



# PRODUCT OVERVIEW

# LEVEL MEASUREMENT

MAC Sensor Co.,LTD.

Changsha City,Hunan,China

<http://www.macsensor.com>

TEL: +86-731-89975636 / 89975645

## Ultrasonic Level Meter

# UL20 UL30 UL40

### PROFILE

The Ultrasonic level meters are used to measure material level, which is non-contact, of high reliability, cost-effective, easy to install and maintain. They meet the requirements of material level without the contact and own the independent property rights with development for many years by our company.



UL30



UL20



UL40

## SPECIFICATIONS:

Function	Integrated type(UL20/UL30)	Split type(UL40)
Range	5m,10m,15m,20m,30m,40m,50m,60m	5m,10m,15m,20m,30m,40m,50m,60m,70m
Accuracy	0.25%-0.5%	0.25%-0.5%
Resolution	3mm or 0.1% ( bigger )	3mm or 0.1% ( bigger )
Display	Chinese and English LED	Chinese and English LED
Analog Output	Four-wire 4 ~ 20mA/510Ωload Two-wire 4 ~ 20mA/250Ω load	4 ~ 20mA/510Ωload
Relay Output	Two groups: AC 250V/ 8A or DC 30V/ 5A Status can be programmed	Two groups for single channel Four groups for double channels AC 250V/ 8A or DC 30V/ 5A Status can be programmed
Power supply	Standard:24VDC Optional: 220V AC+15% 50Hz	Standard:220V AC+15% 50Hz Optional:24VDC or 120mA Customized:12VDC or battery
Environment Temperature	LED : -20 ~ +60℃ , Probe : 20 ~ +80℃	LED : -20 ~ +60℃ , Probe : 20 ~ +80℃
Communication	Option:485,232 Communication (manufactures agreement)	Option:485,232 Communication (manufactures agreement)
Protection Grade	LED: IP65, Probe: IP68	LED: IP65, Probe: IP68
Cable Probe	No	standard:10m; 100mmax
Probe installation	According to the range and the probe type	According to the range and the probe type
Power Consumption	<b>Four-wire system</b> Power supply:24V, No relay: 80mA Channel 1 of Relay: 105mA; Channel 2 of Relay: 130mA; The specific power is as follows: No relay: 24×80mA=1.9W; Channel 1 of Relay: 24×105mA=2.5W; Channel 2 of Relay: 24×130mA=3.1W; <b>Two-wire system</b> Power supply:24V, No relay: 30mA The specific power is as follows: No relay: 24×30mA=0.72W	Power supply:24V, No relay: 100mA Channel 1 of Relay: 120mA; Channel 2 of Relay: 145mA; Channel 3 of Relay: 170mA; Channel 4 of Relay: 190mA; The specific power is as follows: No relay: 24×100mA=2.4W; Channel 1 of Relay: 24×120mA=2.9W; Channel 2 of Relay: 24×145mA=3.5W; Channel 3 of Relay: 24×170mA=4.1W; Channel 4 of Relay: 24×190mA=4.6W;

Note: Ultrasonic probes can also be customized according to customer need in this series: high pressure and high temperature resistant, light, small diameter, small blind area and other special regulatory probes.

# DIMENSION AND DRAWING

## UL20

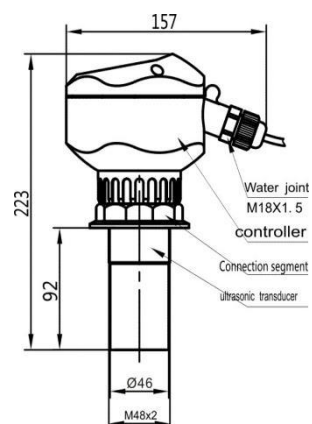


Figure1. Thread of sensor (M48x2)

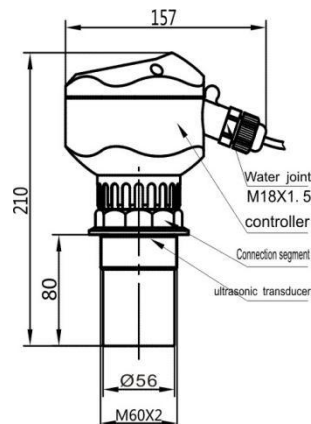


Figure 2. Thread of sensor (M60x2)

