

1. Product Overview

Warehouse Pick To Light System is a kind of advanced light guiding technology, which replaces the picking list with a complete set of electronic display devices (such as signal lights, displays, confirmation buttons) on the shelf space to increase the working efficiency of the warehouse or distribution center. It is a paperless, efficient and cost-effective solution.

When the picking order is placed, it quickly and accurately guides the operator to the correct place through the light, and completes the operation of picking up and putting the goods according to the prompts of the label display, and push the confirmation button to give feedback to the system.

The pick-to-light system greatly reduces the time for operators to visually search for goods, improves the efficiency and accuracy of operations, effectively reduces the cost of training and management, improves overall performance, and improves the level of information management in warehouses.

The PTL Solution has two ways to work: **Cloud Solution** ①(Label management software+V1.2 Label Controllers+Picking tags): It is possible to remotely manage one or more stores (different locations) by installing an ESL software and using the API to connect to customers' system. **Local Solution**②(V1.4 Label Controller+(+V1.2 Label Controllers)+Picking tags): V1.4 controller have integrated server and software device that it can work directly by connecting to the local network, without installing the software. It is very simple and convenient to install in the local.

2. Features

- 868MHz wireless communication, no fear of obstacles, super strong penetrating force.
- Wireless communication range up to a radius of 30 meters
- Deployment is simple and fast, no cables required.
- Custom two-way communication protocol, safe and reliable
- Supports external power supply and internal battery power, ultra-low power consumption.
- Wide operating temperature range (-20° C~50° C)
- Shorten operator training time, reduce manpower cost, management cost and so on.
- Certification: RoHS, CE, FCC

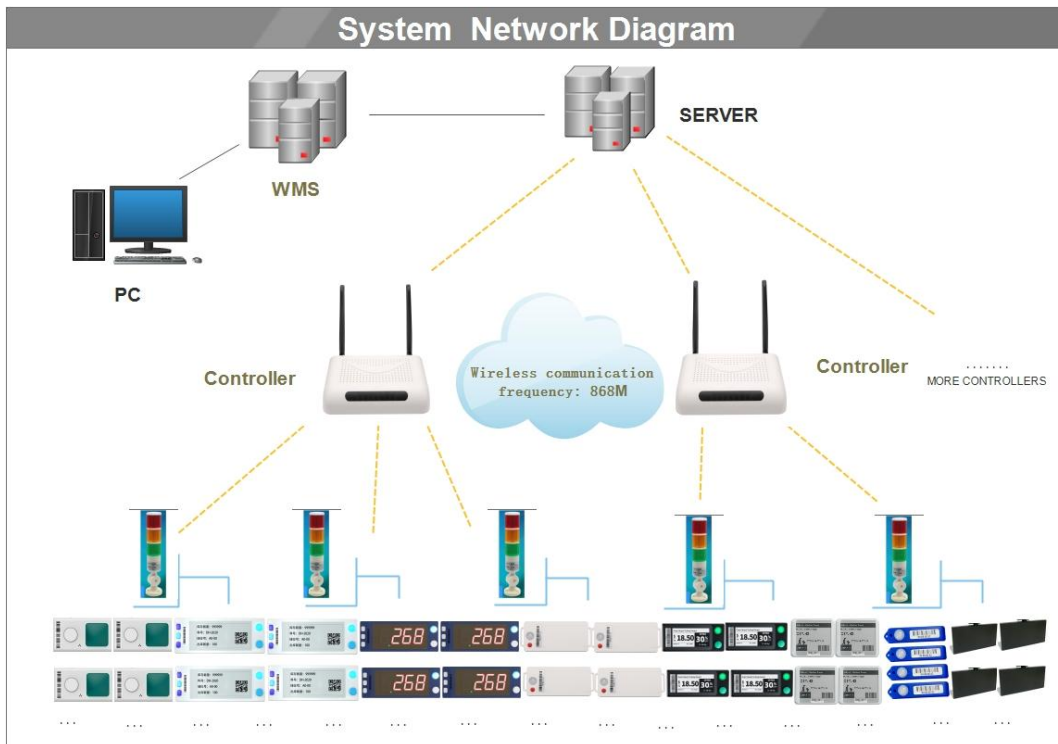


Figure 1.1

Using the wireless network to connect several controllers to the PTL system controlling PC

3. Planning a Wiring Schema for the Network

You will have to plan a wiring schema before installing the Pick-to-Light system in your warehouse/distribution center. You will need to figure out how many controllers according to the length and the width of the warehouse/center. And you will also have to calculate how many picking tags and where they are going to be attached. After planning the wiring schema, you can start the operation by operated guide.

