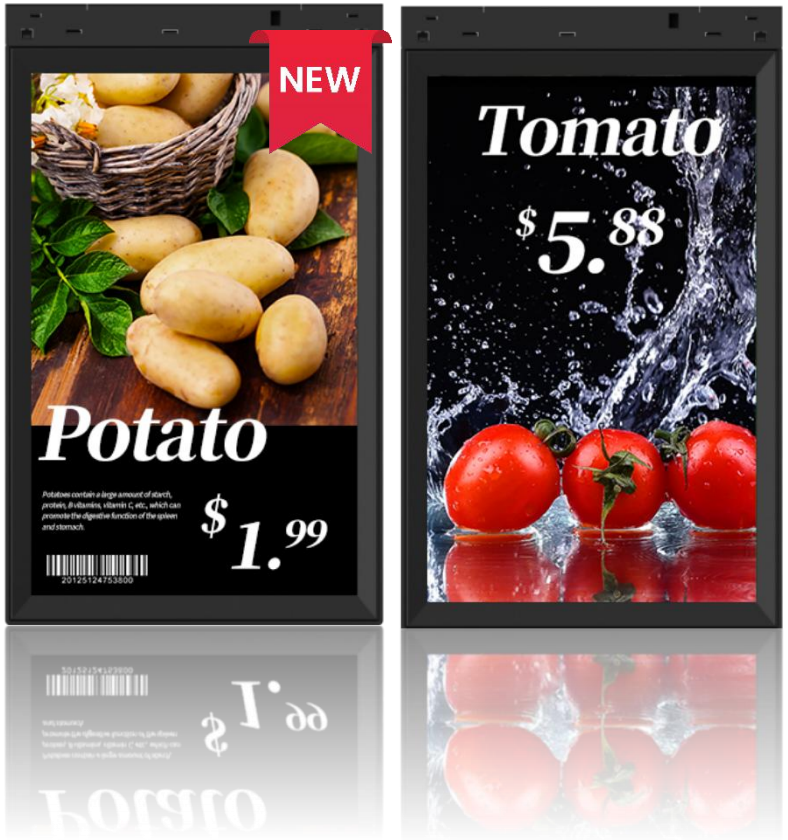
Electronic Shelf Label Solution

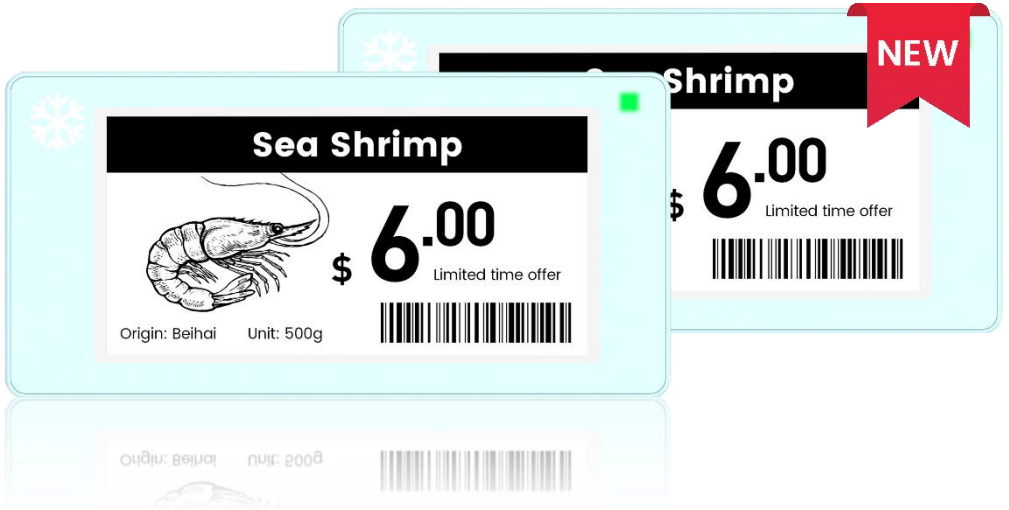
2023

Product Introduction

Product Introduction – New Design



10.1”LCD Signage
(Full-color support video&Image)



2.66” ESL Frozen Label
(working in cold temperature)

Applications

The retail area is the main application area of electronic label, as well as Intelligent office, intelligent warehousing, intelligent manufacturing, intelligent medical and other fields are ESL's innovation application.

