

Model ULT260 series

Ultrasonic Level Transmitter

Measurement Range: Liquid: 0.4...5m/0.4...10m/0.5...15m

Materontek
Sensing and Internet of Things

Technology

Ultrasonic sensor

Applications

Liquids and bulk solids in small vessels level measurement

Features

- Non-contact level metering
- Narrow 5° beam angle
- Fully temperature compensated electronics,
- Quick-set menu for efficient installation
- 4 to 20 mA / HART interface
- Measurement Range: Liquid: 0.4...5m/0.4...10m/0.5...15m
- Process Connection: Thread, flange
- Housing Material of Transducer: ABS,PVDF,PTFE



Principle of Operation

The sensor transmits ultrasonic pulses to the measurement target. The pulses are reflected from the surface of the target and received back by the sensor. The running time is converted into the distance and it shows as level or volume on the display.

$$D = (C \cdot T) / 2$$

D: distance

C: sound velocity

T: time of flight

Distance: from the sensor bottom to surface of the target

Level: from the bottom of storage to surface of the target

Empty: from the sensor bottom to the bottom of storage

Technical data

Model	ULT260-5	ULT260-10	ULT260-15
Measurement Type	Ultrasonic non-contacting	Ultrasonic non-contacting	Ultrasonic non-contacting
Liquid Measuring Range	0.4...5m	0.4...10m	0.5...15m
Dead Band	0.4m	0.4m	0.5m
Accuracy	0.25%F.S,0.5%F.S	0.25%F.S,0.5%F.S	0.25%F.S,0.5%F.S
Output option	(4~20)mA/HART/Two-wire (4~20)mA/Four-wire		
Power Supply	24VDC, AC220V	24VDC, AC220V	24VDC, AC220V
Process Temp.	-40~+70°C	-40~+70°C	-40~+70°C
Process Pressure	-0.2~1bar	-0.2~1bar	-0.2~1bar
Protection Class	IP65,option IP67	IP65,option IP67	IP65,option IP67
Process Mount	Thread M66x2,flange	Thread M66x2, flange	Thread M95x2, flange
Display	Yes	Yes	Yes
Material of sensor	ABS,PVDF,PTFE	ABS,PVDF,PTFE	ABS,PVDF,PTFE

Notes: The listed specifications and dimensions are subject to change without prior notice

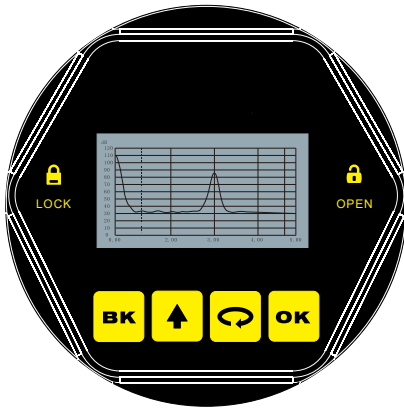
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Display/Adjustment Modules



-  Keypad
 - Enter programming mode;
 - Confirm programming options;
 - Confirm modifications to parameters.
-  Keypad
 - Choose programming options;
 - Choose the digit of parameters to edit
 - Display the contents of parameters.
-  Keypad
 - Modify parameter values.
 - Choose display mode
-  Keypad
 - Programming mode exit;
 - Return to higher menu level.
 - Shortcut
 - Display Echo wave

Ordering code

Model	ULT260	ULT260 Ultrasonic Level Transmitter
	5	Ultrasonic Level Transmitter(Liquid: 0.4...5m)
Type	10	Ultrasonic Level Transmitter(Liquid: 0.4...10m)
	15	Ultrasonic Level Transmitter(Liquid: 0.5...15m)
Approval	P	Standard (Non-explosion-proof)
	I	Ex ia IIC T6
	D	Ex d IIC T4
Transducer Material/Process Temperature/Protection Level	A	ABS/(-40~70)°C
	B	PVDF/(-30~70)°C
	C	PTFE/(-30~70)°C
Electronic Component	B	(4~20)mA/Two-wire/24VDC
	C	(4~20)mA/HART/Two-wire/24VDC
	D	(4~20)mA/Four-wire/220VAC
	R	(4~20)mA/Four-wire/24VDC
Housing/Protection Level	A	Aluminum/IP67
	D	Aluminum (Two-chamber) /IP67
	G	Stainless Steel/IP67
Process Connection	M1	M66x2
	M2	M95x2
	FL	Flange
	DJ	Suspension bracket
Cable Entry	M	M20x1.5
	N	½NPT
Display/Programming	A	Yes
	For example	ULT260-5-P-A-B-A-M1-M-A