



## **MH-A UNIVERSAL ULTRASONIC (LIQUID) LEVEL METER**



### **Product Introduction**

**MH-A Universal Ultrasonic (liquid) level meter**, is our company based on years of experience in the development and manufacture of universal ultrasonic level meter. It bachelor of the public, drawing on a variety of advantages at home and abroad meter. To achieve a fully digital, user-friendly design concept, with a sound material/level measurement and control, data transmission and interpersonal communication. It uses engineering plastic ABS waterproof shell, the shell is small and very strong. The main chip adopts imported industrial-grade single-chip microcomputer and so on dozens of related special purpose integrated circuit, digital temperature compensation and wide voltage input voltage regulator. Modular circuit design, military quality multi-layer PCB board, hardware structure close, reasonable layout. But also according to customer needs to add modules to achieve other functions (such as: Bluetooth, GPRS communications, etc.). With strong anti-interference, can be arbitrarily set the upper and lower nodes and on-line output adjustment, with a live display, select the analog, switch-level RS485 output, easy access to related facilities. With high reliability, no pollution, stable performance, without contact with industrial media will be able to meet most of the liquid level, material level measurement requirements. Completely solve the pressure, capacitive, float and other traditional measurement methods to bring the winding, plugging, leakage, media corrosion, maintenance and other shortcomings. So it can be widely used in material level, liquid level measurement and control related to various fields. **This product is approved by the national authority of the inspection, the product in line with GB3836.1-2010 and GB3836.4-2001 countries will be required, explosion-proof mark: ExiaII BT4Gb.**

### **Feature Of Product**

- ★ This product built-in GPRS, Wifi achieve Internet of things
- ★ Backup and restore settings parameters
- ★ Measurable level, level, volume, weight and so on
- ★ Can adjust the analog output
- ★ With digital filtering and echo recognition
- ★ Can be manually set fixed interference filter function
- ★ Support for custom sound velocity (Special material measurement)
- ★ Support custom serial data format (Selected when ordering)
- ★ Support for custom mathematical function operation

### **Application areas**

- ☆ Water and sewage treatment pump-Water wells, Biochemical reaction pool, Sedimentation tank and so on
- ☆ Power, Mine mortar pool-Coal slurry pool, Butter storage tank, Stacking field or part of the mobile device control
- ☆ Food industry-Wineries, granaries, Food materials installed tank and so on
- ☆ Supporting the use of control systems

## **Performance**

Range: 2m, 5m, 8m, 10m, 12m, 15m, 20m, 25m, 30m (When ordered)

Blind zone: <0.25-1.5m (Varies by range)

Emission angle: less than 10 ° (Depending on the sensor)

Minimum display resolution: 1mm

Frequency: 20KHz ~ 2000KHz

Accuracy:  $\pm 0.3\%$  F.S

Temperature compensation: Automatic temperature compensation

Display: LED, LCD, OLED (Optional)

Field settings: The machine button to complete

## **Output (When Ordered)**

Analog output signal: 0~20mA; 4~20mA load  $>300\Omega$ ; 0~5V; 0~10V

Digital output: RS485 (Modbus support);

Wireless transmission: Built-in GPRS wireless communication optional SMS data tips (Acquisition system can be customized)

Switch output: Two way NPN/relays (AC: 5A 250V DC: 10A 24V)

## **Power Supply (When Ordered)**

Operating voltage: DC12-24V or AC220V

Power consumption:  $< 1.5W$

## **Physical Characteristics**

Dimensions:  $\Phi 74mm \times 132mm \times G1\ 1/2$  (2m range)

$\Phi 92mm \times 198mm \times M60$  (5m-15m range)

$\Phi 92mm \times 270mm \times DN80$  non-standard flange (20m-30m range)

Installation interface: G1 1/2 pipe thread or  $\Phi 50mm$  round hole with large gong ring (2m range)

M60  $\times$  2 or  $\phi$  61mm round hole with large gong ring (5m-15m range)

DN80 non-standard flange (20m-30m range)

Shell material: ABS engineering plastics, nylon

Line cable: User-defined length (built-in terminal)

Electrical connection: M20  $\times$  1.5

Keyboard: Three touch : A, B, C key

## **Environmental Performance**

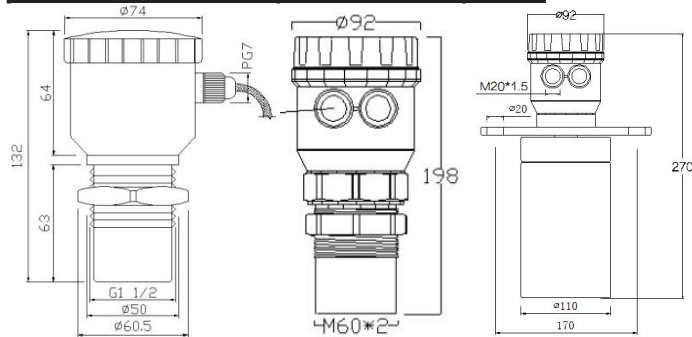
Environmental performance Protection class: IP65 (Can be customized higher protection level)

Explosion-proof grade: EXiall BT4Gb (When ordered)

Working environment: Room temperature/Atmospheric pressure

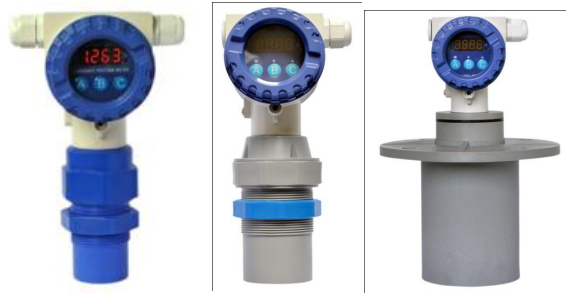
Storage humidity:  $\leq 80\%$  RH No condensation

## **Product Dimension (Unit: mm)**





## MH-GA CAST ALUMINIUM ULTRASONIC (LIQUID) DEVICE



### Product Introduction

**MH-GA cast aluminum ultrasonic (liquid) device**, is based on years of experience in the development and manufacture of general-purpose ultrasonic level meter. It bachelors of the public, drawing on a variety of advantages at home and abroad meter. To achieve a fully digital, user-friendly design concept, I upgraded the Secretary for the high-end products. Shell with cast aluminum waterproof shell, the use of international electrical interface. Standard terminal blocks for easy construction and installation; transparent observation window, more convenient level data observation. With perfect material / level monitoring and control, data transmission and human-computer communication. The main chip adopts imported industrial single-chip microcomputer, digital temperature compensation and ultra-wide voltage input regulator dozens of related special purpose integrated circuits. With strong anti-interference, can be arbitrarily set upper and lower nodes, online output adjustment, with a live display. Can choose analog, switch and RS485 output, convenient interface with the relevant facilities. It is highly reliable. No pollution. Stable performance. Do not have to contact the industrial medium can meet most of the liquid level, material level measurement requirements. Completely solve the pressure, capacitive, float and other traditional measurement methods to bring the winding, plugging, leakage, media corrosion, maintenance and other shortcomings. So it can be widely used in material level, liquid level measurement and control related to various fields. **This product is approved by the national authority of the inspection, the product in line with GB3836.1-2010 and GB3836.4-20010 national standards, explosion-proof mark: ExiaIBT4Gb.**

