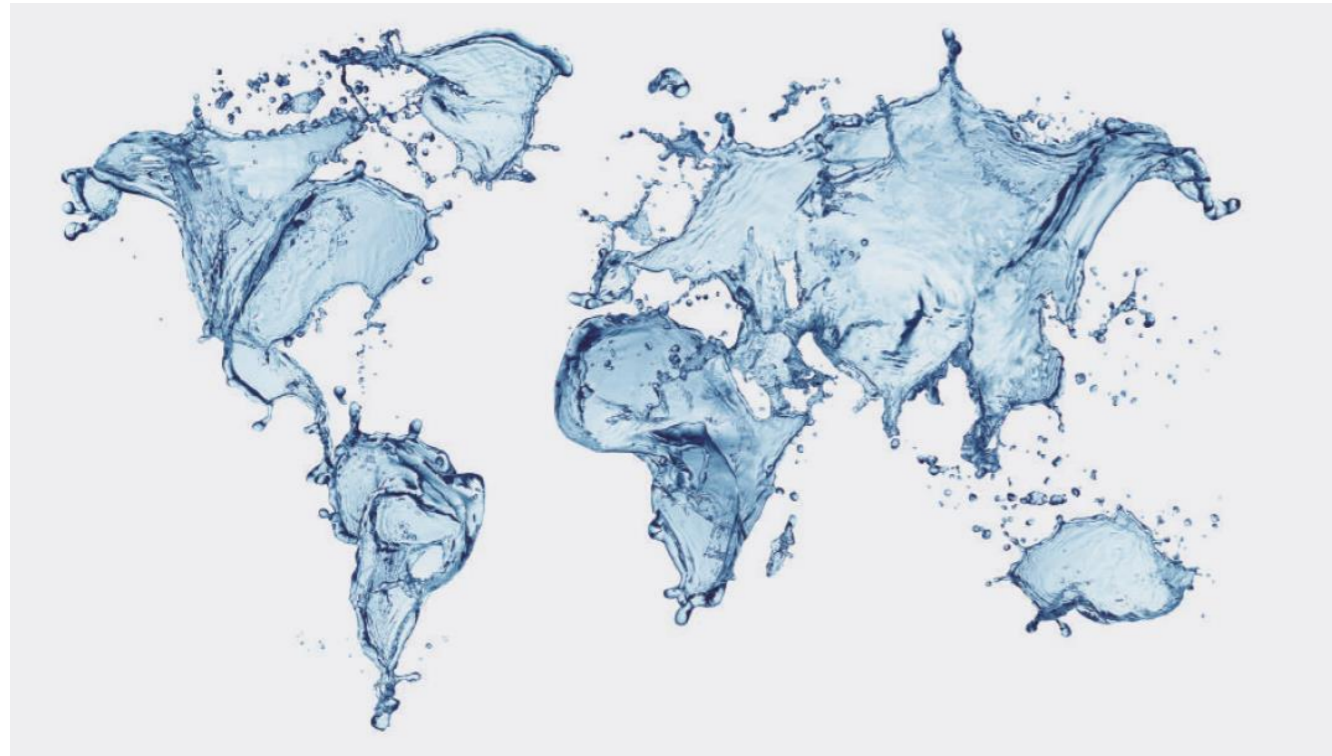


USonic Metring



Ultrasonic Level Meter



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•Ultrasonic Level Meter

•Open Channel Flow Meter

•Radar Level Meter



Compact Version Ultrasonic Level Meter ULM

The ULM is compact ultrasonic level meter for continuous non-contact level measurement in liquids and solids. It consists of probe and electronic units, both of which are water-proof structure. This series can be widely applied to metallurgical, chemical, electricity and oil industries.



Two-wire



Three-wire



Four-wire

Features:

- Continuous non-contact level measurement with compact version;
- Explosion-proof (Ex) type can be optional;
- Integrated design, installed conveniently;
- Protected in the excessive voltage and current and thunder and lightning;
- The big show window of LCD or LED is easy to debug and observe;
- Excellent anti-interference capability;
- 4-20mA, Hart, Modbus, and relay output for optional;
- Intellectual signal treatment technology, guarantee that the instrument meets various kinds of operating occasion;
- All metal outer cover (IP67), airproof and alkali-resisting, meet the abominable environment;

Technical Data:

Range:	LMU4 : 0.00-4.00m (Dead Zone 0.20m) Explosion - proof type is optional
	LMU6 : 0.00-6.00m (Dead Zone 0.25m) Explosion - proof type is optional
	LMU8 : 0.00-8.00m (Dead Zone 0.30m) Explosion - proof type is optional
	LMU12 : 0.00-12.00m (Dead Zone 0.50m) Explosion - proof type is optional
	LMU20 : 0.00-20.00m (Dead Zone 0.80m)
	LMU30 : 0.00-30.00m (Dead Zone 1.20m)
	LMU40 : 0.00-30.00m (Dead Zone 1.50m)
	Note : Effective rang of volatility Liquid level ,volatile liquid or solid material level is 50% of liquid's
Accuracy :	1.2 % FS (in air)
Output Current :	DC4-20mA (HART is optional)
Output Load :	0-5000
Output Resolution :	1.3 FS
Display :	4 digit LCD
Display Resolution :	4m-8m : 1mm
	12m-40m : 1cm
Input Power :	2-wire DC20-32V , 30mA (Explosion - proof type EXiallBT6.Ga is optional)
	3-wire DC20-32V , 60mA or 12V , 100mA
Temp. Compensation:	4-wire DC24V±10% , 80mA or AC85-265V , IOrnA
	The whole range is automatic
Temp. Range:	-40c-+75c (LCD : -20°C- +70oc)
Pressure:	±0.IMP
Beam Angle:	8° (3db)
Measure Cycle :	1.Second (tunable)
Button :	3pcs induction buttons
Cable connection :	PG13.5 M20*1.5/V2" NPT
Cable Diameter :	06-12mm
Case Material :	ASS/Aluminum
Sensor Material :	ABS/PVC/PTFE
IP Class:	IP67
Fix Method:	Screw or flange

Remote Version Ultrasonic Level Meter

Remote version ultrasonic level meter is that the level meter's electronic unit (set parameters, display, the signal output) is separate from the ultrasonic probe, connected by cable each other, the ultrasonic probe is installed in the upper container, the electronic unit (i.e., host) can choose the installation location flexibly, in order to facilitate observation, operation.



Standard Type ULM10

Enhanced type ULM20

Features:

- Separate probes are easy to install, host installation location is flexible and easy to operate.
- Ultrasonic probe using PVC or PTFE materials for a variety of corrosive conditions, sanitary type is optional.
- With the patents of Smart echo processing technology to ensure the accuracy and stability.
- Patented ultrasound probe structure with short blind range, high sensitivity, build-in with full range of automatic temperature compensation.
- Maximum length allowed for the probe cable 100m, super anti-electromagnetic interference.
- 6pcs relay at most, MODBUS, HART, PROFIBUS-DP protocol, and other functions.
- Electric heating probe for cold regions.
- Can be flexibly customized according to customer demand.

Technical Data:

Range:	LMU4 :0.00-4.00m	(Dead Zone 0.20m)	Explosion - proof type EXiaIBT6.Ga is optional
	LMU6 :0.00-6.00m	(Dead Zone 0.25m)	Explosion - proof type EXiaIBT6.Ga is optional
	LMU 8 : 0.00-8.00m	(Dead Zone 0.30m)	Explosion - proof type EXiaiiBT6.Ga is optional
	LMU 12 :0.00-12.00m	(Dead Zone 0.50m)	Explosion - proof type EXiaiiBT6.Ga is optional
	LMU 20: 0.00-20.00m	(Dead Zone 0.80m)	
	LMU 30 : 0.00-30.00m	(Dead Zone 1.20m)	
	LMU40 :0.00-30.00m	(Dead Zone 1.50m)	
	Note : Effective range of volatility Liquid level ,volatile liquid or solid material level is 50% of liquid		
Accuracy:	1.2 % FS (in air)		
Output Current :	DC4-20mA (RS485-modbus&HART is optional)		
Output Load :	0-500Ω		
Relay Output :	Min. level or Max. level Alarm and control		
Relay Mode:	Normally open & normally closed can be optional		
Relay Specification :	SA 2SOVAC/30VDC		
	LMB with 2pcs , LMC with Max. 6pcs		
Output Resolution :	1.3 % Fullspan		
	4 digit LCD		
	4m-8m: 1mm		
	12m-40m :1cm		
Serial Communication :	RS485 (MODBUS) (optional)		
Baud Rate:	19200/9600/4800/2400/1200		
Power Supply :	DC21-27V , 0.1A ; AC85-265V , 0.05A		
Measure Cycle :	1.5second (tunable)		
Button:	3pcs induction buttons		
Cable Connection:	PG11/PG13.5		
Temperature compensation :	The whole range is automatic		
Temp. Range:	-40°C- +15°C < LCD : -20°C- +70°C		
Size :	LMB 170*100*70mm; LMC 2500*1850*125mm		
Case Material :	ABS		
Case Material :	ABS/PVC/PTFE		
IP Class :	Transmitter IP67, Sensor IP68		

