

[For detailed selection, refer to page 5](#)



LV80-W

Wireless pressure transmitter

Product description

The LV80-W wireless submersible level transmitter is a high-precision intelligent instrument powered by lithium thionyl chloride battery and equipped with wireless communication functionality.

This product is primarily designed for liquid level measurement in environments with inconvenient power supply, such as the oil, chemical, power plant, urban water supply, and hydrological exploration sectors, transmitting liquid level and alarm data via wireless networks to a data center.

This product features a low-power design, equipped with a high-precision pressure sensor, and includes functions such as power on/off, zeroing, data storage, upper/lower limit alarms, and threshold alarms. It supports local Bluetooth parameter settings, firmware updates, and data export.

This product features multiple wireless transmission modes, including NB-IoT and 4G, and can be powered by either battery or external power supply to meet diverse user needs.

Working principle

The wireless immersion-type liquid level transmitter has a wide range of applications, extensively used in municipal water supply and drainage, sewage treatment plants, stormwater drainage networks, reservoirs, and fire water tank level monitoring. It can also be applied in environments such as chemical storage tanks, water conservancy rivers and canals, reservoir embankments, agricultural irrigation ponds, and groundwater wells. The device requires no wiring, making it suitable for remote, isolated locations, and harsh working conditions. It enables long-term stable monitoring of liquid level changes, meeting the needs of remote unmanned liquid level data collection across various industries, including environmental monitoring, industrial production, and water resource management.

Features

The wireless submersible liquid level transmitter adopts the static pressure measurement principle, offering high accuracy and rapid response. Equipped with low-power design and long-lasting power supply, combined with wireless transmission technology, it eliminates the constraints of cables and enables remote wireless data upload. The device features waterproofing, corrosion resistance, impact resistance, and anti-electromagnetic interference, making it suitable for harsh and humid working conditions. With stable performance and overload protection, it supports long-term continuous online monitoring. Its simple structure ensures easy installation and requires no routine maintenance, providing real-time liquid level feedback. Compatible with cloud management, it facilitates unattended on-site monitoring and intelligent remote management.

