KL320-TH Datasheet

& Humidity Sensor FeaturingLoRaWAN KL320-TH

Temperature





KL320-TH is a simple, compact and powerful LoRaWAN® temperature & humidity sensor. It is equipped with high-precision sensors and IP67 waterproof design, applicable for accurate temperature and humidity data detection in various harsh environments. Food-grade material's enclosure and magnet design allow it to be placed in freezers and refrigerators and in contact with food or medicines safely.

In addition to LoRaWAN® technology with low power consumption, it has built-in high-capacity batteries available for usage for up to 5 years without battery replacement. Moreover, KL320-TH is compatible with both KLED LoRaWAN® Gateway and Kled measurement IoT Cloud to achieve remote data monitoring and management. It is suitable for both indoor and outdoor applications such as cold chain transportation, agricultural greenhouses, office buildings, hospitals, factories, etc.

Features

- Uses Sensirion high-precision sensor, capable of sensing subtle changes in temperature and humidity
- > IP67 waterproof enclosure with multi-level structure and sealing ring design enabling strong waterproof performance for harsh environments
- > Uses food-grade material's enclosure, which is safe for contact with food or medicines
- Ultra-low power consumption and standby with 5400 mAh built-in replaceable batteries, ensuring durable battery life
- > Wall mounting or magnet version optional for multiple installation scenarios

- Anti-theft and anti-slip pad design on back cover to secure firm and sturdy installation
- Long range data transmission for up to 15 kilometers in rural areas
- > Store locally 3000 historical records and support retransmission to prevent data loss
- Equipped with NFC for easy configuration
- Compliant with standard LoRaWAN® gateways and network servers
- Quick & easy management with KLED measurement IoT Cloud solution

♦ Specifications

Wireless Transmission		
Technology	LoRaWAN®	
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4	
Tx Power	16dBm (868)/20dBm(915)/19dBm(470)	
Sensitivity	-137dBm @300bps	
Mode	OTAA/ABP Class A	
Measurement		
Temperature		
Range	-30°C to + 60°C	
Accuracy	+/- 0.2°C	
Resolution	0.1°C	
Humidity		
Range	0% to 100% RH	
Accuracy	+/- 2%	
Resolution	0.5% RH	
Operation		
Power On & Off	NFC Configuration via Mobile App, Power Button (Internal)	
Configuration	NFC Configuration via Mobile App	
Physical Characteristics		
Power Supply	2 × 2700 mAh ER14505 Li-SOCL ₂ Batteries	
Battery Life*	≥5 years	
Operating Temperature	-30°C to +60°C	
Relative Humidity	≤95%	
Material & Color	ABS + PC (Food Grade), White	
Ingress Protection	IP67	
Dimension	85 × 58 × 18 mm (3.34 × 2.28 × 0.70 in)	

	Installation	Standard Version: Wall Mounting
		Magnet Version: Magnetic Adsorption

^{*} Tested under laboratory conditions and for guideline purposes only.

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