Open Channel Flowmeter UOL

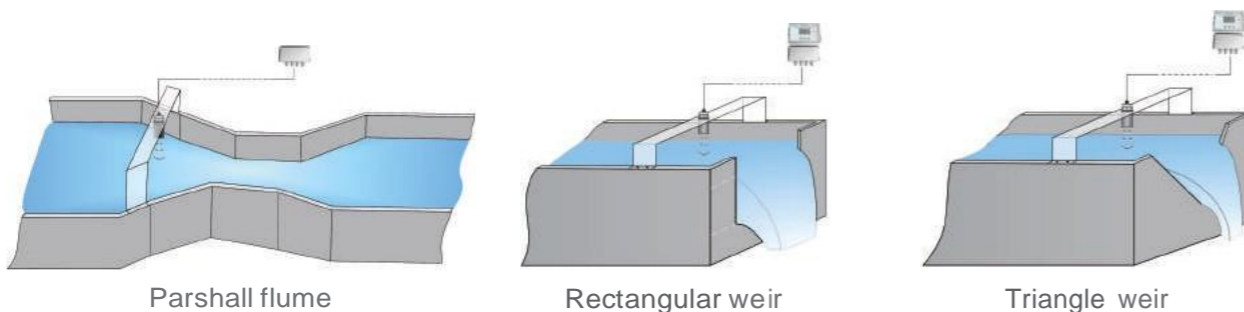
UOL serials is non-contact ultrasonic open channel flow meter, with low blind area, high sensitivity, high stability. It consists of ultrasonic probe and the host, mainly used for measuring water conservancy irrigation, sewage plants, enterprises, and institutions of the flow rate of the sewage outfalls, urban sewage and chemical enterprise part of the flow measurement.



Features:

- Not contact liquid measure, easy to maintain.
- High accuracy, 1mm for level measure.
- Match with various weir and flume, Parshall flume, Right-angle triangle weir, rectangular weir, groove, and throat channel slot.
- Large screen display, double line 14 bit LCD liquid crystal display (with backlight).
- Automatic temperature compensation, automatic filtering system, strong anti-jamming.
- 4-20mA, Hart, RS485(modbus) can be optional.
- High protection grade, transmitter is IP67, sensor is IP68.
- 6pcs relay, can be set high, low and fault alarms.

Installation Drawing:



Technical Data:

Transmitter	
Weir&Flume Match :	Standard : Parshall Flume, Triangular Weir, Rectangular Weir and Non-throat Flume USER Standard : Long-throat Flume (Rectangular Flume or Trapezoid Flume)
Display Resolution :	1mm
Accuracy:	1mm or 0.2%FS (in air)
Display:	14 Digit LCD in 2 rows
Button :	3pcs induction buttons
Output:	DC4-20mA/Hart Serial Communication RS485(modbus standard protocol)
Output Load :	0-5000
Relays:	2pcs, 4pcs, 6pcs can be optional (SA 250VAC/30VDC)
Relay Specification :	SA 250VAC/30VDC
Power Supply :	DC24V (±5%) 0.2A or AC220V (±20%) 0.1A
Measure Cycle :	■ 1 Second (tunable)
Temp. Range :	-20°C - +70°C
Case Material:	ABS
IP Class :	Transmitter IP67
Cable Connection :	PG9/PG11/PG13.5
Installation :	Wall-mounted
Size:	250*185*125mm

Sensor	
Level Range :	Standard 0.00-4.00m (liquid), other level range can be optional.
Dead Zone :	Standard 0.20m
Temperature Range:	-40°C - +70°C
IP Class :	IP68
Sensor Material :	ABS/ PVC/PTFE
Pressure :	0.2Mpa
Cable Length :	Standard 10m (Max. 1000m)
Beam Angle :	8°(3db)
Process Connection :	G2"
Installation:	Screw or flange

Ultrasonic Level Transmitter LVT & LVR

Level transmitter is divided into the LVT series two-wire type and the LVR series digital type:

Features:

- Separate probes are easy to install, host installation location is flexible and easy to operate.
- Convenient set parameters and read the data via Bluetooth/HART/MODBUS (Except the LVT 2-wire simple space output type)
- Ultrasonic probe using PVC or PTFE materials for a variety of corrosive conditions, sanitary type is optional.
- With the smart echo processing technology to ensure the accuracy and stability.
- Patented ultrasound probe structure, ultra short blind range, high sensitivity, built-in full range of automatic temperature compensation.
- Maximum length allowed for the probe cable 1000m, super anti-electromagnetic interference.
- Electric heating probe for cold regions.
- Can be flexibly customized according to customer demand.