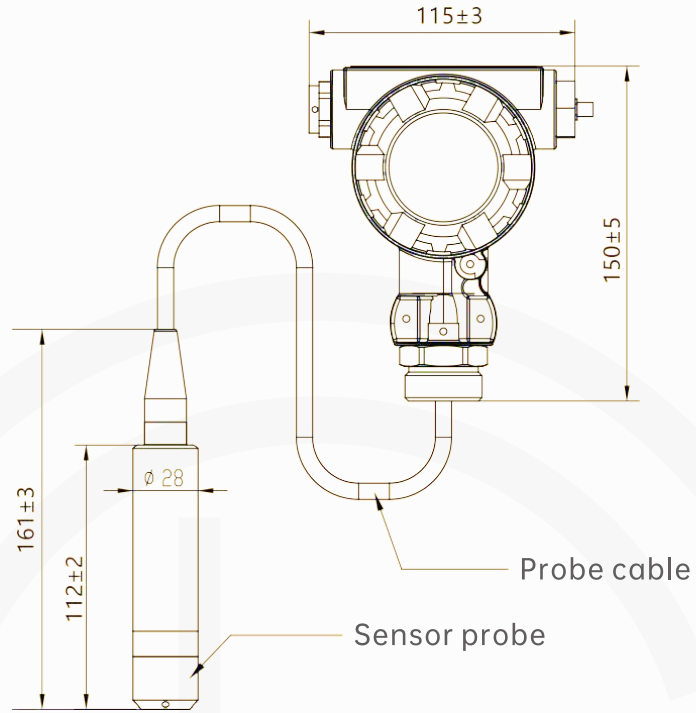


Technical Specifications

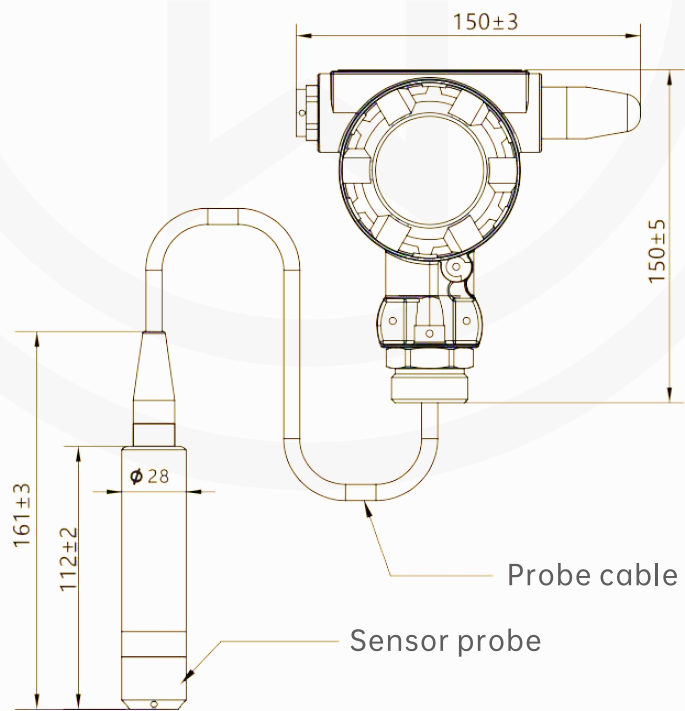
Technical Name	Parameter
Range	0~ 1...200mH ₂ O
Precision	+0.5%F.S
Overload pressure	1.5 times rated pressure
Forms of pressure	Gauge pressure G
Measured medium	Gas or liquid compatible with 304 and 316L stainless steel, fluororubber, or nitrile rubber
Operating Temperature	-20°C~70°C
Storage temperature	-40°C~85°C(battery-free)
Power supply	NB-IoT:3.6V@19Ah(Disposable lithium-ion battery) 4G:3.6V@19Ah(Disposable lithium-ion battery)/10~30VDC
Power consumption	Send average current≤100mA@3.6VDC; Quiescent current≤20uA@3.6VDC;
Pressure interface	Investment type/M20x1.5 installation type
Contact method	NB-IoT/4G
Communication protocol	MQTT
Communication frequency band	NB-IoT:B5/B8,4G:Full Netcom
SIM card	Nano SIM (12.3mmx8.8mmx0.67mm)
Antenna type	Built in horn antenna/external suction cup antenna
Configuration method	Local Bluetooth
Button	Non contact panel interaction
Sampling period	Adjustable from 10 to 600 seconds, default is 60 seconds
Reporting cycle	Adjustable from 1 to 1440 minutes, default is 120 minutes
Pressure Alarm	Pressure upper limit, lower limit, and dynamic change threshold can be set
Protection level	IP65
Weight	≈1.9kg



