Low temperature (-120°C~70°C) E=Higher than 200°C or lower than -120°C needs to be customized							
Calibration	D=Diameter calibration T=Temperature calibration N=No calibration							
Output	S=4-20mA H=Hart protocol M=Modbus protocol R=Relay alarm X=Other output methods need to be customized							
Cable	O=Ordinary cable A=Armored cable X=Other cables by customized							

### Applications

