

Liquid Leak Sensor S50

General Description

The S50 is a wireless leak sensor that detects most common liquids, including water, oils, coolants, and chemicals(excluding strong acids and alkalis)—using a contact-based optical sensing element. When liquid comes into contact with the sensing probe, the S50 wirelessly reports the alarm to your server within 30 seconds, enabling timely response and minimising damage, downtime, and clean-up costs.

Built for demanding environments, the S50 features an IP68-rated probe and enclosure for complete dust protection and temporary submersion. Its ultra-low-power design and high-capacity replaceable battery deliver over 16 years of battery life on a single battery—one installation, long-term protection. The S50 supports 4G by default, with LoRaWAN and NB-IoT available as options.

Target Application

- Oil Depots & Fuel Storage
- Wine Cellars & Warehouses
- Chemical Product Warehouses
- Pharmaceutical & Chemical Tank Farms
- Food & Beverage Warehouses
- Hospital Medical Equipment Zones

Advantages:

- **Detects most liquids** – water, chemicals, oils, and coolants
- **Event-triggered alerts** – wireless alarm reported to your server within 30 seconds.
- **16+ years lifetime** – on a single replaceable battery.
- **IP68-rated ruggedness** – dust-tight and waterproof, even under temporary submersion.
- **Reliable long-range wireless** – stable connectivity in demanding industrial settings.
- **Quick and flexible deployment** – simple mounting and integration with your existing system.



S50 Specification

Model	S50
Shape	
Bands/Regions	
S50-4	4G LTE: Global or B1/3/5/7/8/20/28(EU) or B2/3/4/5/7/8/28/66(LA)
S50-N	NB-IoT: Global
S50-L	LoRaWAN: EU868 / US915 / AU915 / AS923 / KR920 / IN865
Optional Sensors	
Temperature Humidity	Temperature range: -45.0 ~ +135 ºC Humidity range: 0% ~ 100%
Battery	
Battery Capacity	3.6V 17000 mAh (Replaceable)
Battery Life	> 16 Years (1 Report / Day)
	> 8 Years (2 Report / Day)
General	
Shell materia	PC, UL94 V-0 fire rating
Probe meteria	PPSU
Alert Time	< 30 s
Working Current	< 100 mA
Sleeping Current	50 μA
Protocol	TCP/UDP/MQTT (S50-4 / S50-N)
SMS alert	Supported (S50-4)
Offline data log	2000 records
SIM Type	Nano Sim (S50-4 / S50-N)
Operating Temperature	-40 ºC ~ +85 ºC
Dimension	126*60*47 mm
Weight	265 g

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