The essence of the innovative lies in the electronic computerization of the display material medium, break the static of traditional paper display, get through the online and offline information integration and exchange, efficiency and cost savings are still the main elements of innovation application.

Chain Department Store | Fresh Category Retail | 3C Electronic Store | Leading Retail Enterprise

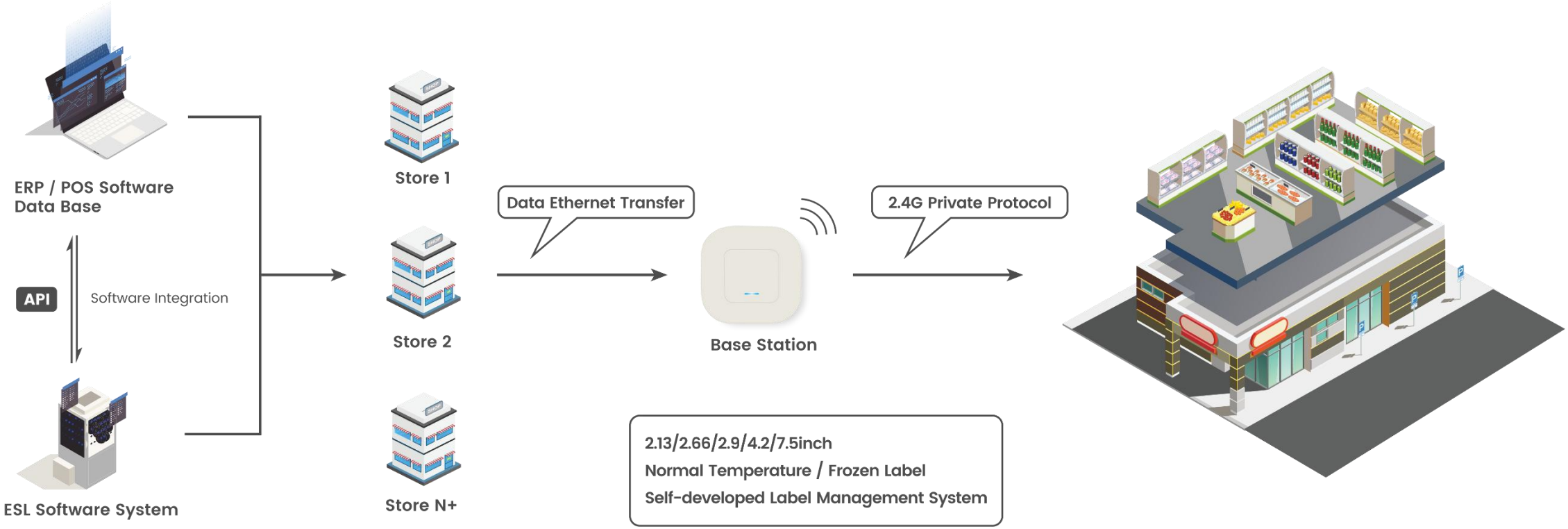
Int

Intelligent Medical

Working Principle

The latest cloud architecture realizes data visualization management

- First, the commodity information in the database is coded by the host computer through ESL software system.
- Then transmit information such as prices that need to be updated sends to base station through Ethernet.
- The base station sends the 2.4G signal of updated information to the E-labels in entire shopping mall (each store), etc.