4. Product categories

4.1 Label Controller Pick_Controller_V1.4

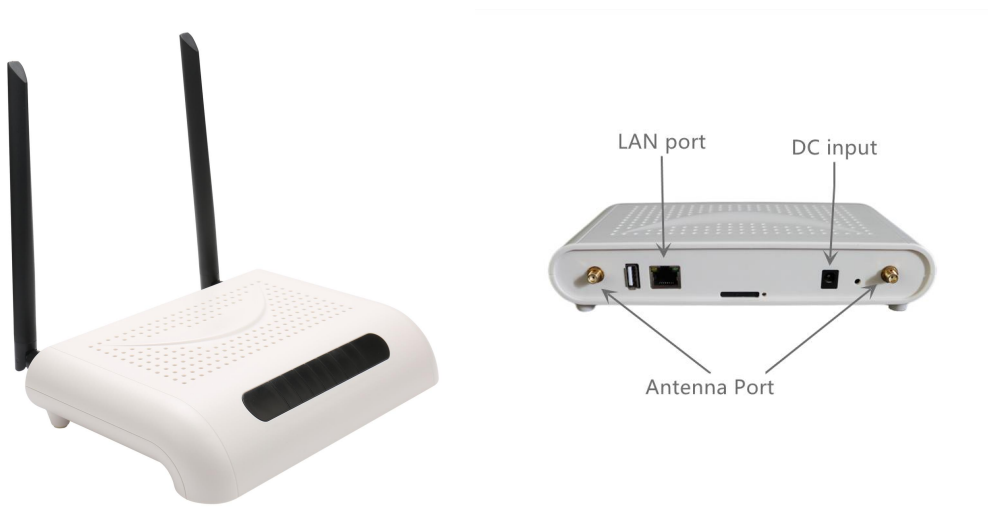


Figure 4.1

4.1.1 Features and Limitation

- One LAN port
- One DC input
- Two Antenna
- Communication mode: 868M,RJ45
- **Built-in server and software,one-stop controller**
- Power Supply:DC 12V 1A or POE
- Dimension: 210mm(L) x 140mm (W) x 43mm (H)
- The coverage of Wireless distance is radius 30m approx, support up to 10000 devices (picking tags)

4.2 Label Controller Pick_Controller_V1.2

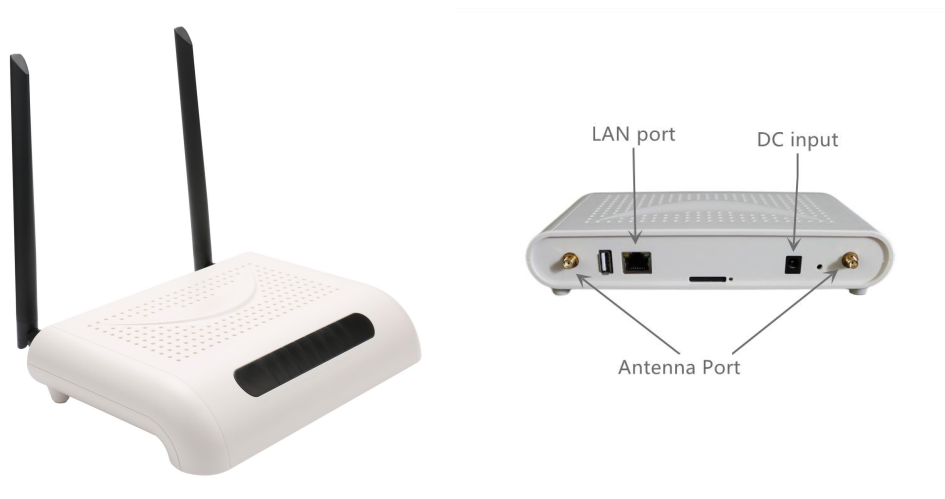


Figure 4.2

4.2.1 Features and Limitation

- One LAN port
- One DC input
- Two Antenna
- Communication mode: 868M
- Power Supply:DC 12V 1A or POE
- Dimension: 210mm(L) x 140mm (W) x 43mm (H)
- The coverage of Wireless distance is radius 30m approx, support up to 10000 devices (picking tags)**It needs to be used with software.**