Technical Data:

Range : (Liquid)	LVT(LVR)4: 4.00m (Dead Zone:0.20m) LVT(LVR)6 : 600m (Dead Zone:0.25m) LVT(LVR)8: 8.00m (Dead Zone:0.30m) LVT(LVR)12: 12.00m (Dead Zone:0.50m) LVT(LVR)20: 20.00m (Dead Zone:0.80m) LVT(LVR)30: 30.00m (Dead Zone:1.20m)
Accuracy:	0.2% Full span (In air)
Output Current	LVT:DC4-20mA; LVR:DC4-20mA ,RS485(Modbus-RTU),Hart and Bluetooth can be optional
Baud Rate:	9600/19200/38400/76800 Only for LVR
Power Supply :	LVT: DC20-32V ;a30mA ; LVR:DC3.5-SV,DC9-12V,DC20-32V can be optional
Temperature Range :	-40 °C -75 °C
Temperature compensation :	The whole range is automatic
Pressure Range :	-0.1MP-+0.2MP (Relative to atmospheric)
Beam Angle:	
Measure Cycle :	1.5second (tunableness)
Cable :	06-12mm
Cable Fix :	PG13.5/M20/1/2NPT
Sensor Material:	ABS/PVC/PTF E
Protect Grade :	IP68
Corrosion resistance :	Resistant to strong corrosion
Probe Cable Length :	100m(can be extended to 1000m by order)



LRD815

Model	LRD815
Application	Liquids, especially highly erosive liquids
Measuring range	10m
Process Connection	Thread / Flange (Optional)
Process Temperature	(-40~120)°C / (-60~250)°C
Process Pressure	(-0.1~0.3)MPa
Accuracy	±5mm
Antenna/Material	Build-In Horn/PTFE
Frequency	26GHz
Explosion Proof	Exia IIC T6 / Exd IIC T6
Housing	Aluminum, IP67; Plastic, IP66
Output	(4~20)mA/HART/RS485 (Modbus)
Display	LCD, can display curve (standard)
Power Supply	2-wire: (DC24V) 4-wire: (DC24V or AC220V)



LRD817

Model	LRD817
Application	Liquid: corrosive or hygienic liquids
Measuring range	20m
Process Connection	Flange
Process Temperature	(-40~150)°C
Process Pressure	(-0.1~0.3)MPa
Accuracy	±3mm
Antenna/Material	Horn with PTFE
Frequency	26GHz
Explosion Proof	Exia IIC T6 / Exd IIC T6
Output	(4~20)mA/HART/RS485 (Modbus)
Display	LCD, can display curve (standard)
Power Supply	2-wire: (DC24V) 4-wire: (DC24V or AC220V)



{ Horn and Parabolic}

Model	LRD818 (Horn and Parabolic)
Application	Solid: high dust, high level range
Measuring range	70m
Process Connection	Flange (Gimbal is optional)
Process Temperature	(-40~120)°C / (-60~250)°C
Process Pressure	(-0.1~4.0)Mpa
Accuracy	±15mm
Antenna/Material	Parabolic/Stainless Steel 316L
Frequency	26GHz
Explosion Proof	Exia IIC T6 / Exd IIC T6
Housing	Aluminum, IP67; Plastic, IP66
Output	(4~20)mA/HART/RS485 (Modbus)
Display	LCD, can display curve (standard)
Power Supply	2-wire: (DC24V) 4-wire: (DC24V or AC220V)

26G Pulse Radar Level Meter



LRD816

Model	LRD816
Application	Mildly erosive liquids under certain temperature and pressure
Measuring range	30m
Process Connection	Thread / Flange (Optional)
Process Temperature	(-40~120)°C / (-60~250)°C / (-60~600)°C
Process Pressure	(-0.1~4.0)MPa / (-0.1~40)MPa
Accuracy	±3mm
Antenna/Material	Horn/Stainless Steel 316L
Frequency	26GHz
Explosion Proof	Exia IIC T6 / Exd IIC T6
Housing	Aluminum: IP67; Plastic: IP66
Output	(4~20)mA/HART/RS485 (Modbus)
Display	LCD, can display curve (standard)
Power Supply	2-wire: (DC24V) 4-wire: (DC24V or AC220V)



