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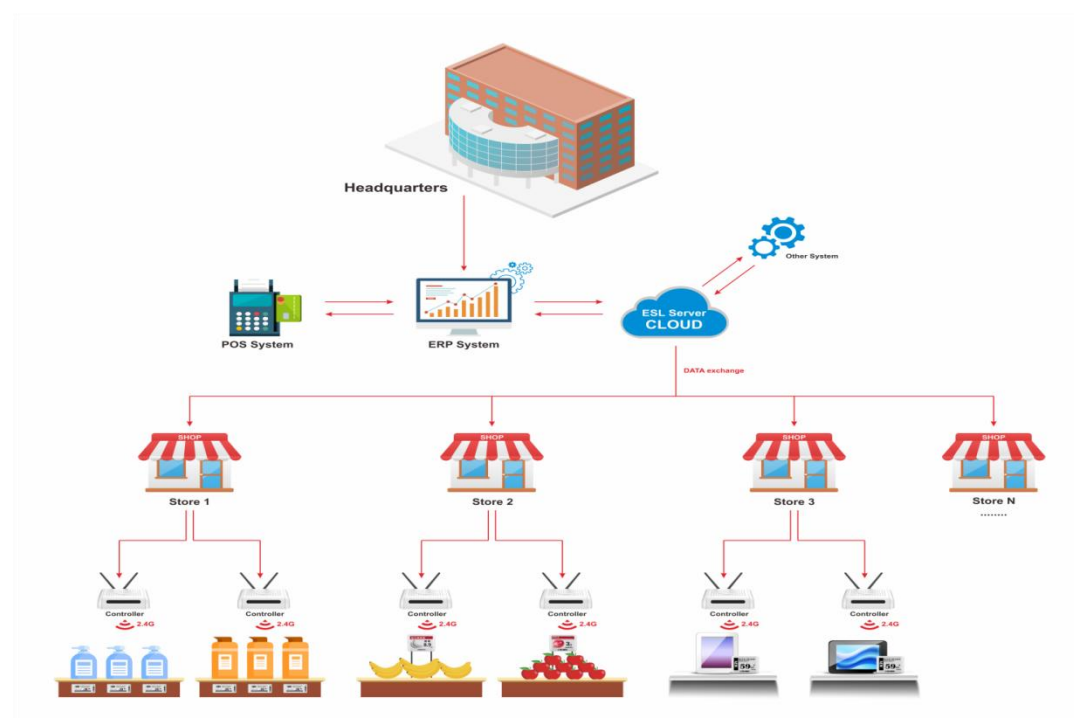# Electronic Shelf Labels

What are Electronic Shelf Labels (ESLs)?

ESL systems are used to display and automatically update product pricing shown on shelves. They are typically comprised of three components:

1. **Label management software**
2. **Label controller**
3. **E-ink display price tag**

The label management software provides an intuitive-way for users to easily manage pricing and stock information of every product.These information is then sent to the label controller via network before being transmitted to the E-ink electronic shelf labels via a private 2.4 G signal for ultimate data transfer security.And the label across the shop floor will update instantly .

How do ESLs Work?

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What are the Benefits of ESLs?

✔ Improve ease and efficiency of pricing management

✔ Enhance customers' in-store shopping experience

✔ Instantly deliver ti me-limited promotions and dynamic price changes

✔ Optimize store layout based on real data

✔ Reduce labour costs and save human resources for more important tasks

✔ Reduce processing ti me for online orders and reduce error rate

✔ Improve sustainability by reducing paper and food waste

Why Choose Us?

• 5-years experience in R&D and production of wireless low-power electronic shelf labels
• Outstanding Customer Service
• High Quality Products with Commercial Grade Components
• High Integrity Award for Enterprise in business
• Lifetime Tech Support & 1-Year Manufacturer's Warranty
• Full customized service

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Solution Overview

The ESL Solution also has two ways to work: ① **Cloud ESL solution**(Label management software+V2.4 Label Controllers+E-ink display price tag): 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. Suitable for any scenarios. ② **Local ESL solution**(V4.4 Label Controller+(+V2.4 Label Controllers)+E-ink display price tag): V4.4 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. Suitable for Testing,shops, bakeries, bookstores,Pharmacy and so on.

Product Features

1) V4.4 "One-Stop" controller,work directly by connecting to the local network.
2) Cloud ESL software can remotely manage one or more stores (different locations).
3) Wireless communication distance radius 30 m.

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4) Wireless communication speed 50/250kbps.

5) Customized duplex communication protocol, security warranted.

6) Software and Hardware data calibration. Matrix EPD,full viewing.

7) 2.4G carrier wave, encryption communication.Strong penetrating power without fear of obstacles.

8) Low power consumption, the routine use of 5 years of battery life.The batteries can be replaceable.

