

- ★ Ultra-long Distance
- ★ Strong Anti-interference
- ★ Stable Signals
- ★ FSK Two-way Transmission



Industrial Remote- Control Solutions

Receivers/Transmitters

NEW



Receivers
DL_F21-5_RXM1



Transmitters
DL_F21-5_TXM1

Brief Introduction

This Industrial Remote Control and Receiver Solution were special designed for IIoT (Industrial Internet of Things) applications. We have a set of Remote Control (transmitter) & Receiver PCBA with mature software solution for any potential demand. It can be also ODM base on this system, according to your specified requirements.

With the help of this wireless remote-control system and ready PCBA, you can hold the portable transmitter (with your own cover), walk freely and choose the best location for remote operation, which can greatly improve the safety and reduce accidents such as work-related injuries. The operator can complete multiple tasks independently, which can greatly improve their work efficiency, and save your labor cost.

Features

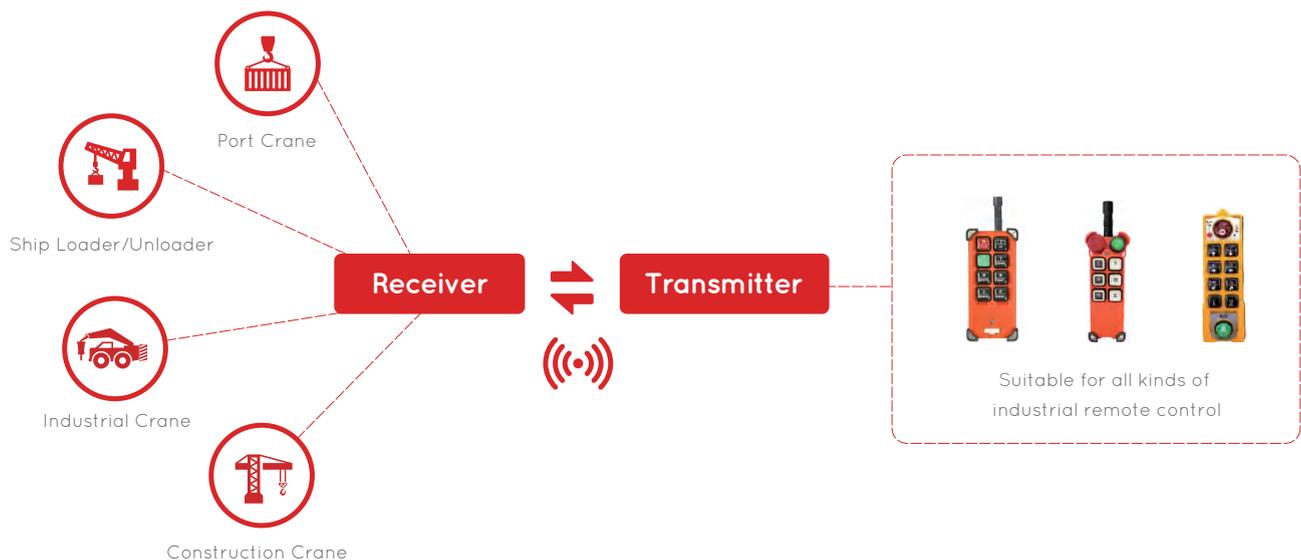
- Stable communication, sensitive response, strong anti-interference
- 160mW maximum transmit power, greatly improves the communication distance
- 0.5-160mW, 25-levels power automatic adjustment
- Adaptive transmit power according to communication distance, for longer battery life
- Feedback the working status of the receiver through RGB lights
- Low battery alarm
- Ultra-low sleep current
- Antennas are well-matched and optimized for high efficiency
- RGB lights to indicate the signal strength

Safe & Professional

- Runaway relay reset (open)
- Two-way communication, and timeliness is guaranteed
- Interference detection for improved reliability



Working Principle





Intelligent Adjustment
Adaptive transmit power, interference detection



Wide Coverage
Long range in open space



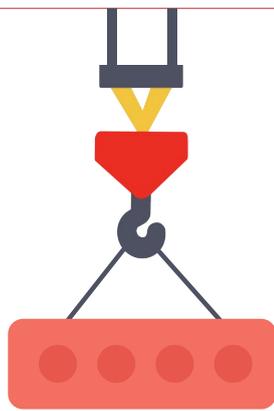
Safe and Reliable
Two-way communication, stable signals