4.3 CK_Label_V1



4.3.1 Features and Limitation

- One button
- No Screen
- One RGB full-color uniform lamp
- Buzzer sound prompt function
- Magnetic suction flexible installation
- Two power supply modes: two AA batteries (replaceable) or external 24V power supply
- Dimension: 37mm(L) x 65mm (W) x 33.7mm (H)

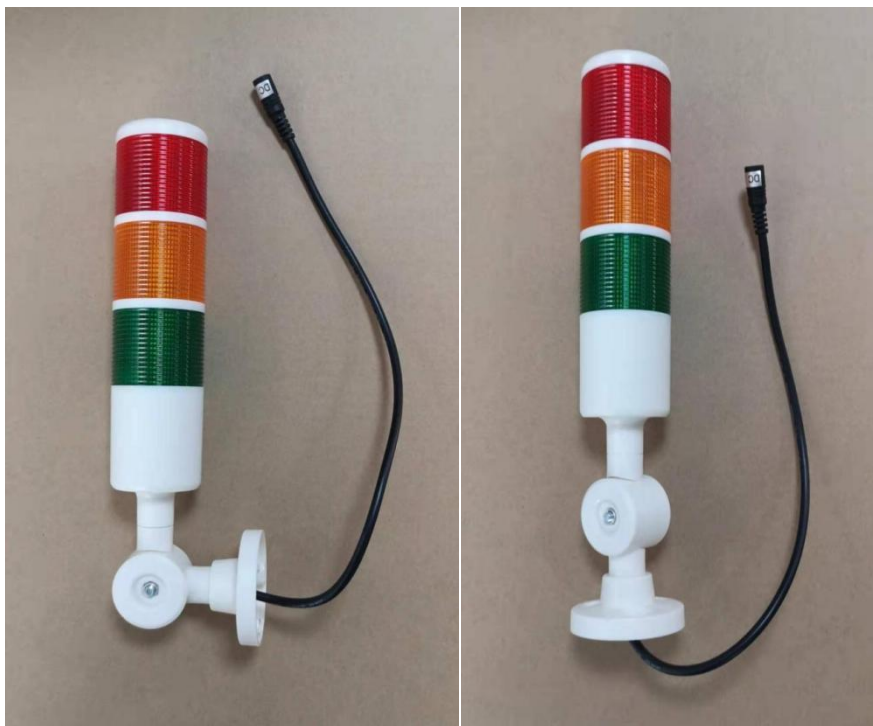
4.4 CK_Label_V3



4.4.1 Features and Limitation

- Four button
- One Multi-color high-light LED indicator
- Resolution: 296*128
- Two power supply modes: internal battery supply or external 24V power supply
- Dimension: 114.5mm(L) x 44.5mm (W) x 19mm (H)
- Displayable content: Text/Picture/Bar code/QR code

4.5 CK_Label_V9



4.5.1 Features and Limitation

- NO button
- Three color high-light LED indicator (Red &Yellow &Green)
- Resolution: 296*128
- Power supply : DC 24V 0.2A
- Size: D60 H307mm

4.5.2 CK_Label_v9_B (battery version)



4.5.4 Features and Limitation

- NO button
- Three color high-light LED indicator (Red &Yellow &Green)
- Size: 50*230mm
- Power supply :No. 1 dry cell battery (2 pcs) powered by 10,000 mAh replaceable battery

4.6 CK_Label_V10



4.6.1 Features and Limitation

- Four button
- One RGB Colorful indicator lights
- Screen display: 3-digit tube 0.8 inches
- Power supply : external 24V power supply
- Dimension: 114.5mm(L) x 44.5mm (W) x 19mm (H)
- Displayable content: 0-999 (red)

4.7 CK_Label_V11



4.7.1 Features and Limitation

- One button

- One RGB Colorful indicator lights
- No Screen
- Power supply : internal battery supply (Replaceable)
- Dimension: 114.5mm(L) x 44.5mm (W) x 19mm (H)
- Paste installation