9) Support content: text/bar code/QR code/picture

Product Introduction

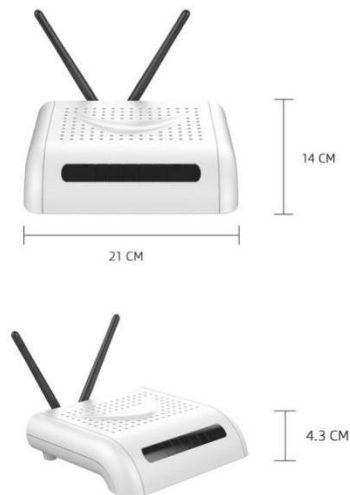| Model:	Pick_Router_V4.4
Size(mm)	D205mm,H45mm
POWER	48V POE
Working temperature	-10-70℃
Weight	350g
Communication frequency	2.4G
Communication rate	50-250kbps
Communication mode	10/100Mbps Ethernet & 2.4G
Wireless range radius	30m
Label capacity	>10000
Update the way	OTA
Interface type	RJ45-2.4G
Server	Built-in: webserver:Tomcat Server system:JAVA Database:Mysql Router
Access	Web access
Service Interface protocol	Http，Data format：Json

THIS SPECIFICATION VARIES DEPENDING ON THE INSTALLATION ENVIRONMENT AND USER SCENARIO

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PICK_ROUTER_V2.4

Model:	PICK_Router_V2.4
Size	21*14*4.3cm
power	DC12V or POE
Working temperature	-10-70℃
Weight	465g
Communication frequency	2.4G
Communication rate	50-250kbps
Communication mode	10/100Mbps Ethernet & 2.4G
Wireless range radius	30M
Label capacity	>10000
Update the way	OTA
Interface type	RJ45 & USB host & DC Jack
operating system	linux
Interface protocol	Http，Data format：Json

THIS SPECIFICATION VARIES DEPENDING ON THE INSTALLATION ENVIRONMENT AND USER SCENARIO

ESL_TFT_2.1_V4

Case: white smooth finish

Case: black finish

Product code	ESL_TFT_2.1_v4
Dimensions (mm)	69.5x35x14.8
Display technology	Mono TFT
Active display area (mm)	23.668(H) x 48.5(V)
Resolution (pixels)	250*122
Pixel Size(mm)	0.194x0.194
Pixel colors	Black/white
Viewing angle	45/45/60/60
Operating temperature	-20℃ to 70℃
Battery	1200mAh(CR2450X2)
Battery lifetime	2 -3years
ESL operating frequency	2.4G
Wireless firmware update	Yes
Weight	0.028kg
Support content format	Text/Barcode/QR code/Picture
Communication radius	30m
Template design DIY	Yes
Communication equipment	Gateway : PICK_Router_V4.4 / PICK_Router_V2.4

This specification varies depending on the installation environment and user scenario

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PE21_V4

Product code	PE21_V4
Dimensions (mm)	70x34.7x13.6
Display technology	E ink
Active display area (mm)	23.71(H) x 48.55(V)
Resolution (pixels)	250*122
Pixel Size(mm)	0.1942×0.1942
Pixel colors	Black/white
Viewing angle	180
Operating temperature	0℃-50℃
Battery	1200mAh(CR2450X2)
Battery lifetime	3-5years
ESL operating frequency	2.4G
Wireless firmware update	Yes
Weight	32.5 G
Support content format	Text/Barcode/QR code/Picture
Communication radius	30m
Template design DIY	Yes
Communication equipment	Gateway：PICK_Router_V4.4 / PICK_Router_V2.4

\# THIS SPECIFICATION VARIES DEPENDING ON THE INSTALLATION ENVIR

PE21R_V4

Product code	PE21R_V4
Dimensions (mm)	70x34.7x13.6
Display technology	E ink
Active display area (mm)	23.71(H) x 48.55(V)
Resolution (pixels)	250*122
Pixel Size(mm)	0.1942×0.1942
Pixel colors	Black/white/Red
Viewing angle	180
Operating temperature	0℃-50℃
Battery	1200mAh(CR2450X2)
Battery lifetime	3 -5years
ESL operating frequency	2.4G
Wireless firmware update	Yes
Weight	32.5 G
Support content format	Text/Barcode/QR code/Picture
Communication radius	30m
Template design DIY	Yes
Communication equipment	Gateway：PICK_Router_V4.4 / PICK_Router_V2.4

\# THIS SPECIFICATION VARIES DEPENDING ON THE INSTALLATION ENVIRONMENT AND USER SCENARIO

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PE29_V4

Product code	PE29_V4
Dimensions (mm)	88.5x41.5x13.8
Display technology	E ink
Active display area (mm)	29(H) x 66.9(V)
Resolution (pixels)	296x128
Pixel Size(mm)	0.227X0.226
Pixel colors	Black/white
Viewing angle	180
Operating temperature	0℃–50℃
Battery	1200mAh(CR2450X2)
Battery lifetime	5years
ESL operating frequency	2.4G
Wireless firmware update	Yes
Weight	0.045kg
Support content format	Text/Barcode/QR code/Picture
Communication radius	30m
Template design DIY	Yes
Communication equipment	Gateway: PICK_Router_V4.4 / PICK_Router_V2.4

\# THIS SPECIFICATION VARIES DEPENDING ON THE INSTALLATION ENVIRONMENT AND USER SCENARIO

41.5 mm (W)