Energy Saving
Sleep current is only 1.2uA

Product Name	Transmitter/Receiver
Model No.	DL_F21-5_TXM1/DL_F21-5_RXM1
Temperature	-25-70 °C
Distance	>300m
Transmitter	
Power Supply	2*5 AAA battery
Working Voltage	2.3-3.6V
Frequency	915MHz (customizable)
Max Transmit Power	160mW 22dBm (automatic adjustment)
Low Voltage Alarm	≤2.6V
Air Baud Rate	9600bit/s
Coding Method	cyclic error correction coding
Band Width	200KHz
Number of Channels	100
Response Time	25-35ms
Sleep Current	1.2uA
Board Size	14.51 * 5.7cm
Receiver	
Power Supply	36V AC (can be customized)
Receive Sensitivity	-120dBm
Service Life	12 months (200 times per day)
Board Size	16.4* 7.7cm

Transmitter RGB Lights to Indicate the Receiver Status



RX

Red Light on the Transmitter
No signal received, out of range
or the receiver is working abnormally

Distinguish signal strength by RGB Lights

Strong Signal	Normal Signal / Interference Exist	Weak Signal	Communication Failed	Under Protection

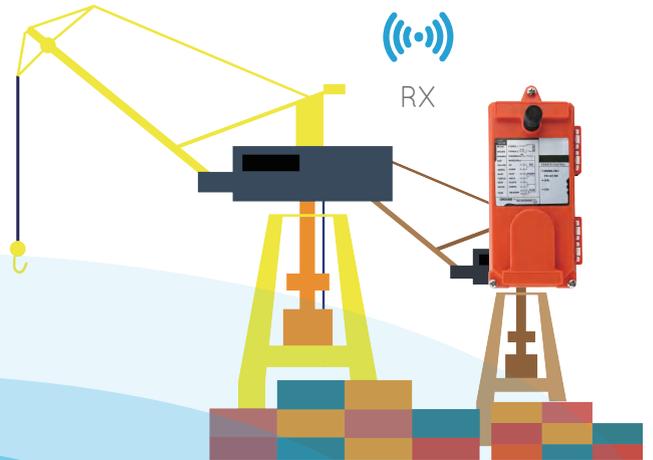


Adaptive Power

50 meters range, close distance
Power is 7dbm, more energy saving



TX



RX

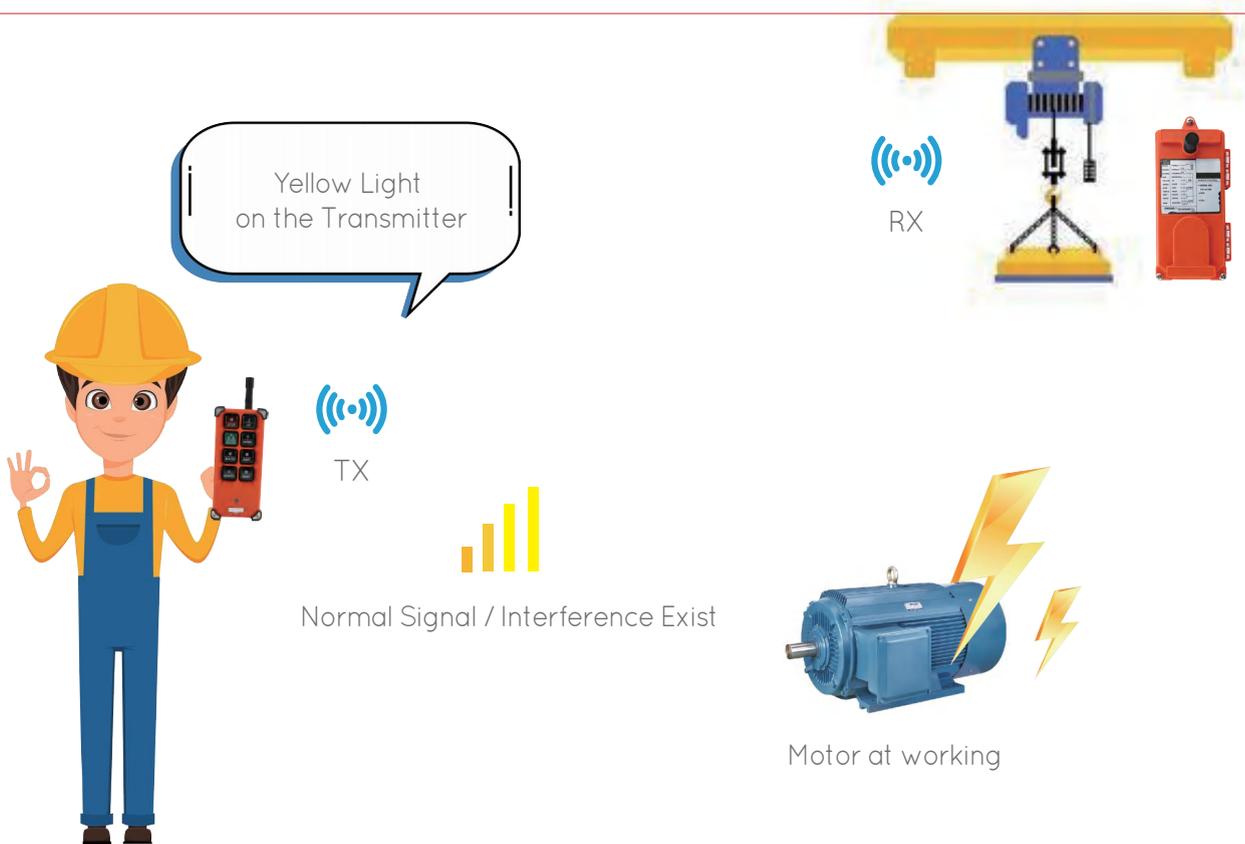
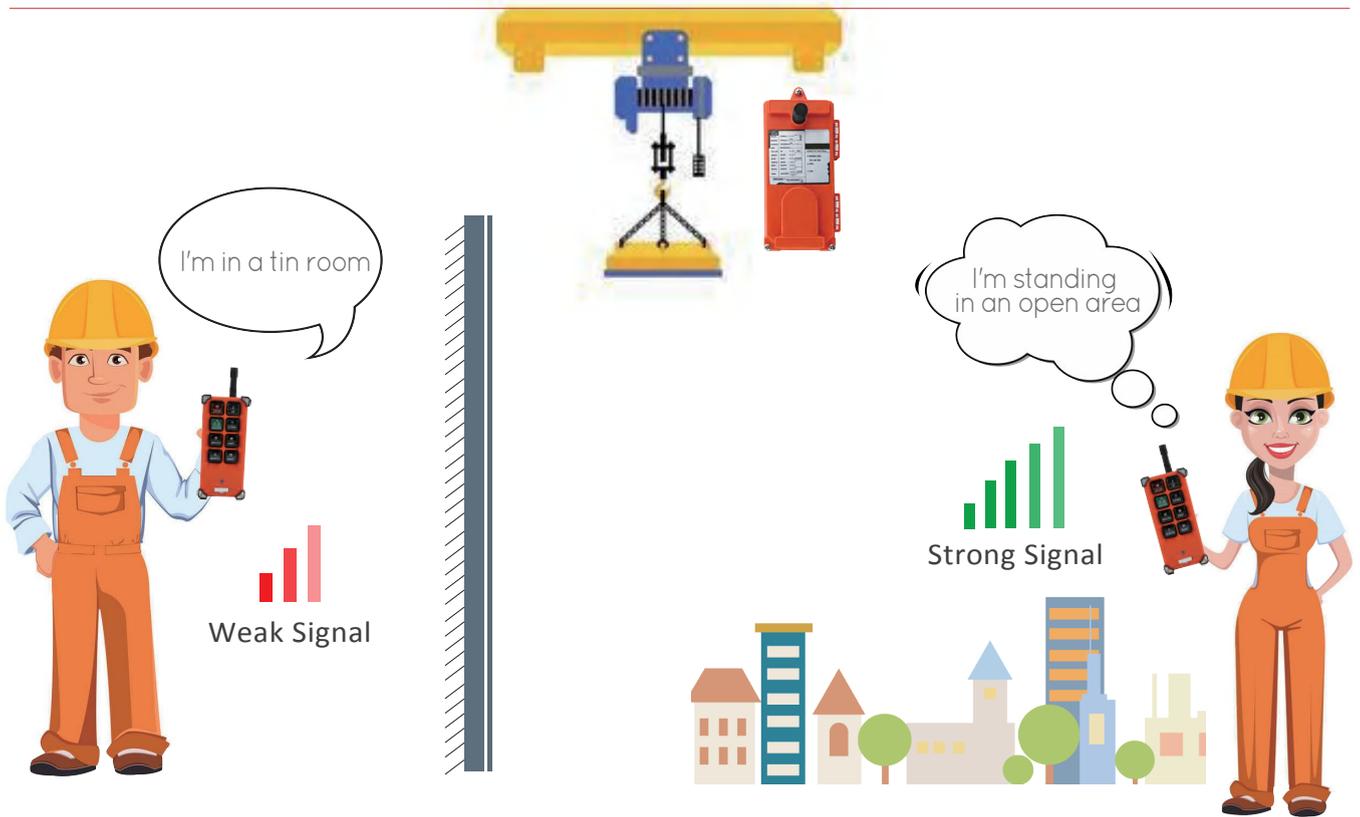
Power: 10dBm
Current: 30mA

