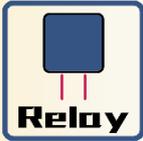


# LoRa Terminal

## F8L10T



## 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



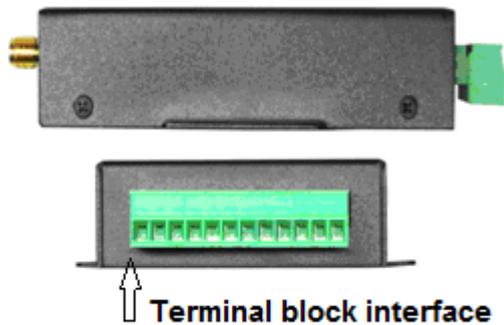
High Performance

- ▶ 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
<b>Communication Frequency Band</b>	Support a variety of frequency bands around the world (433/470/780/868/915 MHz)
<b>Indoor/Urban Communication Distance</b>	F8L10T-N:1km      F8L10T-E:2km
<b>Outdoor/Visual Communication Distance</b>	F8L10T-N:3.5km      F8L10T-E:11.5km
<b>Bandwidth</b>	6 level adjustable (0.3, 0.6, 1.0, 1.8, 3.1, 5.5Kbps)
<b>TX Power</b>	F8L10T-N:20dBm (100mW)      F8L10T-E:30dBm (1W)
<b>RX Sensitivity</b>	-140dBm
Interfaces	
Items	Contents
<b>Serial</b>	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
<b>Indicator</b>	"Power", "ACT", "Online"
<b>Antenna</b>	LoRa : Standard SMA female interface, 50 ohm, lightning protection (optional)
<b>Power</b>	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~+85°C (-40~+185°F)
Storage Temperature	-40~+125°C (-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)