88.5 mm (L)　　13.8 mm (H)

PE29R _V4

Product code	PE29R_v4
Dimensions (mm)	88.5x41.5x13.8
Display technology	E ink
Active display area (mm)	29(H) x 66.9(V)
Resolution (pixels)	296x128
Pixel Size(mm)	0.227x0.226
Pixel colors	Black/white/Red
Viewing angle	180
Operating temperature	0℃–50℃
Battery	1200mAh(CR2450X2)
Battery lifetime	5years
ESL operating frequency	2.4G
Wireless firmware update	Yes
Weight	0.045kg
Support content format	Text/Barcode/QR code/Picture
Communication radius	30m
Template design DIY	Yes
Communication equipment	Gateway: PICK_Router_V4.4 / PICK_Router_V2.4

\# This specification varies depending on the installation environment and user scenario

41.5 mm (w)

88.5 mm (L)　　13.8 mm (H)

PE42R_V4

Product code	PE42R_V4
Dimensions (mm)	104.5x87.5x12.7
Display technology	E ink
Active display area (mm)	84.8(H) x 63.6(V)
Resolution (pixels)	400 x 300
Pixel Size(mm)	0.212x0.212
Pixel colors	Black/white/Red OR Black/white
Viewing angle	180
Operating temperature	0℃ to 50℃
Battery	2400mAh(CR2450X4)
Battery lifetime	3-5 years
ESL operating frequency	2.4G
Wireless firmware update	Yes
Weight	104.4g
Support content format	Text/Barcode/QR code/Picture
Communication radius	30m
Template design DIY	Yes
Communication equipment	Gateway：PICK_Router_V2/PICK_Router_V4.4

\# 此规格根据安装环境和用户场景不同而有所不同

ESL_BWR7.5_V2

Product code	ESL_BWR7.5_V2
Dimensions (mm)	180x130x13
Display technology	E ink
Active display area (mm)	163.2(H) x 97.92(V)
Resolution (pixels)	640*384
Pixel Size(mm)	0.255 ×0.255
Pixel colors	Black/white/Red
Viewing angle	180
Operating temperature	0℃ to 50℃
Battery	3600mAh(CR2450X6)
Battery lifetime	5years
ESL operating frequency	2.4G
Wireless firmware update	Yes
Weight	381.4g
Support content format	Text/Barcode/QR code/Picture
Communication radius	30m
Template design DIY	Yes
Communication equipment	Gateway：PICK_Router_V4/PICK_Router_V2

\# 此规格根据安装环境和用户场景不同而有所不同
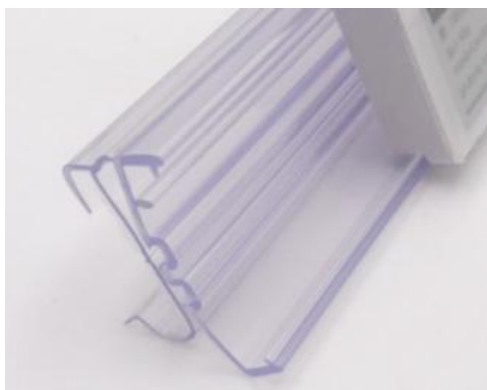
ESL_BWR10.2_V2

Product code	ESL_BWR10.2_V2
Dimensions (mm)	234.9*175.4*14.4
Display technology	E ink
Active display area (mm)	215.5(H) x 143.68(V)
Resolution (pixels)	960x640
Pixel Size(mm)	0.2245x0.2245
Pixel colors	Black/white/Red
Viewing angle	180
Operating temperature	0℃ to 50℃
Battery	3600mAh(CR2450X6)
Battery lifetime	5years
ESL operating frequency	2.4G
Wireless firmware update	Yes
Weight	428.7g
Support content format	Text/Barcode/QR code/Picture
Communication radius	30m
Template design DIY	Yes
Communication equipment	Gateway: PICK_Router_V3/PICK_Router_V2

＃ 此规格根据安装环境和用户场景不同而有所不同

2. How to install
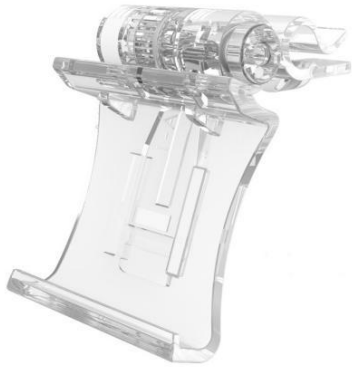
1. Slide way（for2.1&2.9）

2. Desktop fixed（for2.1&2.9）	
3. Paste Fixed（for2.1&2.9）	
4. Clip（for2.1&2.9）	

5. Hook Fixed（for2.1&2.9）	
6. Paste Fixed（for 4.2 inch）	
7. Desktop fixed（for 4.2 inch）	

8. Clip（**for 4.2 inch**）	
9. Desktop fixed（**for 7.5 inch**）	
10. Paste Fixed（**for 7.5 inch**）	

11. Desktop fixed（for 10.2 inch）	
12. Paste Fixed（for 10.2 inch）	