



## FU

### Ultrasonic level transmitter

The Ultrasonic Level Measurement is mounted on top of the vessel. Under the control of the electronic unit, the probe emits ultrasonic wave pulse to measured medium. The sound wave is reflected by the surface of medium, a part of reflection echo is received by the probe and converted into electrical signal. From the emission of the ultrasonic wave to the new reception, the time is direct proportion to the distance from the probe to the measured medium. The electronic unit detects the time and calculates out the measured distance according to the known sound velocity. Use subtraction to obtain the value of medium position.

#### Product series



■ Explosion-proof-1



■ Expanding type-1



■ Standard type-1



■ Explosion-proof-2

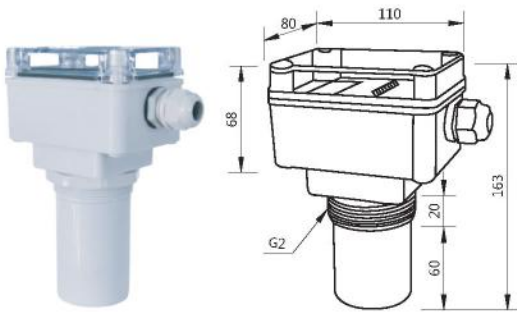


■ Expanding type-2



■ Standard type-2

## Integrated ultrasonic level transmitter--standard type



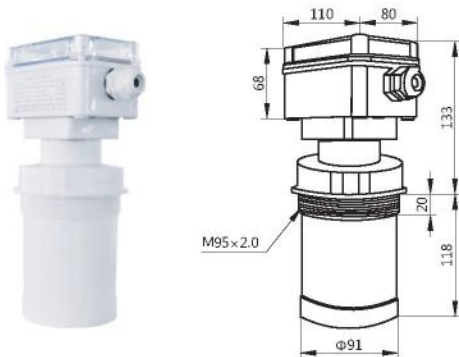
First show:  
 FU4 FU8 type  
 DC24V power supply  
 LCD display  
 Ambient temperature: -45°C ~75°C

FU4A FU8A type  
 AC 220V power supply  
 LCD display  
 ambient temperature: -25°C ~60°C

FU4E FU8E type  
 DC24V power supply  
 LED digital display  
 Ambient temperature : -45°C ~75°C

Model	FU4 FU4A FU4E	FU8 FU8A FU8E
Measuring range	4.00m ( Liquid)	8.00m ( Liquid) 3.00m ( Solid)
Dead zone	0.20m	0.30m
Accuracy(in air)	0.2% of real range	0.2% of real range
Display resolution	1mm	1mm
Signal output	4 ~ 20mA	4 ~ 20mA
Output resolution	0.03% of real range	0.03% of real range
Output load	0 ~ 600Ω	0 ~ 600Ω
Relay output	Upper limit and lower limit control (optional)	
Relay specification	5A 250VAC/30VDC	5A 250VAC/30VDC
Parameter setting	Three inductive buttons	
Medium temperature	-45°C ~ 95°C	-45°C ~ 95°C
Pressure range	±0.1MPa	±0.1MPa
The sound beam Angle	8°C (3db)	8°C (3db)
Detection period	1 秒	1 秒
Sheating material	ABS	ABS
Sensor material	PVC	PVC
IP grade	IP68	IP68
Process connection	Flange or holder	Flange or holder

## Integrated ultrasonic level transmitter--middle range type



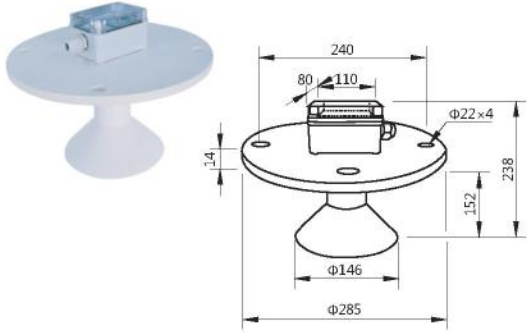
First show:  
 FU6 FU12 type  
 DC24V power supply  
 LCD display  
 Ambient temperature: -45°C ~75°C

FU6A FU12A type  
 AC 220V power supply  
 LCD display  
 ambient temperature: -25°C ~60°C

FU6E FU12E type  
 DC24V power supply  
 LED digital display  
 Ambient temperature : -45°C ~75°C

