SEN101-7101 Wireless Submersible Level Sensor

Product Description

Wireless low-power liquid level sensor, its product has high accuracy, low power consumption, small size and easy to use. A high-precision and high-stability liquid level sensor is selected, and a high-reliability amplification circuit is used to convert the liquid level signal of the measured medium into a standard electrical signal for output. The use of high-quality sensors, exquisite packaging technology and perfect assembly technology ensures the stability and excellent performance of the product. Utilize the NB-IoT/4G/LoraWAN network to realize wireless transmission of on-site instrument data to the cloud. Sensor data can be obtained by logging into the relevant platform through an Internet PC or mobile terminal. It can be widely used in various types of fire protection, industrial control, water conservancy, etc. with low power consumption. Requires measurement and control occasions.



Features

- Low power consumption design, on-site segment LCD display.
- Moisture-proof, anti-condensation, anti-leakage, protection grade IP65.
- Excellent impact resistance, overload resistance and vibration resistance.
- Efficient lightning protection, strong resistance to radio frequency and electromagnetic interference protection.
- Advanced temperature digital compensation function, using digital compensation and non-linear correction technology.
- -10°C～80°C digital wide temperature compensation, wide operating temperature range.
- High precision, high frequency response, good long-term stability.
- On-site liquid level data can be wirelessly transmitted to the cloud platform to facilitate remote monitoring data uploading to the cloud platform.

Applications

- Industrial process level measurement and control.
- Water conservancy, hydropower, fire monitoring and control.
- Building automation, constant pressure water supply.
- Urban water supply and sewage treatment.
- Level measurement and control of other automated systems.
- Various low-power applications.

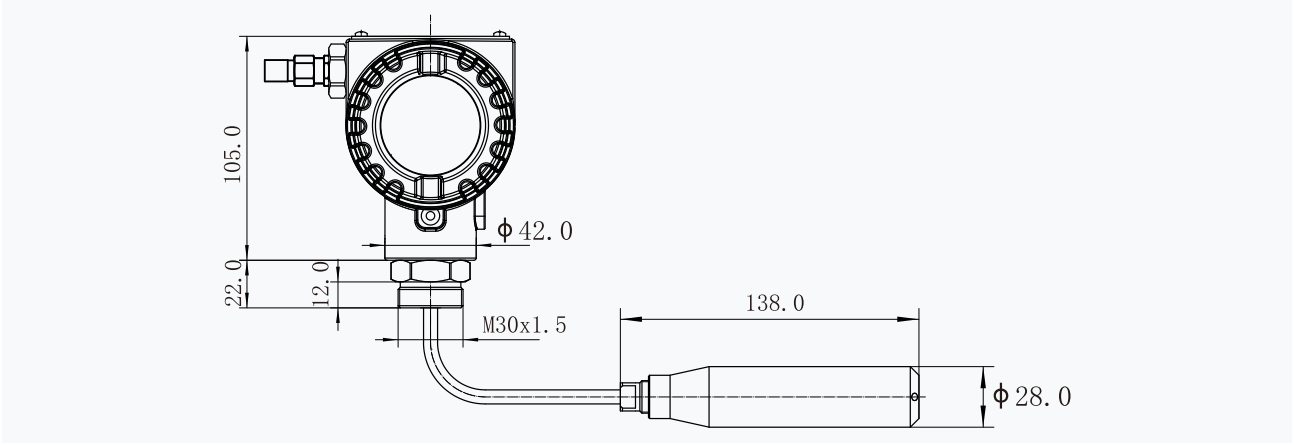
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Specifications

Measuring range	Liquid level range: 0-3, 5, 10, 15, 20, 25, 30...60m		
Transfer method	NB-IoT/4G/LoraWAN		
Protocol	CoAP/MQTT/LoraWAN		
Power supply	1: Battery powered, standard 8000mAh battery capacity, service life 1-3 years (depending on data reporting frequency)		
	2: External power supply 9-30V DC		
	Battery life reference comparison table (the actual situation is related to the use environment, such as the service life will be reduced when the signal is poor)		
	Upload time frequency	Sampling frequency	Service life
	10 minutes/time	1 minute	50 days
Power supply	1 hour/time	1 minute	260 days
	12 hours/time	1 minute	>3 years
NB-IoT power consumption	Sleep current: ⩽25uA; Sampling current: ⩽5mA (lasting 400ms) Communication average current: ⩽50mA (lasting 5s); Online current: ⩽15mA (lasting 90s)		
4G power consumption	Sleep current: ⩽25uA; Sampling current: ⩽5mA (lasting 400ms) Communication average current: ⩽80mA (lasting 5s); Online current: ⩽15mA (lasting 90s)		
LoRaWAN protocol	LoRaWANTM Specification 1.0.2		
Measuring medium	Non-corrosive liquid compatible with 304 stainless steel; Note: corrosive media needs to be confirmed with the engineer		
Medium temperature	-10~+60°C		
Accuracy	± 0.5%FS, ± 1%FS		
Operating temperature	-20~+60°C		
Long term stability	±0.2%FS		
Overload pressure	200%FS		
Destroying pressure	300%FS		
Housing material	304 stainless steel, aluminum die casting		
Protection level	IP65		
Threaded interface	M20*1.5, G1/2, Φ25 round table (others can be customized)		

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Dimensions



Ordering Guide

Example:SEN101-71012123-700
①　②　③④⑤⑥　⑦

① Product series model　② Product model code　③ Precision code　④ Output/power supply number
⑤ Electrical connection code　⑥ Thread connection code　⑦ Measuring range

SEN101-							
Company code + product series code							
	7101	Product model code					
		2	±0.5%FS				Accuracy
		3	±1%FS				
			5	4G/24V DC			Output/power supply
			6	NB-IoT/24V DC			
			7	LoRa/24V DC			
			H	4G/Battery powered 3.6V			
			I	NB-IoT/battery powered 3.6V			
			J	LoRa/battery powered 3.6V			
				2	Direct lead		Electrical connection
				4	Direct outlet explosion-proof connector M20X1.5		
					B	Submersible installation (nothread)	Threaded connection