

Introduction

F8L10T LoRa data transmission terminal is a wireless data transmission terminal based on LoRa spread spectrum technology. At the same time using LoRa wireless transmission technology for short-distance data transmission. It has been widely used on M2M fields, such as electric power, Intelligent traffic, wireless metering, industrial automation, telemetry, water supply, environment protection, weather, etc.

Industrial-grade Design

- High-powered industrial LoRa chip and MCU
- Support low power consumption mode, including multi-sleep and trigger modes to reduce the power dissipation farthest
- Housing: iron, providing IP30 protection
- High-powered industrial 32 bits CPU
- Power range: DC 5~36V

Stability & Reliability

- Support hardware and software WDT
- RS232/RS485/RS422 port: 15KV ESD protection
- Power port: reverse-voltage and overvoltage protection
- Antenna port: lightning protection(optional)

Standard & Convenience

- Adopt terminal block interface, convenient for industrial application
- Support standard RS232 and RS485(or RS422) port that can connect to serial devices directly
- TTL logic level RS232 interface can be customized, ADC interface can be customized
- Support intellectual mode, enter into communication state automatically when powered
- Provide management software for remote management
- Support several work modes
- Convenient configuration and maintenance interface

LoRa Terminal F8L10T



High Performance

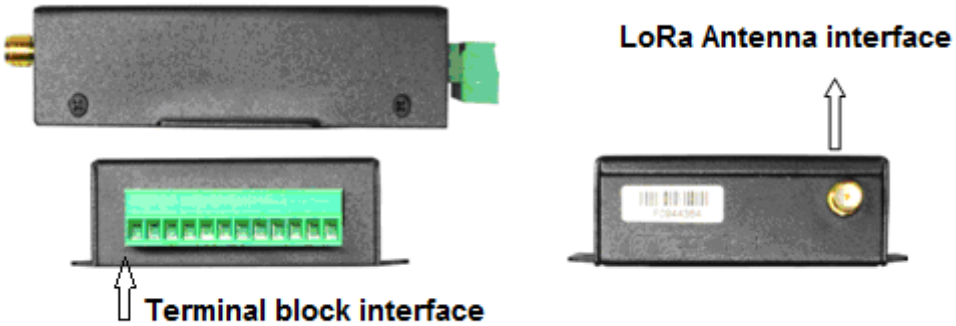
- Support LoRa wireless short-range data transmission capabilities, with self-organizing network capabilities
- Relay routing and terminal device functionality
- Network capacity: 65000 nodes (typical number of 300)
- Send mode flexible: Broadcast send or destination address send mode optional
- Supply 5 I/O channels, can achieve the analog input of the 3 channels, the digital input and output of the 2 channels; compatible with the pulse count function of the 2 channels

Product Specification

LoRa Specification	
Items	**Contents**
Communication Frequency Band	Support a variety of frequency bands around the world（433/470/780/868/915 MHz）
Indoor/Urban Communication Distance	F8L10T-N:1km F8L10T-E:2km
Outdoor/Visual Communication Distance	F8L10T-N:3.5km F8L10T-E:11.5km
Bandwidth	6 level adjustable（0.3，0.6，1.0，1.8，3.1，5.5Kbps）
TX Power	F8L10T-N:20dBm (100mW) F8L10T-E:30dBm (1W)
RX Sensitivity	-140dBm
Interfaces	
Items	**Contents**
Serial	1 RS232 port and 1 RS485 (or RS422) port, 15KV ESD protection Data bits: 8 Stop bits: 1, 2 Parity: none, even, odd, space, mark Baud rate: 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200bps
Indicator	“Power”, “ACT”, "Online”
Antenna	LoRa : Standard SMA female interface, 50 ohm, lighting protection (optional)
Power	Terminal block interface, reverse-voltage and over voltage protection

LoRa Terminal F8L10T





Power Supply			
Items	**Contents**		
Standard Power	DC 12V/0.5A		
Power Range	DC 5~36V		
Consumption			
Items	**Working Condition**		**Consumption**
F8L10T-N	@12 VDC	Sleep	3.1 ~ 3.2mA
		Receive data	13.2 ~ 13.4mA
		Transmit data	60.3 ~ 61.2mA
	@5 VDC	Sleep	7.3 ~ 7.4mA
		Receive data	26.1 ~ 26.2mA
		Transmit data	107.3 ~ 115.1mA
F8L10T-E	@12 VDC	Sleep	3.1 ~ 3.3mA@12 VDC
		Receive data	13.2 ~ 13.4mA@12 VDC
		Transmit data	110-125mA@12 VDC
	@5 VDC	Sleep	7.2 ~ 7.4mA@5 VDC
		Receive data	26.3 ~ 26.5mA@5 VDC
		Transmit data	210 ~ 213mA@5 VDC
Physical Characteristics			
Items	**Contents**		
Housing	Iron, providing IP30 protection		
Dimensions	91x58.5x22 mm		
Weight	205g		

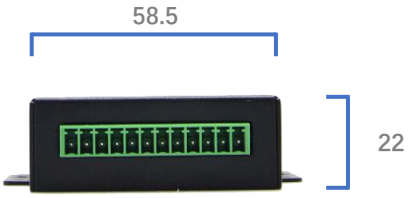
LoRa Terminal F8L10T



Physical Characteristics	
Items	**Contents**
Operating Temperature	-40~+85ºC（-40~+185°F）
Storage Temperature	-40~+125ºC（-40~+257°F）
Operating Humidity	95% (unfreezing)

Dimension (mm)





Order Information

Products	Description
F8L10T-N	LoRa data transmission terminal（Without PA）
F8L10T-E	LoRa data transmission terminal（With PA）