

Four-Faith 四信®

LoRa Sensor Terminal

FST200

Low Power | Pass Through | Cloud Platform | Remote Management

Introduction

FST200 series sensor terminal is a wireless data transmission terminal based on LoRa spread spectrum technology, which can meet the requirements of all kinds of sensor interface access data transmission terminal. The terminal adopts Four-Faith self-developed LoRa module with ultra-low power consumption design and built-in high-capacity lithium battery, which can be used for many years. It adopts IP67 high protection grade, waterproof and dustproof, which is designed for harsh environment monitoring applications. The terminal supports the Four-Faith private protocol and the standard LoRaWAN® protocol. The sensor is equipped with the Four-Faith sensor cloud platform and sensor cloud APP, which allows you to 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 LoRa module
- Adopt high precision sensor chip
- Using ABS+PC, anti-UV, flame retardant materials
- Protection level up to IP67

High Performance

- Ultra-low power design, built-in 19000mA ultra-large capacity lithium battery
- Support Four-Faith private 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, din-rail, pole-mounted installation

Sensor Terminal FST200



Product Specification

Characteristics	
Items	**Contents**
Frequency	433/470/868/915MHz
Protocol	Private protocol, LoRaWAN® protocol *
Indoor Communication Distance	Penetrates 10 floors
Outdoor Communication Distance	5 Km
Operating Temperature	FST100-00XA: -20~+60℃ (-4~+140℉) FST200-00XC :-35~+75℃ (-31 ~ +167℉)
Power Supply Method	FST100-00xa: Built-in 3.6V/19000mAh lithium battery (Disposable)
	FST200-00xc: Supplies power from the DC power adapter. The default value is 12V/1.5A
Receiving Current	≤10.5mA, (SF=9@20dBm)
Note: FST200-00XA/FST200-00XC, where X represents frequency band L and H, FST200-00XA low-power consumption product, FST200-00XC normal power consumption product; * means under development	

Power Consumption	
Items	**Contents**
Transmitting Current	FST200-00XA:<142mA@3.6V FST200-00XC:<69mA@12V
Receiving Current	FST200-00XA:<14.9mA@3.6V
	FST200-00XC:<7.2mA@12V
Sleep Mode Current	FST200-00XA:<14uA@3.6V
3.3V Output Load	FST200-00XA:<100mA@3.6V
12V Output Load	FST200-00XA:<80mA@3.6V

Note:

1, FST200-00 XA/FST200-00XC, where X represents the bandwidth H and L, FST200-00XA is low-power consumption product, FST200-00XC normal power consumption product.

2, 3.3V and 12V output load is single channel output load

3, Power test is without sensor test power consumption

Sensor Terminal FST200



Interfaces

No.	Content	Description
1	RX	RS232 Input
2	TX	RS232 Output
3	GND	Ground
4	B	RS485 Native
5	A	RS485 Positive
6	D2	Digital signal input and output (0-3.3V)
7	D1	Digital signal input and output (0-3.3V)
8	A2	Current acquisition analog signal input (0-20mA), maximum 5V input
9	A1	Voltage acquisition analog signal input (0-5V)
10	V3.3	Output DC is 3.3V and the maximum current is 100mA
11	GND	Ground
12	V12	Output DC 12V, maximum current 80mA
13	GND	Ground
14	CHARGE	The positive terminal of the adapter connects to this pin. The voltage range is 5 to 36V, 12V is recommended. Only applicable to FST200-00XC series product

Note: PT100 interface is optional

Hardware

Item	Content
CPU	Industrial grade 32-bit communication processor
Flash	128KB
SRAM	16KB