### Performance characteristics

- ★ International common electrical interface easy to construction
- ★ Strong, stable sensor for harsh industrial occasions
- ★ Anti-interference strong, can be arbitrarily set the upper and lower nodes and online output adjustment
- ★ Transducer built-in temperature sensor to achieve real-time measurement of real-time temperature compensation
- ★ Blind area can also be manually set, shielding the signal near the probe interference
- ★ 4~20MA current output, optional field bus interface

### Application areas

- ☆ Water and sewage treatment pump-Water wells, biochemical reaction pool, sedimentation tank and so on
- ☆ Power, mine mortar pool-Coal slurry pool, butter storage tank, stacking field or part of the mobile device control
- ☆ Food industry-Wineries, granaries food materials installed tank and so on
- ☆ Supporting the use of control systems

## **Performance**

Range: 2m, 5m, 8m, 10m, 12m, 15m, 20m, 25m, 30m (When ordered)

Blind zone: <0.25- 1.5m (Varies depending on range)

Launch angle: less than 12 ° (Depending on the sensor)

Minimum display resolution: 1mm Frequency: 20 KHz ~ 2000KHz

Accuracy:  $\pm 0.3\%$  F.S

Temperature compensation: Automatic temperature compensation

Display: LED, LCD, OLED (optional)

Field setting: Through the object/level instrument button to complete

## **Output (Order Selected)**

Analog output signal: 0~20mA; 4~20mA load  $>300\Omega$ ; 0~5V; 0~10V

Digital output: RS485 (Modbus support)

Switch output: Two ways NPN

## **Power Supply (Order Selection)**

Operating voltage: DC12-24V or AC220V

Power consumption: <1.5W

## **Physical Characteristics**

Dimensions:  $\Phi 79\text{mm} \times 210\text{mm} \times \text{G1 } 1/2$  (2m range)

$\Phi 79\text{mm} \times 223\text{mm} \times \text{M60}$  (5m-15m range)

$\Phi 79\text{mm} \times 270\text{mm} \times \text{DN80 non-standard flange}$  (20m-30m range)

Installation: G1 1/2 or  $\phi 47\text{mm}$  round hole with large gong ring (2m range)

M60  $\times$  2 or  $\phi 61\text{mm}$  round hole with large gong ring (5m-15m range)

DN80 non-standard flange (20m-30m range)

Shell material: Cast aluminum

Sensor material: ABS/Nylon

Electrical connection: M20X1.5 (two groups)

Keyboard: Three SMD A, B, C keys

Line cable: User-defined length (Built-in terminal)

## **Environmental Performance**

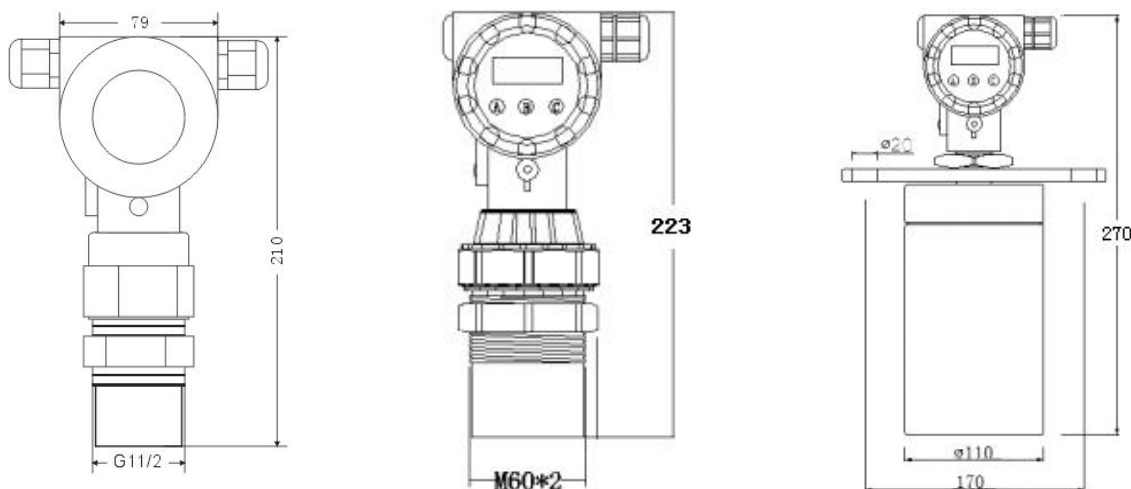
Protection class: IP65 (Customizable higher degree of protection)

Explosion-proof grade: EXiaII BT4Gb (When ordered)

Working environment: Normal temperature and pressure

Storage humidity:  $\leq 80\%$  RH No condensation

## **Product Dimension (Unit: mm)**



## **MH-NA CHINESE AND ENGLISH BILINGUAL MENU ULTRASONIC (LIQUID) INSTRUMENT**



### **Product Introduction**

**MH-NA chinese and english biligual menu ultrasonic (liquid) instrument**, is based on years of experience in the development and manufacture of general-purpose ultrasonic level meter. It bachelor of the public, drawing on a variety of advantages at home and abroad meter. To achieve a fully digital, user-friendly design concept, I upgraded the Secretary for the high-end products. Shell with waterproof shell, the use of international electrical interface, a standard terminal, easy to install the installation, a waterproof seal. With perfect material / level monitoring and control, data transmission and human-computer communication. Using large-scale integrated circuits, component chip rate of 90%, to ensure the long-term reliability of the product. While reducing its power consumption to a very low. Large screen display full Chinese menu easy to use, can record ten interference echo points. The main chip adopts imported industrial single-chip microcomputer, digital temperature compensation and ultra-wide voltage input regulator dozens of related special purpose integrated circuits. With anti-interference strong, can be arbitrarily set the upper and lower nodes and on-line output adjustment, with on-site display, select the analog, switch and RS485 output, convenient interface with the relevant facilities. It is highly reliable, non-polluting, stable performance, without contact with industrial media can meet most of the liquid level, material level measurement requirements. Completely solve the pressure, capacitive, float and other traditional measurement methods to bring the winding, plugging, leakage, media corrosion, maintenance and other shortcomings. So it can be widely used in material level, liquid level measurement and control related to various fields. **This product is approved by the national authority of the inspection, the product in line with GB3836.1-2010 and GB3836.4-20010 national standards, explosion-proof mark: ExiaIBT4Gb.**