4.8 CK_Label_V13



4.8.1 Features and Limitation

- One button
- One Multi-color high-light LED indicator
- Resolution: 250*122
- Two power supply modes: internal battery supply or external 24V power supply
- Dimension: 70mm(L) x 34.7mm (W) x 13.6mm (H)
- Displayable content: Text/Picture/Bar code/QR code

4.9 CK_Label_V14



4.9.1 Features and Limitation

- No button
- No LED Lights

- Resolution: 400*300
- Display Technology: Full Graphic E ink Display
- Power supply: internal battery supply
- Dimension: 104.5mm(L) x 87.5mm (W) x 12.7mm (H)
- Displayable content: Text/Picture/Bar code/QR code

4.10 CK_Label_V15



4.10.1 Features and Limitation

- No button
- One RGB Colorful indicator lights
- No Screen
- Power supply : internal battery supply (Replaceable)
- Dimension: 63mm(L) x 14.6mm (W) x 7.9mm (H)
- Paste installation

4.11 CK_Label_V16

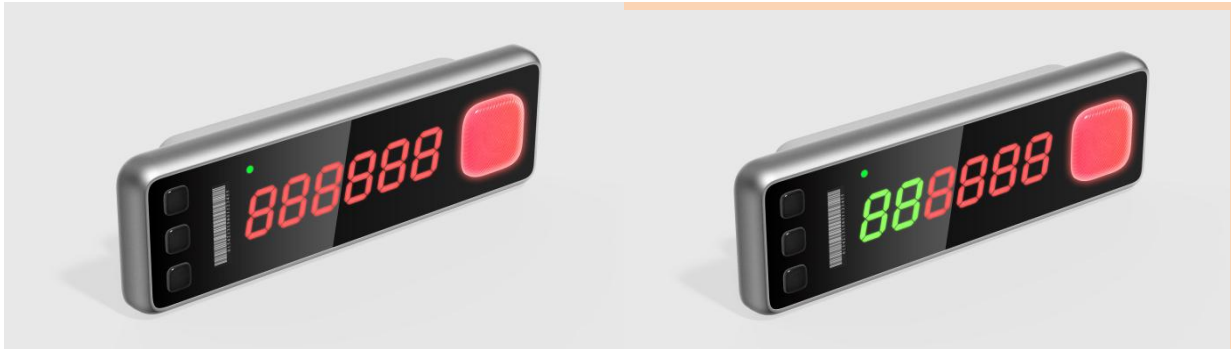


4.11.1 Features and Limitation

- No button
- Screen display: Full color dot matrix screen
- Resolution: 64x32=2048 DOTS
- Power supply : external 24V power supply

- Size: 192mm(L) x 96mm (W)
- Spacing of pixels: 3mm

4.12 CK_Label_V20



(Green-Red default)

4.12.1 Features and Limitation

- Four button
- One RGB Colorful indicator lights
- Screen display: 6-digit tube 0.8 inches
- Power supply : external 24V power supply
- Displayable content: 0-999999
- Displayable color: Red,Green,**Green-Red**(default)

4.13 CK_Label_V23



4.13.1 Features and Limitation

- Four button with four Multi-color high-light LED indicator
- Resolution: 296*128
- Power supply : external 24V power supply
- Displayable content: Text/Picture/Bar code/QR code
- Fast refresh speed, frame rate less than 1 second
- Ultra-thin shell 15mm(external power supply) -20mm (battery version)
- Come with magnetic suction installation (battery version), Come with paste installation

- Long battery life, more than 3 years (10 times/day)
- Large light button to support light selection
- Screen spontaneous lighting (special custom)
- The battery version is standard AA battery powered with no wiring

4.14 CK_Label_V24



4.14.1 Features and Limitation

- 3 buttons & 1 LED Lights
- Resolution: 400*300
- Display Technology: Full Graphic E ink Display
- Power supply: internal battery supply
- Dimension: 104.5mm(L) x 87.5mm (W) x 12.7mm (H)
- Displayable content: Text/Picture/Bar code/QR code

4.15 CK_Label_V75



4.15.1 Features and Limitation

- Resolution: 800*480
- Dimension: 180*130*13mm
- Displayable content: Text/Picture/Bar code/QR code
- Power supply: Type-C interface charging
- 1 × 3-color LED & 1 button