ESL (Hardware)

QS21-RW

Dimensions： 69.3mm(V)*35mm(H)*12mm(D)
Display color：black/white/red
Weight： 29g
Resolution： 250(H) x 122(V)
DPI : 130 DPI

WP26-RW

Dimensions：82.6(V)*40.6mm(H)*13mm(D)
Display color：black/white/red
Weight： 36g
Resolution：296(H) x 152(V)
DPI : 125 DPI

ES29-RW

Dimensions： 89.9mm(V)*41.8mm(H)*13mm(D)
Display color：black/white/red
Weight： 40g
Resolution： 296(H) x 128(V)
DPI : 122DPI

ES42-RW

Dimensions： 97mm(V)*89.5mm(H)*10.5mm(D)
Display color：black/white/red
Weight： 97g
Resolution： 400(H) x 300(V)
DPI : 119 DPI

ES75-RW

Dimensions： 178mm(V)*120mm(H)*12mm(D)
Display color：black/white/red
Weight： 188g
Resolution： 800(H) x 480(V)
DPI : 124 DPI

ESL (Hardware)

WP26-KBF

Operating temperature: -20℃ to 30 ℃

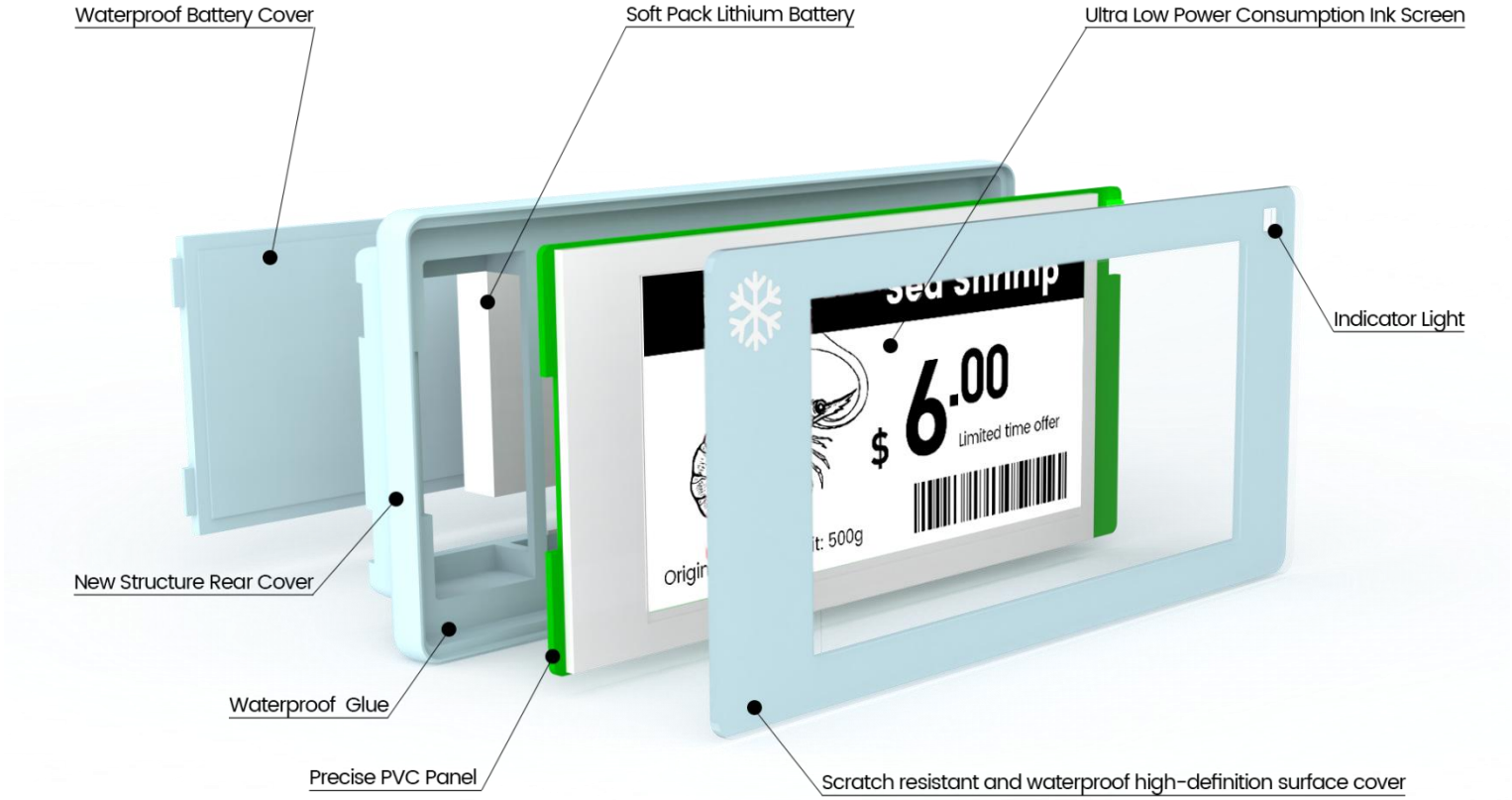
Dimensions：82.6(V)*40.6mm(H)*13mm(D)