### **Feature Of Product**

- ★ This product built-in GPRS, Wifi achieve Internet of things
- ★ Four-wire isolation (compatible with three-wire)
- ★ Backup and restore settings parameters
- ★ Can measure the level, level, volume, weight
- ★ Can be adjusted to the analog output
- ★ Chinese and English bilingual menu
- ★ With digital filtering and echo recognition
- ★ Can be manually set fixed interference filter function
- ★ Support for Bluetooth, GPRS communication (Selected when ordering)
- ★ Support for custom serial data format (Selected when ordering)
- ★ Support for custom main display interface
- ★ Support for custom mathematical function operation
- ★ Support for custom sound velocity (Special material measurement)
- ★ Support MiniSD card data acquisition (Selected when ordering)

## **Application Areas**

- ☆ Water and sewage treatment pump-Water wells biochemical reaction pool, sedimentation tank and so on
- ☆ Power, mine mortar pool-Coal slurry pool, butter storage tank, stacking field or part of the mobile device control
- ☆ Food industry-Wineries, granaries, food materials installed tank and so on
- ☆ Supporting the use of control systems

## **Performance**

Range: 3m, 5m, 8m, 10m, 12m, 15m (When ordering)  
Blind zone: <0.25- 1.5m (Varies depending on range)  
Launch angle: Less than 12 ° (Depending on the sensor)  
Minimum display resolution: 1mm  
Frequency: 20 KHz ~ 2000KHz  
Accuracy:  $\pm 0.3\%$  F.S  
Temperature compensation: Automatic temperature compensation  
Display: Display: 1.8 inch Chinese LCD  
Field settings: Through the object/level instrument button to complete  
Keyboard: 4-bit patch button can be automatically switched in English menu

## **Output (Selected when ordering)**

Analog output signal: 0~20mA; 4~20mA load >300 $\Omega$ ; 0~5V; 0~10V  
Digital output: RS485 (Modbus support)  
Switch output: Two ways NPN/relays (AC: 5A 250V DC: 10A 24V)

## **Power supply (when ordered)**

Operating voltage: AC220V or DC12-24V  
Power consumption: <1.5W

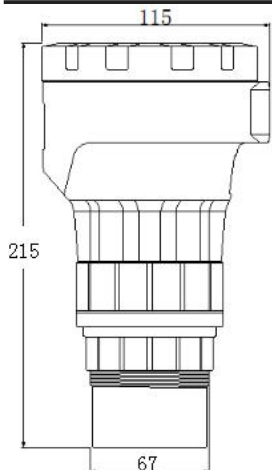
## **Physical characteristics**

Dimension:  $\Phi 115\text{mm} \times 215\text{mm} \times \text{M67}$   
Line cable: user-defined length (built-in terminal)  
Electrical connection: M20X1.5 (two groups)  
Installation: M67X2 or  $\phi 68\text{mm}$  round hole with a large gong ring

## **Environmental performance**

Protection class: IP65 (customizable higher degree of protection)  
Explosion-proof grade: EXiaII BT4Gb (when ordered)  
Working environment: normal temperature and pressure  
Storage temperature:  $\leq 80\%$  RH No condensation

## **Product Dimension (Unit: mm)**





## **MH-T SERIES (TI/TII) HIGH PRECISION SMALL BIND AREA ULTRASONIC (LIQUID) DEVICE**



### **Product Description**

**MH-T series (TI/TII) high precision small blind area ultrasonic (liquid) device** is our company brand for the small blind area, high precision, small space conditions measured and developed. The first domestic blind area is less than 0.06m, the accuracy of up to  $\pm 1\text{mm}$  ultrasonic ranging products (has been the National Science and Technology Innovation Fund Project Award, Chongqing City, high-tech new products, key new products in Chongqing). Shell with ABS plastic plastic shell, the probe part of the PP or stainless steel, the shell is small and very strong; transparent cover design, easy to observe the display. The main chip adopts imported industrial single-chip microcomputer, digital temperature compensation and ultra-wide voltage input regulator dozens of related ASIC, the product performance more stable work more reliable. It has strong anti-interference, can be arbitrarily set by the host computer software on the lower limit node and online output adjustment, select the analog, switch and RS485 output, convenient interface with the relevant facilities. It is highly reliable, non-polluting, stable performance, do not touch the industrial medium can meet most of the liquid level, material level measurement requirements. Completely solve the pressure, capacitive, float and other traditional measurement methods to bring the winding, plugging, leakage, media corrosion, maintenance and other shortcomings. So it can be widely used in material level, liquid level measurement and control related to various fields. **This product is approved by the national authority of the inspection, the product in line with GB3836.1-2010 and GB3836.4-2010 national standards, explosion-proof mark: ExiaIBT4Gb.**

### **Performance Characteristics**

- ★ Strong, stable sensor for harsh industrial occasions
- ★ Anti-interference strong, can be arbitrarily set the upper and lower nodes and online output adjustment
- ★ Transducer built-in temperature sensor to achieve real-time measurement of real-time temperature compensation
- ★ 4~20mA current output, optional field bus interface
- ★ The first domestic 0.06m small blind spot level meter

### **Application Areas**

- ☆ water and sewage treatment pump-Water wells, biochemical reaction pool, sedimentation tank and so on
- ☆ power, mine mortar pool-Coal slurry pool, butter storage tank, stacking field or part of the mobile device control
- ☆ food industry-Wineries, granaries, food materials installed tank and so on
- ☆ supporting the use of control systems

## **Performance**

Range: 1m, 2m (When ordered)

Blind zone: <0.06-0.15m (Different from range)

Launch angle: less than 6° (Depending on the sensor)

Minimum display resolution: 1mm

Maximum error: Less than  $\pm 1\text{mm}$ , less than  $\pm 1.5\text{mm}$  (With the range and different)

Operating frequency: 40KHz~430.0KHz (Depending on model specifications)

Temperature compensation: Automatic temperature compensation

Display: Four eight-segment LED digital tube (Optional LCD display)

Field settings: Through the local button to complete

Calibration: Factory calibration, on-site calibration

## **Output (Selected when ordering)**

Analog output signal: 0~20mA; 4~20mA load  $>300\Omega$ ; 0~5V; 1~5V; 0~10V; 1~10V

Digital output: RS485 (Modbus support)

Switch output: Three ways NPN

## **Powered By**

Operating voltage: DC12-24V

Power consumption: <1.5W

## **Physical Characteristics**

Dimensions:  $\Phi 74\text{mm} \times 92\text{mm} \times \text{M30}$  (Stainless steel);

$\Phi 74\text{mm} \times 117\text{mm} \times \text{G1 } 1/2$  (ABS)

Installation: M30  $\times 1.5$ , G1 1/2

Shell material: ABS engineering plastics;

