

FST100









Introduction

FST100 series temperature and humidity terminal is a wireless data transmission terminal based on LoRa spread spectrum technology. It uses LoRa network to provide wireless data transmission function for users. It adopts Four-Faith self-developed LoRa module, adopts ultra-low power design, built-in high-capacity lithium battery, which can be used for many years, adopts IP67 high protection grade, waterproof and dustproof. Designed for harsh environment monitoring applications. The sensor terminal supports the Four-Faith proprietary protocol and the standard LoRaWAN[®] protocol. The sensor is equipped with the Four-Faith sensor cloud platform and sensor cloud APP, which can view sensor data, data analysis, data alarm, device management and so on at any time.



Industrial-grade Design

High-performance industrial-grade chip and wireless module

- Adopt high precision sensor chip
- Using ABS+PC, anti-UV, flame retardant materials
- Protection level up to IP67



- Ultra-low power design, built-in 8200mA ultra-large capacity lithium battery
- Support Four-Faith proprietary protocol and standard LoRaWAN[®] protocol
- Quick NFC configuration and TYPE C interface configuration, easy to use
- Equipped with Four-Faith sensor cloud platform and sensor cloud APP
- Support NFC upgrade, local serial port upgrade, and remote upgrade
- Support wall mount installation



Product Specification

Characteristics			
Items	Contents		
Sensor Type	Digital Sensor		
Sensor temperature	-40°C~125°C		
Measuring Range			
Sensor Humidity	0 ~ 100% RH		
Measuring Range Temperature	±0.2°C		
Measurement Accuracy	\pm 0.2 C (Typical 0-65°C, minimum or maximum temperature accuracy range does not exceed \pm 0.8°C)		
Humidity	±1.8% RH		
Measurement Accuracy	\pm 1.0% KD (Typical 30-70RH, minimum or maximum humidity accuracy does not exceed \pm 7%RH)		
Operating Temperature	-20°C~60°C		
	Low frequency:410-510MHz		
Frequency	High frequency:863-928MHz		
Protocol	Private protocol, LoRaWAN [®] protocol		
Indoor Communication	Penetrates 6 floors		
Distance	reneurales o noors		
Outdoor			
Communication	4.2 Km		
Distance			
Operating Voltage	Built-in 3.6V/8200mAh lithium battery (Disposable)		
Transmitting Current	\leq 86.2mA, duration less than 0.53second, (SF=9@20dBm)		
Receiving Current	≤11.3mA, (SF=9@20dBm)		
Sleep Mode Current	≤15.3uA, (SF=9@20dBm)		

Note: The smaller the SF (the higher the rate), the shorter the transmission distance, the shorter the launch time, and the less the function



Battery Life			
Item	Voltage/Current	Data Rate	Collection Interval (Time)
Deep Sleep	<15.3uA		
Receiving Data	<11.3mA	Level 3 (Further transmission)	5 minutes: about 1400 days (4 years) 10 minutes: about 3000 days (8 years)
Transmitting	<86.2mA		
Data	~00.211A		
Deep Sleep	<15.2uA		
Receiving Data	<11.3mA	Level 4	5 minutes: about 1600 days (4.5 years)
Transmitting	<86 0mA	(Closer transmission)	10 minutes: about 3200 days (9 years)
Data	<86.2mA		

Note: The battery working time is the theoretical day. The theoretical day is also affected by wireless signals and working temperature and humidity. The battery working time may be slightly shorter or longer.

Hardware			
Item	Content		
CPU	Industrial grade 32-bit communication processor		
Flash	128KB		
SRAM	16KB		
Other			
Item	Content		
Shell	PC+ABS material, anti-exposure, anti UV, anti-aging, impact resistance, protection grade IP67		
Dimension	90x65x34.5mm		
	(Excluding antenna and mounting parts)		
Installation	Wall mount		
Flame	UL94V-0		
Resistance			
Weight	365g		
Operating	-20~+60°C (-4~+140°F)		
Temperature			
Storage	-20~+60°C (-4~+140°F)		
Temperature			
Humidity	95% (No condensation)		

Humidity & Temperature Terminal FST100



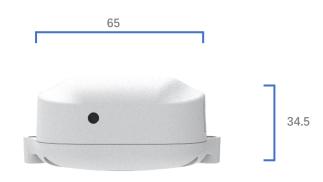
Topology



APP

Dimension (mm)







Order Information

Products	Frequency	Description	
FST100-00L	410-510 MHz	The sensor terminal supports only disposable lithium sub- battery power consumption and built-in temperature and	
FST100-00H	863-928 MHz	humidity sensors, Support private protocol and LoRaWAN protocol, support LoRaWAN frequency band CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923, etc	



ЛЁГКОСТЬ, ЭФФЕКТИВНОСТЬ, СОВЕРШЕНСТВО СЕТЕВЫЕ РЕШЕНИЯ В СФЕРЕ ИНТЕРНЕТА ВЕЩЕЙ (IOT)

