



Measuring principle

The product measures liquid level height by calculating the time difference between ultrasonic wave transmission and reception, determining the distance based on sound wave propagation



Recorder



Flow



Temp



Analyzer



Level



Pressure

Special characteristics

- Measures time difference between ultrasonic transmission and reception
- Waves reflect off liquid, received and converted by probe
- Calculates distance using speed and time, determines liquid level

Features

- Non-contact measurement, unaffected by the properties of the liquid
- High-precision measurement, high resolution, and low measurement error
- Low power design, stable long-term operation, extended lifespan
- Easy to install and can flexibly adapt to different installation scenarios
- With an IP68 protection rating, it ensures safe and stable operation

Low-power ultrasonic level meter, based on ultrasonic ranging, for accurate non-contact liquid level measurement. Widely used in drainage, water conservancy, hydrology, municipal, environmental, industrial applications.

Preferred areas of use are



Widely used for water and material level measurement in drainage, water conservancy, municipal, environmental, and industrial applications.

Material and test



Parameters

Measurement variable	Material Level / Liquid Level
Measurement range	(0 ~ 5) m / (0 ~ 10) m / (0 ~ 15) m / (0 ~ 20) m
Blind spot	0.3m
Accuracy	± 0.5%FS
Resolution	1mm
Communication Output	RS485, Modbus-RTU communication protocol
Power supply	(3.6~18) VDC/ (12~24) VDC
Standby sleep current	<10 _μ A
Power consumption per distance measurement	11uAh@5V Power Supply
Electrical interface	PG7
Environmental conditions	Temperature: (-20 to 80) ° C Humidity: ≤90% RH non-condensing
Protection Level	IP68

■ Dimension

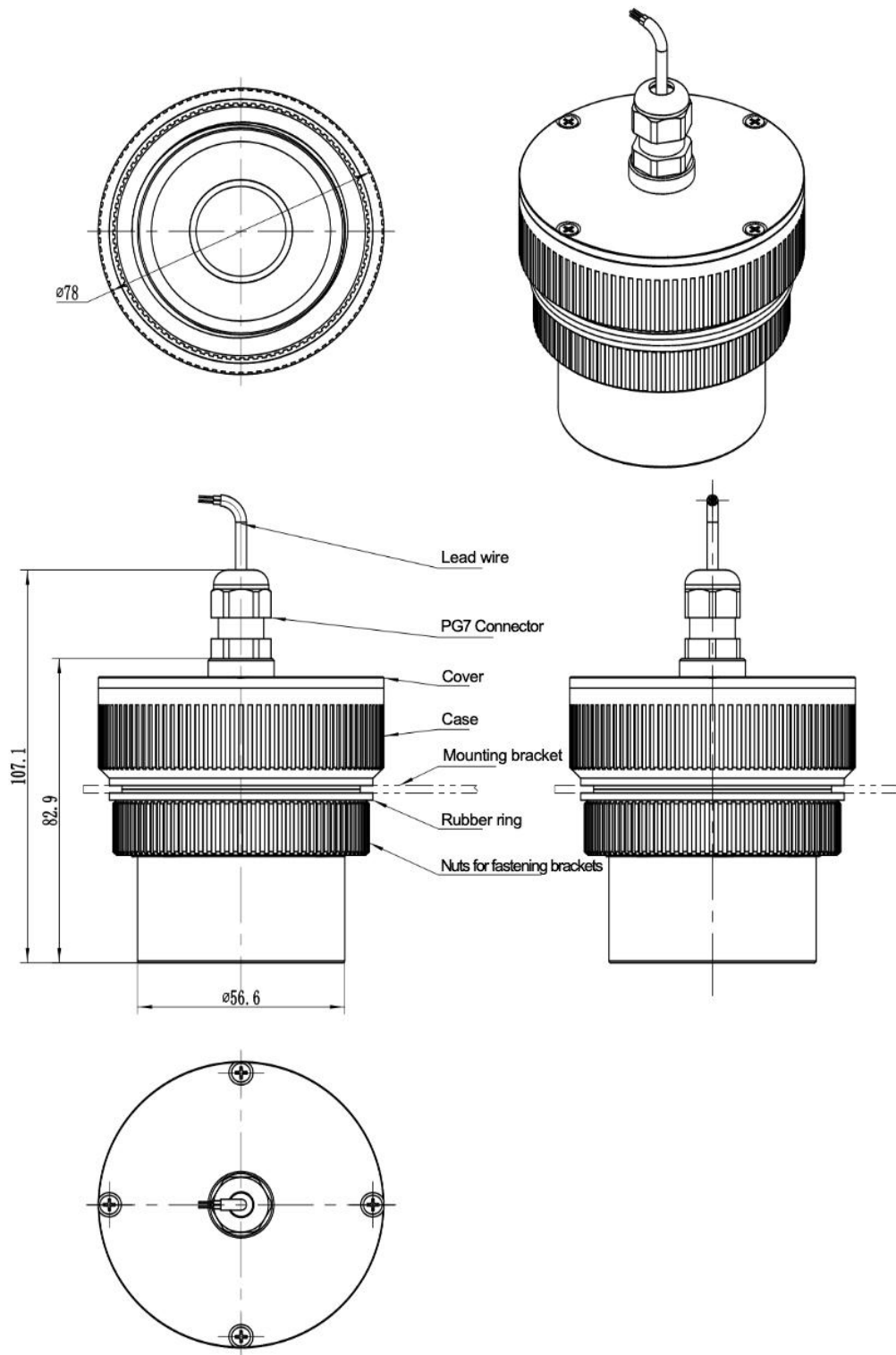


Fig. Product Dimensions (Unit: mm)

■ Ordering Code

FK-RP-E-05-W7-0D-O9-K-O3-I6-P7-Q4														Description
RP-E	-	-	-	-	-	-	-	-	-	-	-	-	-	Ultrasonic Level Meter
Measurement range	05													5m
	10													10m
	15													15m
	20													20m
Power Supply	W7													3.6 ~ 18V DC
	W8													12~24V DC
Cable length		0D												1.5m
Blind spot range			O9											0.3m
Accuracy				K										Level 0.5
Protection Level					O3									IP68
Shell Material						I6								Aluminum alloy
Signal Output							P7							RS485
Work environment								Q4						-20 to 80°C / ≤90% RH non-condensing