Transducer: Stainless steel or ABS plastic

Keyboard: Three patch A, B, C keyboard

Outlet way: Instrument standard socket or cable 1.5M (Optional length)

## **Environmental Performance**

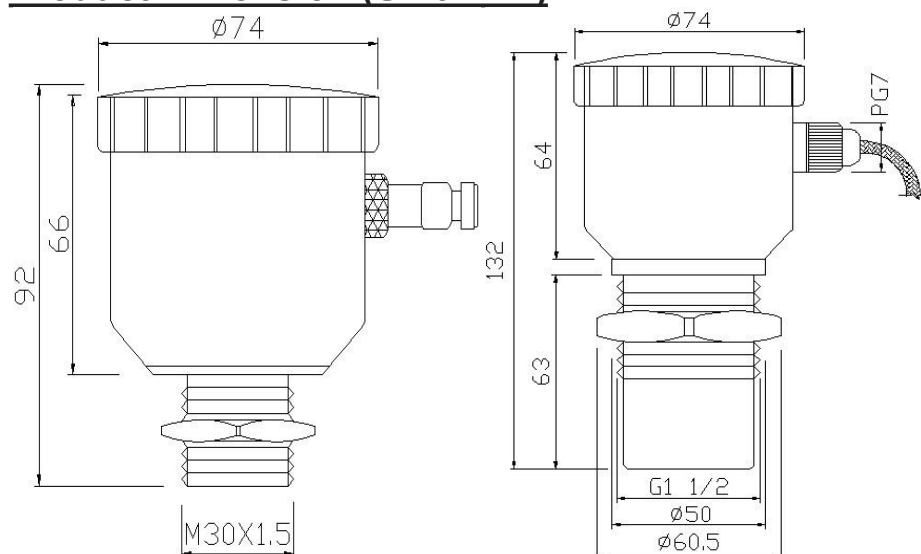
Protection class: IP65 (Customizable higher degree of protection)

Explosion-proof grade: EXiaII BT4Gb (When ordered)

Working environment: Room temperature/atmospheric pressure

Storage humidity:  $\leq 80\%$  RH No condensation

## **Product Dimension (Unit: mm)**





## **MH-CT HIGH PRECISION SMALL BLIND AREA ULTRASONIC (LIQUID) BIT TRANSMITTER**



### **Product Description**

**MH-CT high-precision small blind area ultrasonic (liquid) bit transmitter**, is our company brand for division for the small blind, high precision, small installation space of the conditions of monitoring and development. **Is the first domestic blind area is less than 0.06m, precision up to  $\pm 1\text{mm}$  ultrasonic ranging products (has been the National Science and Technology Innovation Fund Project Award, Chongqing City, high-tech new products, key new products in Chongqing)**. The main chip adopts imported industrial single-chip microcomputer, digital temperature compensation and ultra-wide voltage input regulator dozens of related ASIC, the product performance is more stable and more reliable work. It has strong anti-interference, can be arbitrarily set by the host computer software on the lower limit node and online output adjustment, select the analog, switch and RS485 output, convenient interface with the relevant facilities. It is highly reliable, non-polluting, stable performance, without contact with industrial media can meet most of the level measurement requirements, thus completely solve the pressure, capacitive, float and other traditional measurement methods to bring the winding, , Media corrosion, maintenance and other shortcomings. So it can be widely used in material level, liquid level measurement and control related to various fields. **This product is approved by the national authority of the inspection, the product in line with GB3836.1-2010 and GB3836.4-20010 national standards, explosion-proof mark: ExiaII BT4Gb.**

### **Performance Characteristics**

- ★ Strong, stable sensor for harsh industrial occasions
- ★ Anti-interference strong, can be arbitrarily set the upper and lower nodes and online output adjustment
- ★ Transducer built-in temperature sensor to achieve real-time measurement of real-time temperature compensation
- ★ 4~20mA current output, optional field bus interface
- ★ Small blind area can be less than 6cm, the domestic initiative
- ★ Suitable for small space environment.

### **Application Areas**

- ☆ Water and sewage treatment pump-Water wells, biochemical reaction pool, sedimentation tank and so on
- ☆ Power, mine mortar pool-Coal slurry pool, butter storage tank, stacking field or part of the mobile device control
- ☆ Food industry-Wineries, granaries, food materials installed tank and so on
- ☆ Supporting the use of control systems

## **Performance**

Range: 1m, 2m (When ordered)

Blind zone: <0.06-0.15m (Different from range)

Launch angle: less than 6° (Depending on the sensor)

Maximum error:  $\pm 1\text{mm}$ ,  $\pm 1.5\text{mm}$  (With the range and different)

Operating frequency: 40KHz~430.0KHz (Due to model specifications and different)

Temperature compensation: Automatic temperature compensation

## **Output (Selected when ordering)**

Analog output signal: 0~20mA; 4~20mA load >300 $\Omega$ ; 0~5V; 0~10V

Digital output: RS485 (Modbus support)

## **Powered By**

Operating voltage: DC12-24V

Power consumption: <1.5W

## **Physical Characteristics**

Dimensions:  $\Phi 28\text{mm} \times 100\text{mm} \times \text{M30}$

Shell material: 304 stainless steel

Connection: Threaded or screw ring fixed

Installation: M30  $\times$  1.5

Outlet way: Instrument standard socket (With cable 1.5m)

## **Environmental performance**

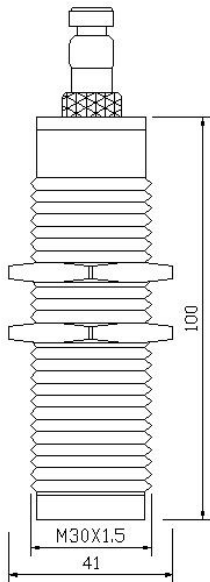
Protection class: IP65 (Customizable higher degree of protection)

Explosion-proof grade: EXiaII BT4Gb (When ordered)

Working environment: Room temperature/atmospheric pressure

Storage humidity:  $\leq 80\%$  RH No condensation

## **Product Dimension (Unit: mm)**



## **MH-CA/CR THREE-WIRE/TWO-WIRE ULTRASONIC (LIQUID) BIT TRANSMITTER**



### **Product Description**

**MH-CA/CR three-wire/two-wire ultrasonic (liquid) bit transmitter**, is my company for the latest low-cost, small installation space, equipment and other supporting the application of the design conditions. It learned from the crowd, learned a variety of objects at home and abroad advantages, to achieve a full digital, two-wire system joined the HART protocol. User-friendly design concept, with a sound material / liquid level control. The main chip adopts imported industrial single-chip microcomputer, digital temperature compensation and ultra-wide voltage input regulator dozens of related special purpose integrated circuits. With strong anti-interference, do not have to contact the industrial medium can meet most of the level measurement requirements. Completely solve the pressure, capacitive, float and other traditional measurement methods to bring the winding, plugging, leakage, media corrosion, maintenance and other shortcomings. So it can be widely used in material level, liquid level measurement and control related to various fields.