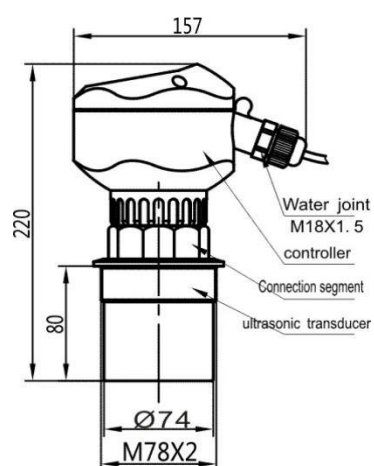


Figure3. Thread of sensor (M78x2)

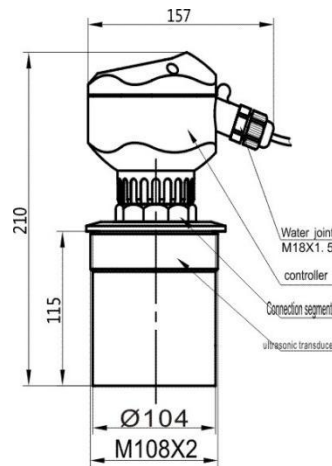
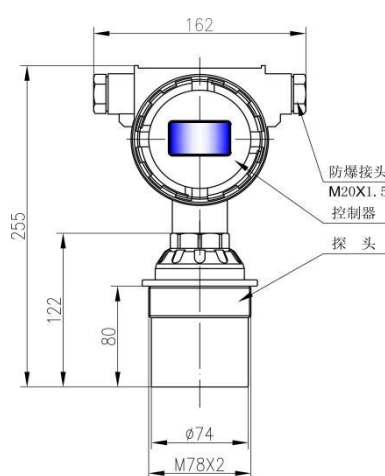
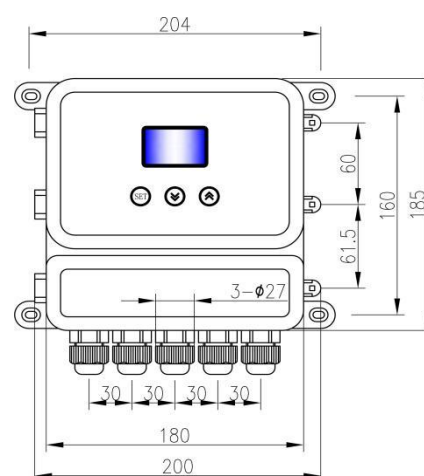


Figure 4 Thread of Sensor (M108x2)



UL30



UL40

## PART NUMBER CODE FOR PRESSURE RANGE

000	0-0.5	016	0-6	X	Customized
001	0-1.0	017	0-7		
002	0-1.1	018	0-8		
003	0-1.5	019	0-10		
004	0-1.6	020	0-12		
005	0-1.7	021	0-15		
006	0-1.8	016	0-16		
007	0-1.9	022	0-20		
008	0-2.0	023	0-25		
009	0-2.1	024	0-30		
010	0-2.2	025	0-35		
011	0-2.3	026	0-40		
012	0-2.5	027	0-50		
013	0-3	028	0-60		
014	0-4	029	0-65		
015	0-5	030	0-70		

## ORDER INFORMATION

P/N	1	4	1	022	1	0	G	2
SELECTION								
Model	1=UL20 2=UL30 3=UL40							
Output	3=4-20mA 5=0-5V 7=0-10V	4=0.5-4.5V 6=1-5V 9=RS485						
Process Connection	1=M68*2.0 male 2=M108*2.0 male 3=G1/2" male X=By customized							
Level Range	Refer to <i>PART NUMBER CODE TABLE FOR RESSURE RANGE</i> on previous page and select your requested range code here.							
Measuring Medium	1=Water 2=Gasoline 3=Diesel 4=By customized							
Accuracy	0=1.0%F.S.	1=0.5%F.S						
Pressure type	G=Gauge	S=Sealed	A=Absolute					
Cable length	1=Cable 1m	2=Cable 2m	3=Cable 3m	4=Cable 4m	5=Cable 5m	X=Cable X m		