LRD818 (Horns)

Model	LRD818 (Horns)
Application	Solid: high dust, easy crystal environment
Measuring range	70m
Process Connection	Flange (Gimbal is optional)
Process Temperature	(-40~120)°C / (-60~250)°C / (-60~600)°C
Process Pressure	(-0.1~4.0)MPa / (-0.1~40)MPa
Accuracy	±15mm
Antenna/Material	Horn/Stainless Steel 316L
Frequency	26GHz
Explosion Proof	Exia IIC T6 / Exd IIC T6
Housing	Aluminum, IP67; Plastic, IP66
Output	(4~20)mA / HART/RS485 (Modbus)
Display	LCD, can display curve (standard)
Power Supply	2-wire: (DC24V) 4-wire: (DC24V or AC220V)



LRD819

Model	LRD819
Application	Solid: high dust, low level range
Measuring range	30m
Process Connection	Flange (Gimbal is optional)
Process Temperature	(-40~120)°C / (-60~250)°C
Process Pressure	(-0.1~4.0)Mpa
Accuracy	±10mm
Antenna/Material	Horn/Stainless Steel 316L
Frequency	26GHz
Explosion Proof	Exia IIC T6 / Exd IIC T6
Housing	Aluminum: IP67; Plastic: IP66
Output	(4~20)mA/HART/RS485 (Modbus)
Display	LCD, can display curve (standard)
Power Supply	2-wire: (DC24V) 4-wire: (DC24V or AC220V)

Intelligent Radar



LRD801

Model	LR0801
Application	Liquids, mildly erosive
Measuring range	35m
Process Connection	Screw thread / Flange
Process Temperature	-40~200C
Process Pressure	(-0.1- 0.3)MPa
Accuracy	±8mm
Antenna/Material	PVC/PTFE/PP
Frequency	6.8GHz
Explosion Proof	Exia IICT6/ Exd IICT6
Housing	Aluminum : IP67; Plastic : IP66
Output	(4-20)mA/HART/RS485(Modbus)
Display	LCD, can display curve(Standard) 2-wire(DC24V)
Power Supply	4-wire:(DC24V or AC220V)



LRD802

Model	LR0802
Application	Liquids, especially highly erosive liquids
Measuring range	35m
Process Connection	PTFE Flange
Process Temperature	-40.15C
Process Pressure	(-0.1-1.6)MPa
Accuracy	±8mm
Antenna/Material	PTFE
Frequency	6.8GHz
Explosion Proof	Exia IICT6/ Exd IICT6
Housing	Aluminum : IP67; Plastic : IP66
Output	(4- 20)mA/HART/RS485(Modbus)
Display	LCD, can display curve(Standard) 2-wire:(DC24V)
Power Supply	4-Wire:(DC24V or AC220V)



LRD803

Model	LR0803
Application	Solid: high dust, easy crystal
Measuring range	35m
Process Connection	Flange (Gimbal is optional)
Process Temperature	-40~150<
Process Pressure	(0.1- 4.0)MPa
Accuracy	±8mm
Antenna/Material	HQm/Stainless Steel 316L
Frequency	6.8GHz
Explosion Proof	Exia IICT6/1 Exd IICT6
Housing	Aluminum IP67; Plastic : IP66
Output	(4- 20)mA/HART/RS485(Modbus)
Display	LCD, can display curve(Standard) 2-wire:(DC24V)
Power Supply	4-wire:(DC24V or AC220V)



LRD803 (Extended)

Model	LR0803 (Extended)
Application	Solid: high dust, easy crystal
Measuring range	35m
Process Connection	Flange (Gimbal is optional)
Process Temperature	-40~120C/-60~250C
Process Pressure	(0-4.0)MPa
Accuracy	±8mm
Antenna/Material	HQm/Stainless Steel 316L
Frequency	6.8GHz
Explosion Proof	Exia IICT6/ Exd IICT6
Housing	Aluminum : IP67; Plastic : IP66
Output	(4- 20)mA/HART/RS485(Modbus)
Display	LCD, can display curve(Standard) 2-wire:(DC24V)
Power Supply	4-Wire:(DC24V or AC220V)