**This product is approved by the national authority of the inspection, the product in line with GB3836.1-2010 and GB3836.4-20010 national standards, explosion-proof mark: ExiaIIBT4Gb.**

### **Features**

- ★ Strong, stable sensor for harsh industrial occasions
- ★ Strong anti-interference and online output adjustment
- ★ Transducer built-in temperature sensor to achieve real-time measurement of real-time temperature compensation
- ★ Parameters can be set through the RS485, you can also external debugging resistor to set the internal parameters of the machine
- ★ Shield the probe near the interference signal
- ★ 4~20mA current output, optional field bus interface

### **Application Areas**

- ☆ Water and sewage treatment pump-Water wells, biochemical reaction pool, sedimentation tank and so on
- ☆ Power, mine mortar pool-Coal slurry pool, butter storage tank, stacking field or part of the mobile device control
- ☆ Food industry-Wineries, granaries, food materials installed tank and so on
- ☆ Supporting the use of control systems

## **Performance**

Level: 2m, 5m, 8m, 10m, 12m, 15m, 20m, 25m, 30m (When ordered)

Detection of blind spots:  $\leq 0.25 \sim .5m$  (With the range and different)

Launch angle: less than  $12^\circ$  (Different from sensor)

Detection accuracy:  $\pm 0.3\%$  F.S

Display: None

Temperature compensation: Automatic temperature compensation

Operating frequency: 20KHz~43.0KHz

## **Output (Order selected)**

Analog output signal: 0~20mA; 4~20mA load  $> 300\Omega$ ; 0~5V; 0~10V

Digital output: RS485 (Support Modbus), HART protocol (Two-wire system)

Switch output: NPN

## **Powered By**

Working power: DC12~24V (Three-wire), DC24-32V (Two-wire)

Power consumption: Less than 1.5W (Three-wire), less than 0.8W (Two-wire)

## **Physical Characteristics**

Dimensions:  $\Phi 55mm \times 119mm \times G1\ 1/2$  (2m range)

$\Phi 74mm \times 135mm \times M60$  (5m-15m range)

$\Phi 109mm \times 200mm \times M30$  (20m-30m range)

Installation: G1 1/2 or  $\Phi 47MM$  round hole (2m range)

M60X2 or  $\Phi 61mm$  round hole (5m-15m range)

M30X1.5 or DN80 non-standard flange (20m-30m range)

Shell material: ABS engineering plastics, nylon

Line cable: 1.5m (Optional length)

## **Environmental Performance**

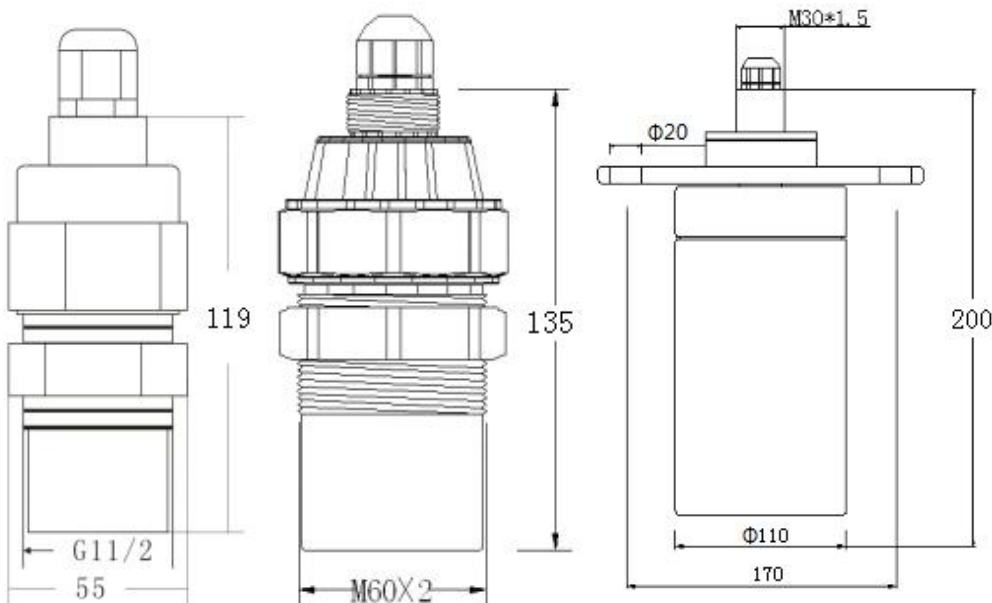
Protection class: IP65 (customizable higher degree of protection)

Explosion-proof grade: EXiall BT4Gb (when ordered)

Working environment: Room temperature / atmospheric pressure

Storage humidity:  $\leq 80\%$  RH No condensation

## **Product Dimension (Unit: mm)**





## **MH-R (2014) TWO-WIRE ULTRASONIC (LIQUID) DEVICE**



### **Product Description**

**MH-R (2014) two-wire ultrasonic (liquid) device**, is my company learned a variety of similar products at home and abroad and the advantages of the development, the use of the latest energy-saving components, so that the machine operating current is less than 3.5mA, can work reliably in the 9-32V DC power supply voltage. Comes with LCD display, easy to set the scene. It does not have to contact the industrial medium can meet most of the level measurement requirements, thus completely solve the pressure, capacitance, float and other traditional measurement methods to bring the winding, plugging, leakage, media corrosion, maintenance and other shortcomings. So it can be widely used in material level, liquid level measurement and control related to various fields.

The upgraded version joins the HART protocol communication support, which compensates the shortcomings of the two-wire instrument without data output and can communicate directly with the HART field instrument.

**This product is approved by the national authority of the inspection, the product in line with GB3836.1-2010 and GB3836.4-20010 national standards, explosion-proof mark: ExiaIBT4Gb.**

### **Features**

- ★ Can adjust the analog output
- ★ Backup and restore settings parameters
- ★ With digital filtering and echo recognition
- ★ 4~20mA current output, with HART protocol;
- ★ Strong, stable sensor for harsh industrial occasions;
- ★ Transducer built-in temperature sensor to achieve real-time measurement of real-time temperature compensation.

