



LoRaWAN[®] Module

F8L10A



Introduction

F8L10A is an industrial LoRa module that provides long-range communication, more compact design that is designed for many M2M/IoT applications. F8L10A adopts a high-performance and low-power consumption industrial Ali SoC embedded solution, makes it easily connect with Alibaba Cloud IoT Center. Also, it can customize for another LoRaWAN[®] protocols, compatible with analog & digital input or output. In addition, it has been widely used in the typical M2M industry application of the IoT industrial chain.



Industrial-grade Design

- ▶ High-performance industrial-grade CPU and wireless module
- ▶ Low power consumption
- ▶ High receive sensitivity
- ▶ DC: 1.8 ~ 3.6V
- ▶ Alibaba Link IoT certification



High Performance

- ▶ LoRa or FSK modulation
- ▶ LoRaWAN[®] 1.0.2 protocol
- ▶ Powerful AT command configuration
- ▶ Support software upgrade by serial port
- ▶ ADR (Automatic Data Rate)
- ▶ Flexible transmit power up to 22 dBm

LoRaWAN[®] Module F8L10A



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Product Specification

Characteristics	
Items	Contents
Band	EU433, CN470-510, CN779-787, EU863-870, US902-928, AU915-928, AS923, KR920-923
Urban Communication Distance	1~2km
Output Power	22dBm
Sensitivity	-140dBm@(SF=12, BW=125kHz) -135dBm@(SF=10, BW=125kHz) -126dBm@(SF=7, BW=125kHz)
RF Data Rate	ADR
Interfaces	
Items	Contents
UART	Data bits: 8 Stop bits: 1, 2 Checksum: none, odd, even Baud rate: 300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 bps
Antenna Connector	50Ω U.FL
Package	Micro double row 1.27mm*10 half-hole pin
Power Supply	
Items	Contents
Standard	3.3V/200mA
Range	DC 1.8~3.6 V
Power Consumption	
Items	Contents
RXD	<10mA@3.3V
TXD	Pout=+22dBm, 108mA Pout=+21dBm, 106mA Pout=+20dBm, 98mA Pout=+17dBm, 90mA Pout=+14dBm, 78mA Pout=+10dBm, 59mA Pout=+5dBm, 47mA
Wake-up	<3.0uA@3.3V
Deep Sleep	<2.0uA@3.3V

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Physical Properties	
Items	Contents
Dimensions	15x15x2.5mm
Weight	1.5g
Others	
Items	Contents
Operating Temperature	-40~+85°C (-40~+185°F)
Storage Temperature	-40~+125°C (-40~+257°F)
Relative Humidity	95% (non-condensing)
Certifications	Alibaba Link IoT Certificated