Overall dimensions



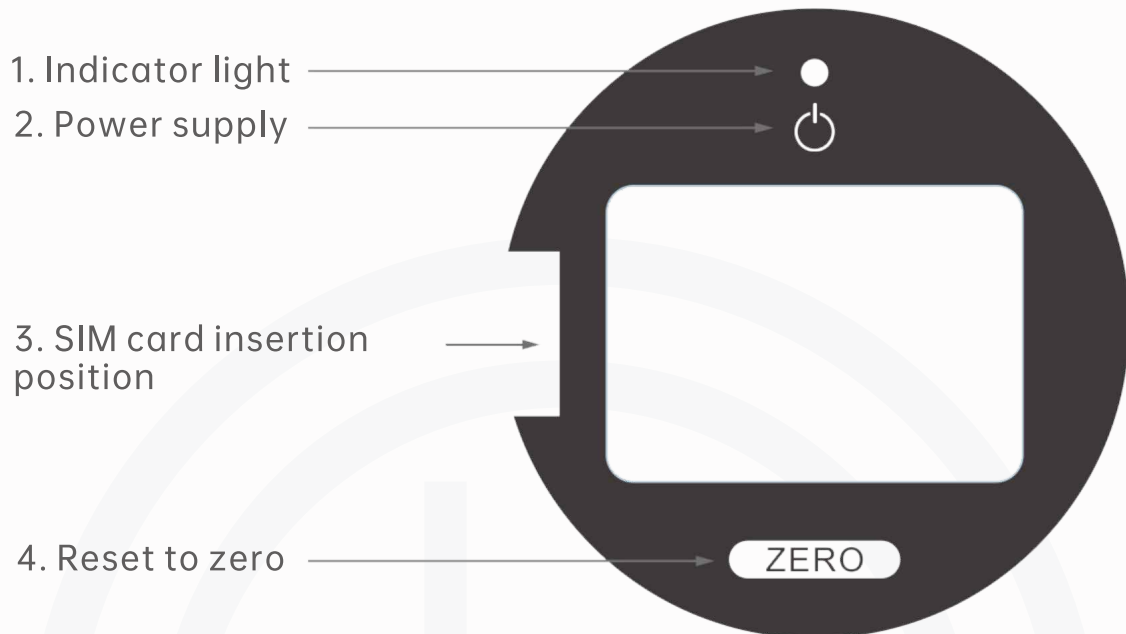
External antenna model



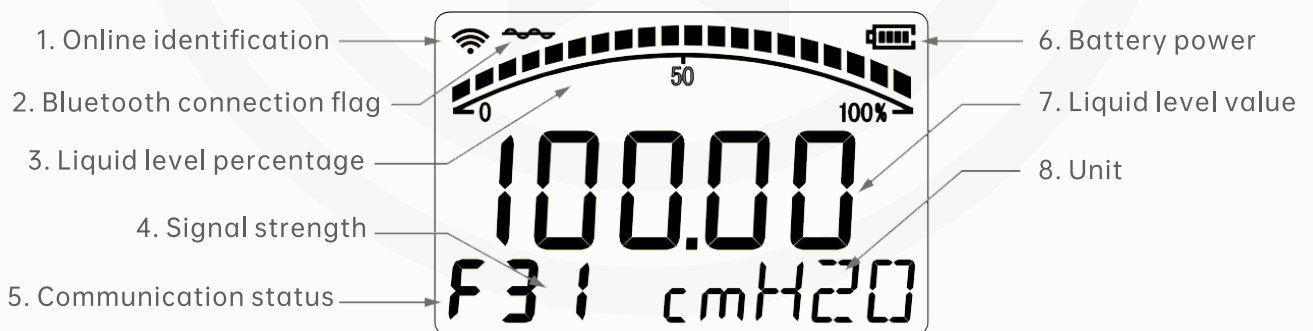
Built in antenna model



Panel indication



Display instructions



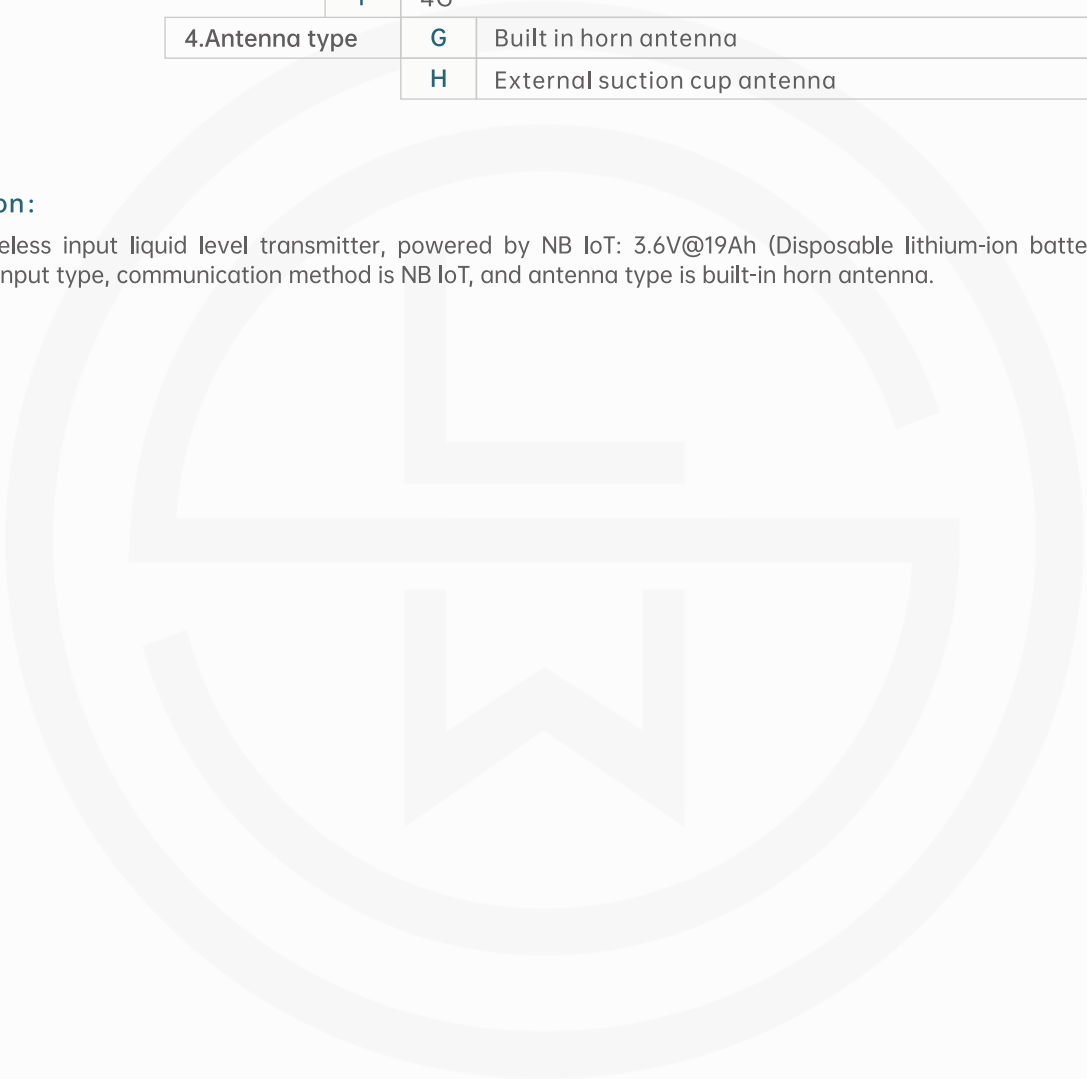
Wireless Input Type Liquid Level Transmitter - Selection and Composition

Example Of Selection **LV80-W** A / C / E / G
1 2 3 4

1.Power supply	A	NB-IoT:3.6V@19Ah(Disposable lithium-ion battery)
	B	4G:3.6V@19Ah(Disposable lithium-ion battery)/10~30VDC
2.Pressure interface	C	Immersive
	D	M20x1.5Installation type
3.Contact method	E	NB-IoT
	F	4G
4.Antenna type	G	Built in horn antenna
	H	External suction cup antenna

Explanation:

LV80-W wireless input liquid level transmitter, powered by NB IoT: 3.6V@19Ah (Disposable lithium-ion battery), pressure interface is input type, communication method is NB IoT, and antenna type is built-in horn antenna.



Product Certification

Compliance and approval; The Ludwig water quality analyzer meets key standards and certifications for process measurement technology; To ensure the highest reliability in such settings;