### **Application Areas**

- ☆ Water and sewage treatment pump-Water wells, biochemical reaction pool, sedimentation tank and so on
- ☆ Power, mine mortar pool-Coal slurry pool, butter storage tank, stacking field or part of the mobile device control
- ☆ Food industry-Wineries, granaries, food materials installed Sheng tank and so on
- ☆ Supporting the use of control systems

## **Performance**

Range: 2m, 5m, 8m, 10m, 12m, 15m, 20m, 25m, 30m (When ordered)

Blind zone: <0.25-1.5m (Different from range)

Launch angle: less than 10 ° (Different from sensor)

Accuracy:  $\pm 0.3\%$  F.S

Minimum display resolution: 1mm

Temperature compensation: Automatic temperature compensation

Operating frequency: 20 KHz ~ 2000KHz (Depending on model specifications)

Field settings: Through the local button to complete

Calibration: Factory calibration, on-site calibration

Display: LCD

## **Output (Optional)**

Output signal: 4~20mA Load impedance width (0~1K $\Omega$ )

Digital output: HART protocol

## **Powered By**

Operating voltage: DC24-32V

Power consumption: <0.8W

## **Physical Performance**

Dimensions:  $\Phi 74\text{mm} \times 132\text{mm} \times \text{G } 1 \frac{1}{2}$  pipe thread (2m range)

$\Phi 92\text{mm} \times 198\text{mm} \times \text{M60}$  (5m-15m range)

$\Phi 92\text{mm} \times 270\text{mm} \times \text{DN80}$  non-standard flange (20m-30m range)

Installation interface: G1 1/2 pipe thread or  $\phi 47\text{mm}$  round hole with large gong ring (2m range)

M60  $\times$  2 or  $\phi 61\text{mm}$  round hole with large gong ring (5m-15m range)

DN80 non-standard flange (20m-30m range)

Shell material: ABS engineering plastics, nylon

Line cable: User-defined length (Built-in terminal)

Electrical connection: M20 x 1.5

## **Environmental Performance**

Protection class: IP65 (Customizable higher degree of protection)

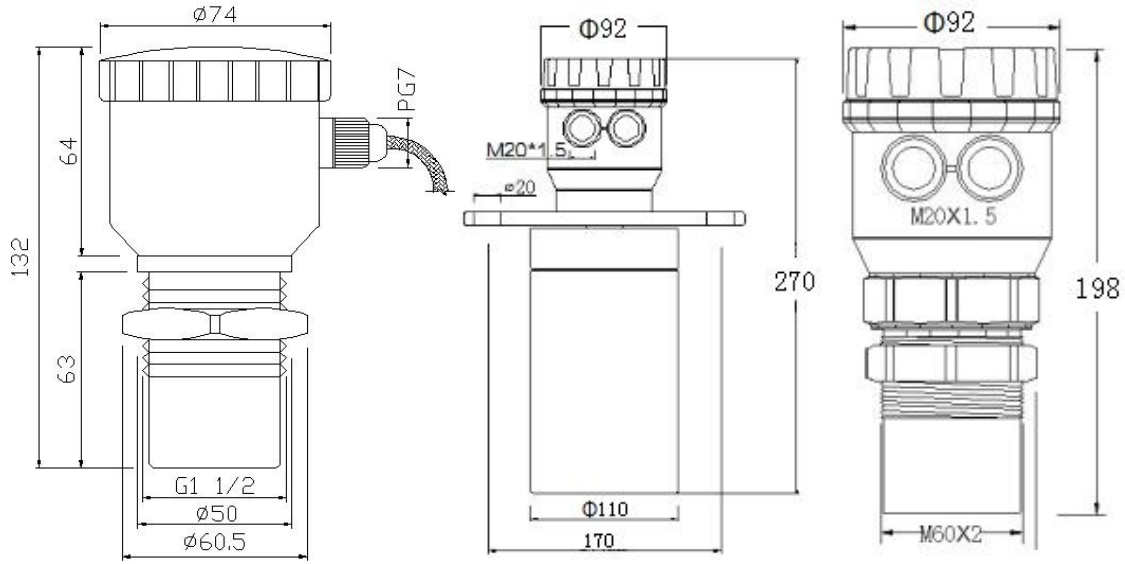
Explosion-proof grade: EXiaII BT4Gb (When ordered)

Working environment: Room temperature/atmospheric pressure

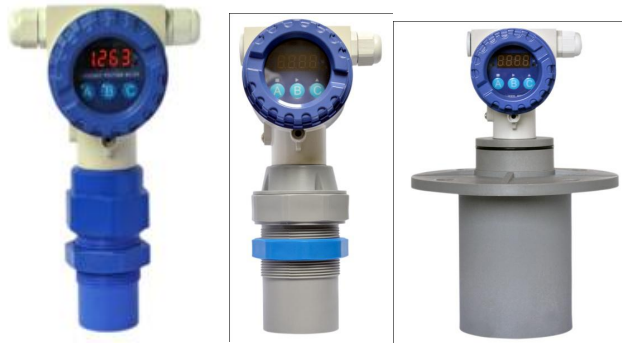
Storage humidity:  $\leq 80\%$  RH No condensation

## **Product Dimension Description (Unit mm)**





## **MH-GR CAST ALUMINIUM TWO-WIRE ULTRASONIC (LIQUID) DEVICE**



### **Product Description**

**MH-GR cast aluminum two-wire ultrasonic (liquid) device**, is my company to absorb the advantages of similar products at home and abroad and the development of two-wire ultrasonic measurement products. Using the latest energy-saving components, the machine operating current is less than 3.5mA, can work reliably in the 9-32V DC power supply voltage. Using cast aluminum shell, comes with LCD display, easy to set the scene. It does not have to contact the industrial medium can meet most of the level measurement requirements, thus completely solve the pressure, capacitance, float and other traditional measurement methods to bring the winding, plugging, leakage, media corrosion, maintenance and other shortcomings. So it can be widely used in material level, liquid level measurement and control related to various fields.

The upgraded version joins the HART protocol communication support, which compensates the shortcomings of the two-wire instrument without data output and can communicate directly with the HART field instrument.\_\_\_\_

**This product is approved by the national authority of the inspection, the product in line with GB3836.1-2010 and GB3836.4-20010 national standards, explosion-proof mark: ExiaIBT4Gb.\_**

### **Features**

- ★ Can adjust the analog output
- ★ Backup and restore settings parameters
- ★ With digital filtering and echo recognition
- ★ 4~20mA current output, with HART protocol
- ★ Strong, stable sensor for harsh industrial occasions
- ★ Transducer built-in temperature sensor to achieve real-time measurement of real-time temperature compensation

### **Application Areas**

- ☆ Water and sewage treatment pump-Water wells, biochemical reaction pool, sedimentation tank and so on
- ☆ Power, mine mortar pool-Coal slurry pool, butter storage tank, stacking field or part of the mobile device control
- ☆ Food industry-Wineries, granaries, food materials installed tank and so on
- ☆ Supporting the use of control systems

## **Performance**

Range: 2m, 5m, 8m, 10m, 12m, 15m, 20m, 25m, 30m (when ordered)

Blind zone: <0.25-1.5m (Different from range)

Field settings: Through the local button to complete

Launch angle: Less than 12° (Different from sensor)