Power: 15dBm
Current: 60mA

Power: 20dBm
Current: 105mA

Power: 22dBm
Current: 120mA

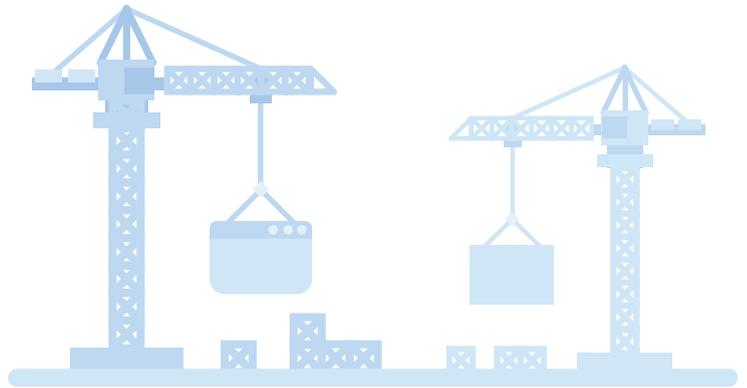
Automatically Detect Signal Strength



The Role of the Buzzer



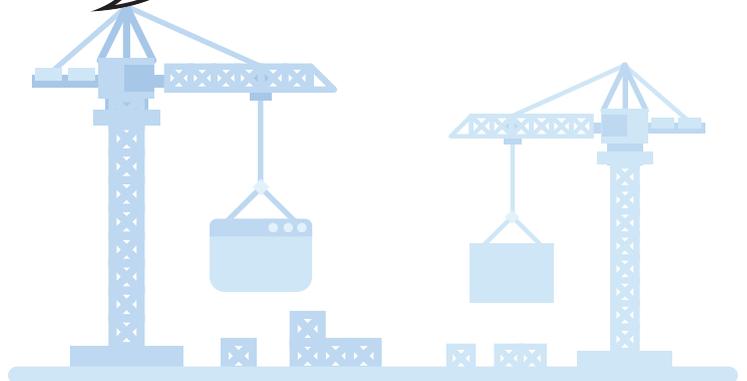
- 1: Two beeps when power on, 500ms each time
- 2: One quickly beep means there is packet loss in communication
- 3: Beep twice means there is interference in communication
- 4: Beep slowly for 1s means the battery is low



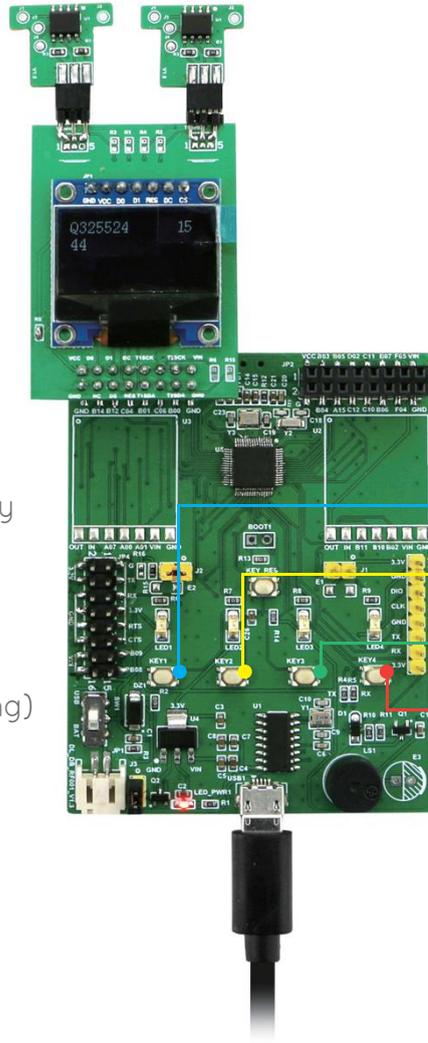
Low Battery Alarm



Low battery buzzer alarm
Battery needs to be replaced



Host Computer and T Card Configuration



T Card Configuration

1. Burn the T card and automatically print the QR code
2. Configure the boot mode
3. Configure button logic
4. Runaway relay reset (time setting)
5. Max. power setting
6. More

- Check
- Generate
- Copy
- Clear

T card burning tool

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