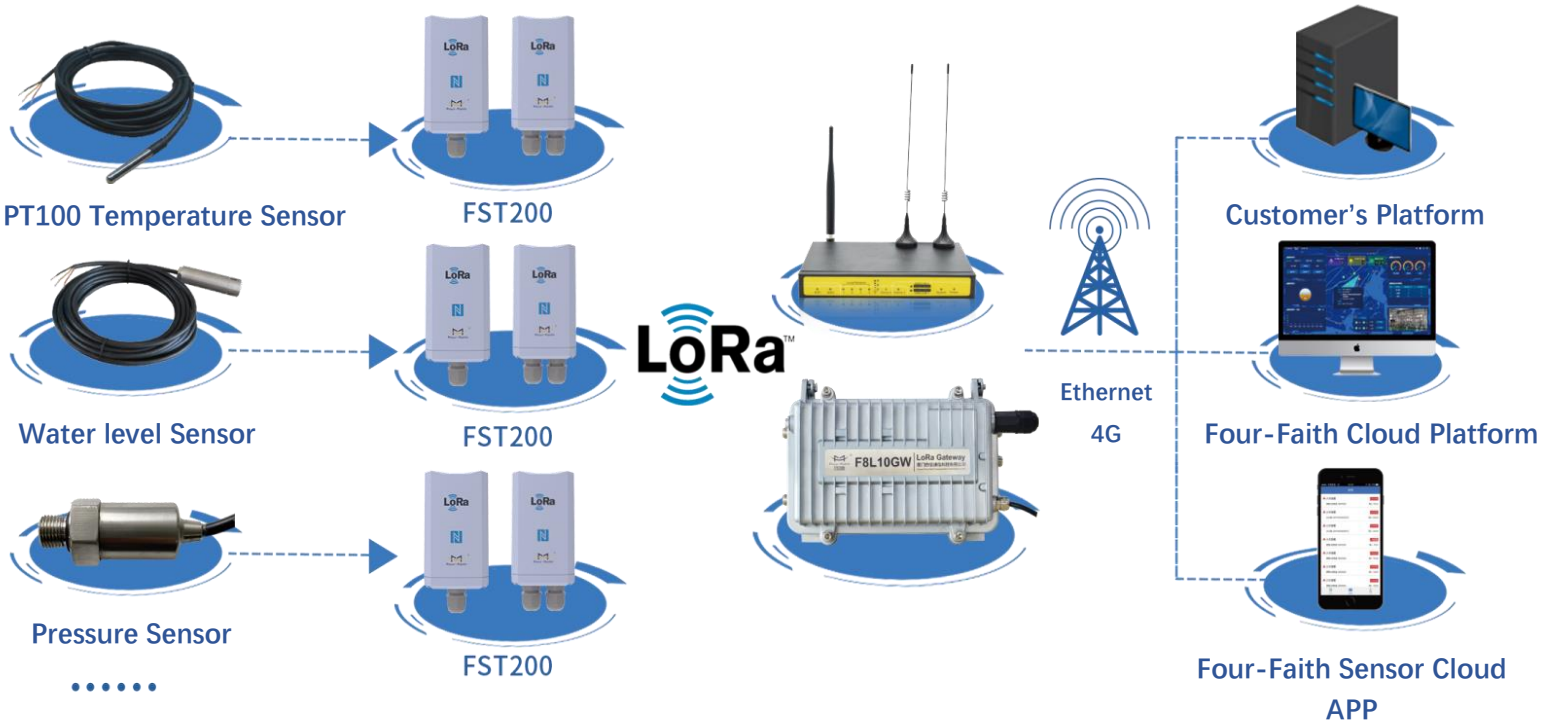
Other

Item	Content
Shell	PC+ABS material, anti-exposure, anti UV, anti-aging, impact resistance, protection grade IP67
Dimension	130x64x64mm (Excluding antenna and mounting parts)
Installation	Wall mount (Default), din-rail and pole-mount (Optional)
Flame Resistance	UL94V-0
Weight	FST200-00XA: 280g FST200-00XC: 180g

Sensor Terminal FST200

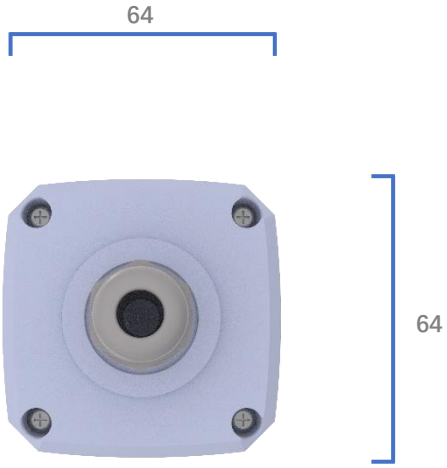


Topology



Dimension (mm)





Sensor Terminal FST200



Order Information

Products	Frequency	Description
FST200-00LA	410-510 MHz	Battery Power Supply
FST200-00HA	863-928 MHz	Battery Power Supply
FST200-00LC	410-510 MHz	DC Power Supply
FST200-00HC	863-928 MHz	DC Power Supply