Minimum display resolution: 1mm

Accuracy:  $\pm 0.3\%$  F.S

Temperature compensation: Automatic temperature compensation

Operating frequency: 20KHz ~ 43.0KHz

Operation display: 3-button operation, LCD display

## **Output (Selected when ordering)**

Output signal: 4~20mA Load impedance (0~1K $\Omega$ ) (standard)

Digital communication: HART protocol

## **Powered By**

Operating voltage: DC24-32V

Power consumption: <0.8W

## **Physical Characteristics**

Dimensions: 79mm  $\times$  210mm  $\times$  G1 1/2 (2m range)

79mm  $\times$  223mm  $\times$  M60 (5m-15m range)

79mm  $\times$  270mm  $\times$  DN80 non-standard flange (20m-30m range)

Installation: G1 1/2 or  $\phi$  47mm round hole with large gong ring (2m range)

M60  $\times$  2 or  $\phi$  61mm round hole with large gong ring (5m-15m range)

DN80 non-standard flange (20m-30m range)

Shell material: Cast aluminum

Sensors: ABS, nylon

Electrical connection: M20X1.5 (Two groups)

Keyboard: Three SMD A, B, C keys

Line cable: User-defined length (Built-in terminal)

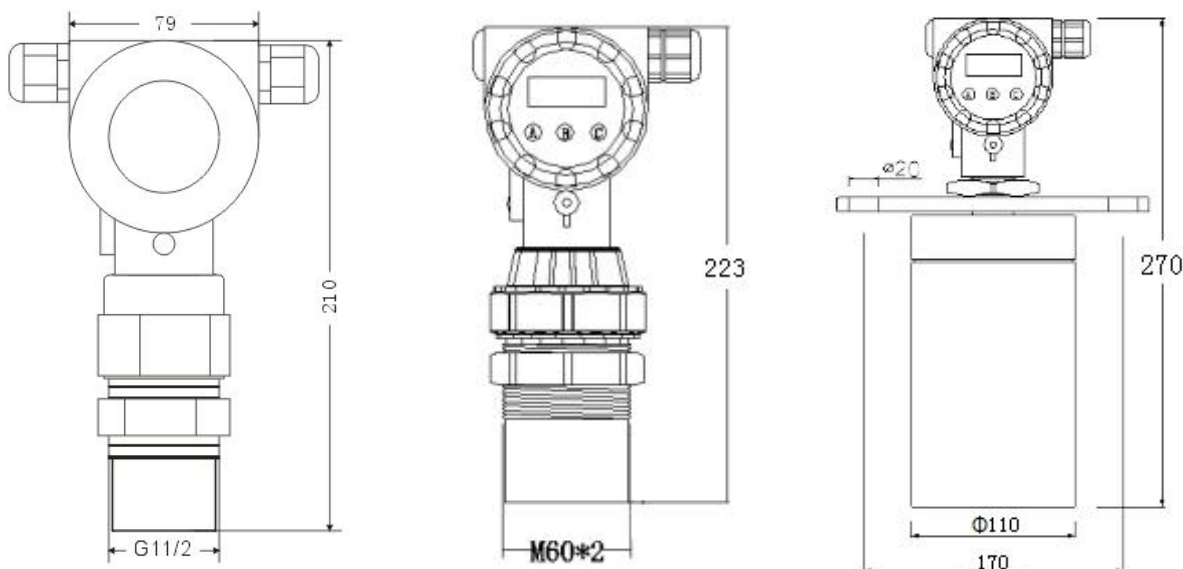
## **Environmental Performance**

Protection class: IP65 (Customizable higher degree of protection)

Explosion-proof grade: EXiall BT4Gb (When ordered)

Working environment: Room temperature/Atmospheric pressure

Storage humidity:  $\leq 80\%$  RH no condensation



## **MH-F / FP SPLIT ULTRASONIC (LIQUID) INSTRUMENT**



### **Product Description**

**MH-F / FP split ultrasonic (liquid) instrument**, is my company accumulated many years of production experience, learn from a variety of similar products advantages, and the development of a convenient application of split ultrasonic level meter, to solve the machine in the harsh environment is easy to worry about the failure of the circuit. With accurate measurement, reliable work, the appearance of generous and so on. Using large-scale integrated circuits, component chip rate of 90%, to ensure the long-term reliability of the product. While reducing its power consumption to a very low, the use of large-screen display full Chinese menu easy to use, support SD card data acquisition and serial data download, can record ten interference echo points.

### **Feature Of Product**

- ★ This product built-in GPRS, Wifi achieve Internet of things
- ★ Backup and restore settings parameters
- ★ Measurable level, level, volume, weight and so on
- ★ Can adjust the analog output
- ★ With digital filtering and echo recognition
- ★ Can be manually set fixed interference filter function
- ★ Support for Bluetooth, GPRS communications (Selected when ordering)
- ★ Support for custom serial data format (Selected when ordering)
- ★ Support for custom mathematical function operation
- ★ Support for custom sound velocity (Special material measurement)
- ★ Support MiniSD card data acquisition (Selected when ordering)
- ★ Support USB output (Selected when ordering)
- ★ Support micro-printer (Selected when ordering)

### **Application Areas**

- ☆ Water and sewage treatment pump-Water wells, biochemical reaction pool, sedimentation tank and so on
- ☆ Power, mine mortar pool-Coal slurry pool, butter storage tank, stacking field or part of the mobile device control
- ☆ Food industry-Wineries, granaries, food materials installed tank and so on
- ☆ Supporting the use of control systems

## **Performance**

Range: 2m, 5m, 8m, 10m, 12m, 15m, 20m, 25m, 30m (When ordered);

Blind zone: 0.3-1.5m (Varies with range)

Launch angle: Less than 12° (Different from sensor)

Distance measurement accuracy:  $\pm 0.3\%$  F.S

Display: Chinese and English large screen LCD, color TFT (Optional)

Minimum display resolution: 1mm

Temperature compensation: Automatic temperature compensation

Operating frequency: 20KHz~200KHz (Depending on model specifications)

Field settings: Through the local button to complete

Calibration: Factory calibration, on-site calibration

Can be automatically switched in English and Chinese

## **Output (Selected when ordering)**

Analog signal output: 4~20mA (Standard), 0~20mA, 0~5V, 0~10V load  $>300\Omega$

Digital communication: RS485, HART protocol, GPRS, MiniSD card data acquisition, USB (Selected when ordering)

4-channel relay output: Relay contact capacity: AC: 5A 250V DC: 10A 120V

## **Powered By**

Operating voltage: AC220V or DC12-24V

Power consumption:  $<5W$

## **Physical Performance**

Mainframe Dimensions: 240mm  $\times$  184mm  $\times$  110mm / 256mm  $\times$  175mm  $\times$  110mm