Guided Wave Radar



LRD701 (Standard)

Model	LR0701 (Standard)
Application	liquids, solids and granules
Measuring range	Cable :35m/Rod:6m
Process Connection	G1/2" NPT / Flange
Process Temperature	-40~200C
Process Pressure	(-0.1- 4)MPa
Accuracy	±5mm
Antenna Material	SS304, SS316L/ PTFE
Antenna Size	<116mm / <116mm / <10mm
Frequency	100MHz-1.8GHz
Explosion Proof	Exia IICT6 / Exd IICT6
Housing	Aluminum : IP67; Plastic : IP66
Output	(4-20)mA/HART/RS485(Modbus)
Display	LCD, can display curve(Standard) 2-wire:(DC24V)
Power Supply	4-wire:(DC24V or AC220V)



LRD702 (Anti-corrosion)

Model	LRD702 (Anti-corrosion)
Application	liquids, highly erosive liquids
Measuring range	Cable :35m / Rod:6m
Process Connection	PTFE/PFA
Process Temperature	-40~120C
Process Pressure	(-0.1- 16)MPa
Accuracy	±5mm
Antenna Material	SS316L, PTFE/PFA
Antenna Size	10mm
Frequency	100MHz-1.8GHz
Explosion Proof	Exia IICT6 / Exd IICT6
Housing	Aluminum : IP67; Plastic : IP66
Output	(4-20)mA/HART/RS485(Modbus)
Display	LCD, can display curve(Standard) 2-wire:(DC24V)
Power Supply	4-wire:(DC24V or AC220V)



LRD703 (Double Lines/Rod)

Model	LRD703 (Double lines/Rod)
Application	Small dielectric constant liquids, solids and granules
Measuring range	Cable :35m / Rod:6m
Process Connection	Flange
Process Temperature	-40~120<
Process Pressure	(0.1-4.0)MPa
Accuracy	±5mm
Antenna Material	SS304, SS316L / PTFE
Antenna Size	<116mm / <116mm / <10mm
Frequency	100MHz-1.8GHz
Explosion Proof	Exia IICT6 / Exd IICT6
Housing	Aluminum : IP67; Plastic : IP66
Output	(4-20)mA/HART/RS485(Modbus)
Display	LCD, can display curve(Standard) 2-wire:(DC24V)
Power Supply	4-wire:(DC24V or AC220V)



LRD704 (Co-axial Type)

Model	LRD704 (Co-axial Type)
Application	Small dielectric constant liquids, complex environment
Measuring range	Rod:6m
Process Connection	G1/2" NPT / Flange
Process Temperature	-40~120C
Process Pressure	(0.1- 4.0)MPa
Accuracy	±5mm
Antenna Material	SS304, SS316L / PTFE
Antenna Size	Q20mm x L25mm Q25mm
Frequency	100MHz-1.8GHz
Explosion Proof	Exia IICT6 / Exd IICT6
Housing	Aluminum : IP67; Plastic : IP66
Output	(4-20)mA/HART/RS485(Modbus)
Display	LCD, can display CUM(Standard) 2-wire:(DC24V)
Power Supply	4-wire:(DC24V or AC220V)

Water Conservancy Radar



LRD813

Model	LR0813 (Standard)
Application	Stream, dam, river channel monitor and measure
Measuring range	30m
Process Connection	Thread/ Frame / Flange
Process Temperature	-40~700C
Process Pressure	(-0.1-0.3)MPa
Accuracy	±3mm
Antenna Material	SS316L / PTFE
Frequency	26GHz
Housing	Aluminum : IP67; Plastic : IP66
Output	(4- 20)mA/RS232/RS485(Modbus)/TTL
Display	LCD, can display curve(Standard)
Power Supply	6-28VDC
Power Consumption	90mW (Min)



LRD813 (Enhanced)

Model	LR0813 (Enhanced)
Application	High deep stream, dam, CO2, Channel monitor and measure
Measuring range	70m
Process Connection	Thread/ Frame / Flange
Process Temperature	-40~700C
Process Pressure	(-0.1-0.3)MPa
Accuracy	±3mm
Antenna Material	SS316L / PTFE
Frequency	26GHz
Housing	Aluminum : IP67; Plastic : IP66
Output	(4-20)mA/RS232/RS485(Modbus)/TTL
Display	LCD, can display curve(Standard)
Power Supply	6-28VDC
Power Consumption	100mW (Min)