Model	FU6 FU6A FU6E	Fu12 FU12A FU12E
Measuring range	6.00m ( Liquid)	12.00m ( Liquid) 6.00m ( Solid)
Dead zone	0.22m	0.30m
Accuracy(in air)	0.2% of real range	0.2% of real range
Display resolution	1mm	1cm
Signal output	4 ~ 20mA	4 ~ 20mA
Output resolution	0.03% of real range	0.03% of real range
Output load	0 ~ 600Ω	0 ~ 600Ω
Relay output	Upper limit and lower limit control (optional)	
Relay specification	5A 250VAC/30VDC	5A 250VAC/30VDC
Parameter setting	Three inductive buttons	
Medium temperature	-45°C ~ 95°C	-45°C ~ 95°C
Pressure range	±0.3MPa	±0.3MPa
The sound beam Angle	5°C (3db)	8°C (3db)
Detection period	1 秒	1 秒
Sheating material	ABS	ABS
Sensor material	PVC	PVC
IP grade	IP68	IP68
Process connection	Flange or holder	Flange or holder

## Integrated ultrasonic level transmitter--wide range type



First show:  
FU20 FU30 type  
DC24V power supply  
LCD display  
Ambient temperature: -45°C ~75°C

FU20A FU30A type  
AC 220V power supply  
LCD display  
ambient temperature: -25°C ~60°C

FU20E FU30E type  
DC24V power supply  
LED digital display  
Ambient temperature : -45°C ~75°C

Model	FU20 FU20A FU20E	FU30 FU30A FU30E
Measuring range	20.00m ( Liquid ) 10.00 ( Solid )	30.00m ( Liquid ) 15.00 ( Solid )
Dead zone	0.60m	0.80m
Accuracy(in air)	0.2% of real range	0.2% of real range
Display resolution	1cm	1cm
Signal output	4 ~ 20mA	4 ~ 20mA
Output resolution	0.03% of real range	0.03% of real range
Output load	0 ~ 600Ω	0 ~ 600Ω
Relay output	Upper limit and lower limit control (optional)	
Relay specification	5A 250VAC/30VDC	5A 250VAC/30VDC
Parameter setting	Three inductive buttons	
Medium temperature	-45°C ~ 95°C	-45°C ~ 95°C
Pressure range	±0.3MPa	±0.3MPa
The sound beam Angle	3°C (3db)	3°C (3db)
Detection period	1 秒	1 秒
Sheating material	ABS	ABS
Sensor material	PVC	PVC
IP grade	IP68	IP68
Process connection	Flange or holder	Flange or holder

## Split type ultrasonic liquid level meter



FUS-BD3	Measuring range: 3m	Dead zone: 0.25m	Power supply: DC24V
FUS-BA3	Measuring range: 3m	Dead zone: 0.25m	Power supply: AC220V
FUS-BD6	Measuring range: 6m	Dead zone: 0.30m	Power supply: DC24V
FUS-BA6	Measuring range: 6m	Dead zone: 0.30m	Power supply: AC220V



FUS-BD20	Measuring range: 20m	Dead zone: 0.60m	Power supply: DC24V
FUS-BA20	Measuring range: 20m	Dead zone: 0.60m	Power supply: AC220V
FUS-BD30	Measuring range: 30m	Dead zone: 0.80m	Power supply: DC24V
FUS-BA30	Measuring range: 30m	Dead zone: 0.80m	Power supply: AC220V



FUS-BD10	Measuring range: 10m	Dead zone: 0.40m	Power supply: DC24V
FUS-BA10	Measuring range: 10m	Dead zone: 0.40m	Power supply: AC220V

## Aluminum shell explosion-proof type



### Technical feature

- ◆ Ultrasonic probe and the host structure
- ◆ Used for all kinds of liquid level or material level measurement
- ◆ Intelligent signal processing technology, adapt to various working conditions
- ◆ The original automatic power control, automatic gain control
- ◆ Over-voltage over-current protection, lightning protection
- ◆ Low dead zone
- ◆ High sensibility
- ◆ Strong in corrosion resistance
- ◆ DC or AC power supply
- ◆ Used for low pressure container
- ◆ Two kinds of output: DC-20mA high&low level switching



### Technical specifications

- ◆ Resolution ratio: 0.01m
- ◆ Accuracy: 0.2%(full range)
- ◆ Display: four digit LED
- ◆ Output: 4~20mA
- ◆ Relay output: upper and lower control
- ◆ Relay energized mode: normally open
- ◆ Relay spec.: 10A AC250V / DC30V
- ◆ Temperature range: -40~70°C
- ◆ Temperature compensation: Full range automatic
- ◆ Pressure range: 0.04MPa normally, 0.5MPa specially
- ◆ Shell material: The host ABS probe PVC
- ◆ Sensor material: PVC
- ◆ IP grade: IP66
- ◆ Process connection: flange or kit

## Selection table

### Ultrasonic level transmitter

	4 : 4m ; 8 : 8m.....N : Nm					
	1 : 24VDC ; 2 : 220VAC					
	E : Explosion-proof ; S : Non explosion-proof					
	Y: Integrated; F: Split type					
	Unit: m					
Product series	Measuring range	Power supply	Housing	Structural style	Measuring range	
FU	-□	□	□	□	-□	