Host Material: ABS plastic/Cast aluminum

Sensor cable: 10m shielded cable (Can be customized any length)

Transducer material: ABS plastic, nylon

Sensor Dimensions:  $\Phi 65\text{mm} \times 119\text{mm} \times G1\ 1/2$  (2m range)

$\Phi 74\text{mm} \times 137\text{mm} \times M60$  (5m-15m range)

$\Phi 110\text{mm} \times 194\text{mm} \times M30$  (20m-30m range)

Sensor mounting interface:  $G1\ 1/2$  (2m range)

$M60 \times 2$  (5m-15m range)

$M30 \times 1.5$  or DN80 non-standard flange (20m-30m range)

## **Environmental Performance**

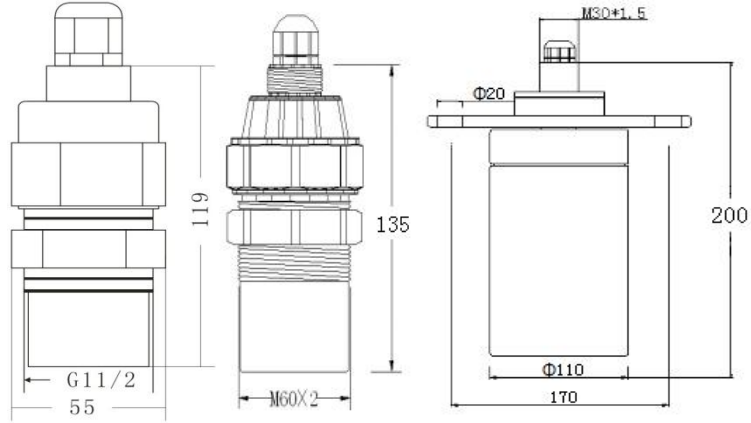
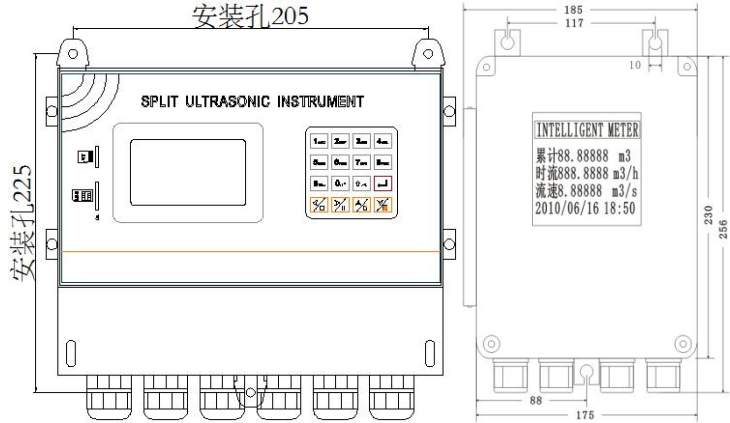
Protection class: IP65 (Customizable higher degree of protection)

Explosion-proof grade: EXiaII BT4Gb (When ordered)

Working environment: Room temperature/Atmospheric pressure

Storage humidity:  $\leq 80\%$  RH No condensation

## **Product Dimension Description (Unit mm)**







## **MH-FS HANDHELD ULTRASONIC (LIQUID) LEVEL METER**



### **Product Description**

**MH-FS Handheld Ultrasonic (Liquid) Level Meter**, is my company accumulated experience in many years of production, drawing on the advantages of a variety of similar products, and the development of a convenient hand-held ultrasonic rangefinder instrument. With accurate measurement, reliable work, the appearance of generous, easy to carry and so on. Using large-scale integrated circuits, component patch rate of 99%. To ensure the long-term reliability of the product, while reducing its power consumption to a very low. Using a large screen display clear, the entire Chinese menu easy to use, support SD card data acquisition and serial data download. Can record ten interference echo points.

### **Performance Characteristics**

- ★ This product built-in GPRS, Wifi achieve Internet of things
- ★ Strong/stable sensor for harsh industrial applications
- ★ Transducer built-in temperature sensor to achieve real-time measurement of real-time temperature compensation
- ★ Blind area can be manually set, shielding the probe near the interference signal
- ★ Backup and restore settings parameters
- ★ Measurable level, level, volume, weight and so on
- ★ Can adjust the analog output
- ★ With digital filtering and echo recognition function, can be manually set fixed interference filter function
- ★ Support for Bluetooth, GPRS communications, GPS positioning, etc. (Selected when ordering)
- ★ Support custom serial data format (Selected when ordering)
- ★ Chinese and English bilingual menu, support the custom main display interface
- ★ Support for custom mathematical function operation, custom sound velocity (Special matter measurement)
- ★ Support MiniSD card data acquisition (Standard 8G)

### **Application Areas**

- ☆ Environmental protection and water detection river and river water level monitoring
- ☆ Supporting the use of control systems

### **Performance**

Range: 1m, 2m, 5m, 8m, 10m, 12m, 15m, 20m, 25m, 30m (Selected when ordering);

Blind zone: 0.06-1.5m (Different from range)

Launch angle: Less than 12° (Different from sensor)

Distance measurement accuracy:  $\pm 1\text{mm}-0.3\%$  F.S (With the range and different)

Display: Chinese and English large screen LCD, color TFT (Optional)

Minimum display resolution: 1mm  
Temperature compensation: Automatic temperature compensation  
Operating frequency: 20KHz~200KHz (Depending on model specifications)  
Field settings: Through the local button to complete

### **Output (Selected at order)**

Output mode: USB-UART (Standard)  
SD card data acquisition: 8G  
Satellite positioning: GPS  
Wireless transmission: GPRS  
Analog signal: 4~20mA, 0~20mA, 0~5V, 0~10V load >300Ω

### **Powered By**

Operating voltage: Built-in 3.7V/1200mAh lithium battery  
External power supply: DC5V 1A  
Power consumption: Operating mode <0.3W Sleep mode <0.03W

### **Physical Performance**

Host Dimensions: 200mm × 94mm × 40mm  
Sensor Dimensions: Φ74mm × 135mm × M60 (Subject to prevail)  
Host Material: ABS Engineering Plastics  
Instrument protection box size: 415mmX315mmX145mm  
Transducer material: ABS plastic, nylon  
Sensor mounting interface: G1 1/2 (2m range)  
M60 × 2 (5m-15m range)  
M30X1.5 or DN80 non-standard flange (20m-30m range)  
Keyboard: 16-bit full keyboard operation  
Sensor cable: 2m shielded cable (Can be customized any length)

### **Environmental Performance**

Protection class: IP65 (Customizable higher degree of protection)  
Explosion-proof grade: EXiaII BT4Gb (When ordered)  
Working environment: Room temperature/Atmospheric pressure  
Storage humidity: ≤80% RH No condensation

### **Product Dimension Description (Unit mm)**