Display color：black/white

Weight： 31g

Resolution：296(H) x 152(V)

DPI : 125 DPI

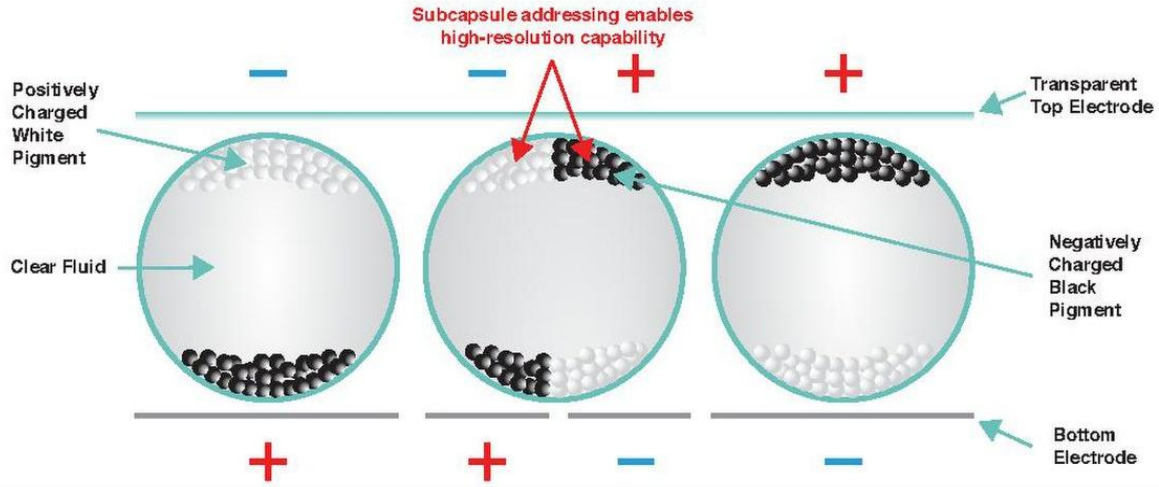


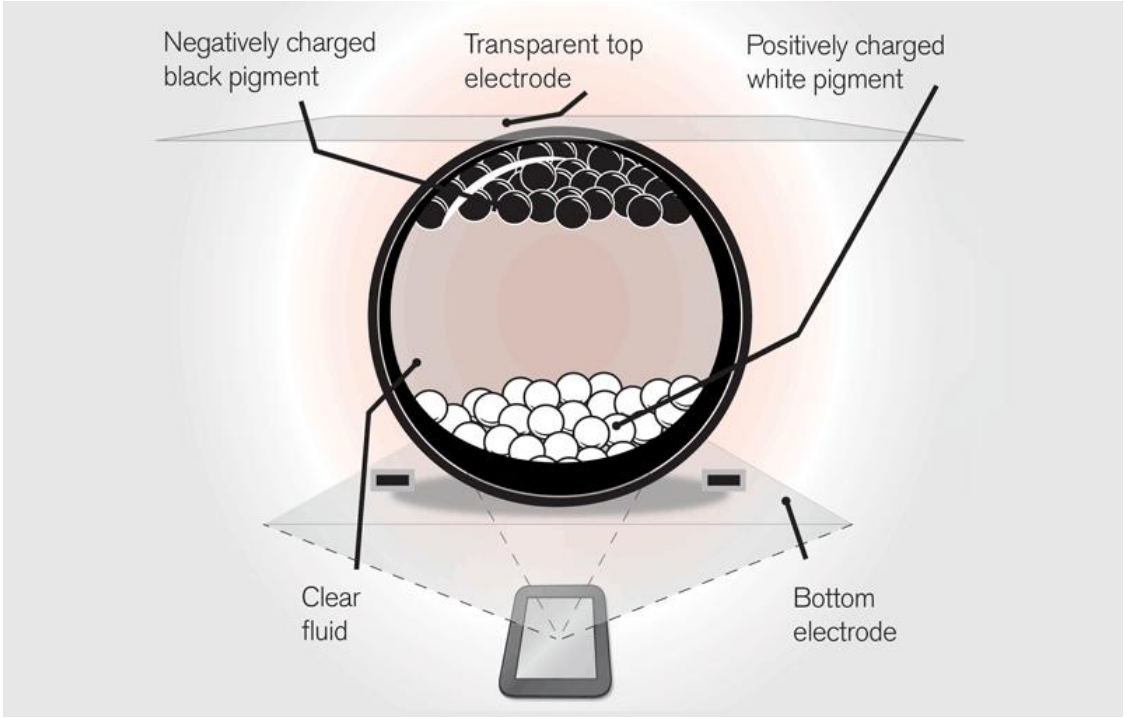
2.66” ESL Frozen Label

E-paper Technology

Electronic paper is a thin film material composed of two parts, including a layer of transparent conductive film (ITO film) and a layer of microcapsule material coated on the film.

Electronic paper contains millions of tiny microcapsules. These microcapsules are filled with a clear fluid having small particles of different colors and electric charges. On applying a positive charge, negatively charged particles move to the top, and positively charged particles move to the bottom of the microcapsule and vice versa. This movement of the particles to the top and bottom makes the surface display a specific color.





ESL (Hardware)

Base Station

- 2.4G private protocol
- 1 base station supports 4000 ESL labels
- Communication distance with a radius of 30 meters

Functional parameter

Communication protocol	2.4G private protocol
Operating frequency band	2400MHZ- 2483.5MHZ
Wireless communication distance	30 meters
Wireless communication rate	250Kbps
Network communication rate	100 meters downstream, 100 meters upstream
Number of antennas	2.4G internal antennas x 4
Number of ESL supported	4000
Operating temperature	-25 ℃~ 40 ℃
Storage Temperature	-0 ℃~ 40 ℃
Configuration IP	Manual / Automatic
Indicator light	LED
Port	Network port, USB port, serial port
OTA	Supports automatic upgrade
Power supply	Supports POE power supply or AC power supply

ESL (Hardware)

ESL development kit

Depending on consumers' need, Sunlux development kit contains different sizes ESL to get users started. The development kit allows users to play it in real retail scene and help users to understand how the whole solution work.

A list of the items included (Suitable for retail scenarios)				
Model	**Description**	**Picture**	**Size**(inch)	**PCS**
ES21-RW	Electronic Shelf Label		2.13	3
ES29-RW	Electronic Shelf Label		2.9	3
ES42-RW	Electronic Shelf Label		4.2	3
PG-4K	Base Station		/	1
Software	ESL Software Account		/	1
Accessory	Power Supply (12 V)	/	/	1
	Network Cable (1 meter)	/	/	1

ESL (Hardware)

Single Screen

10.1 Inch Full Color LCD Signage

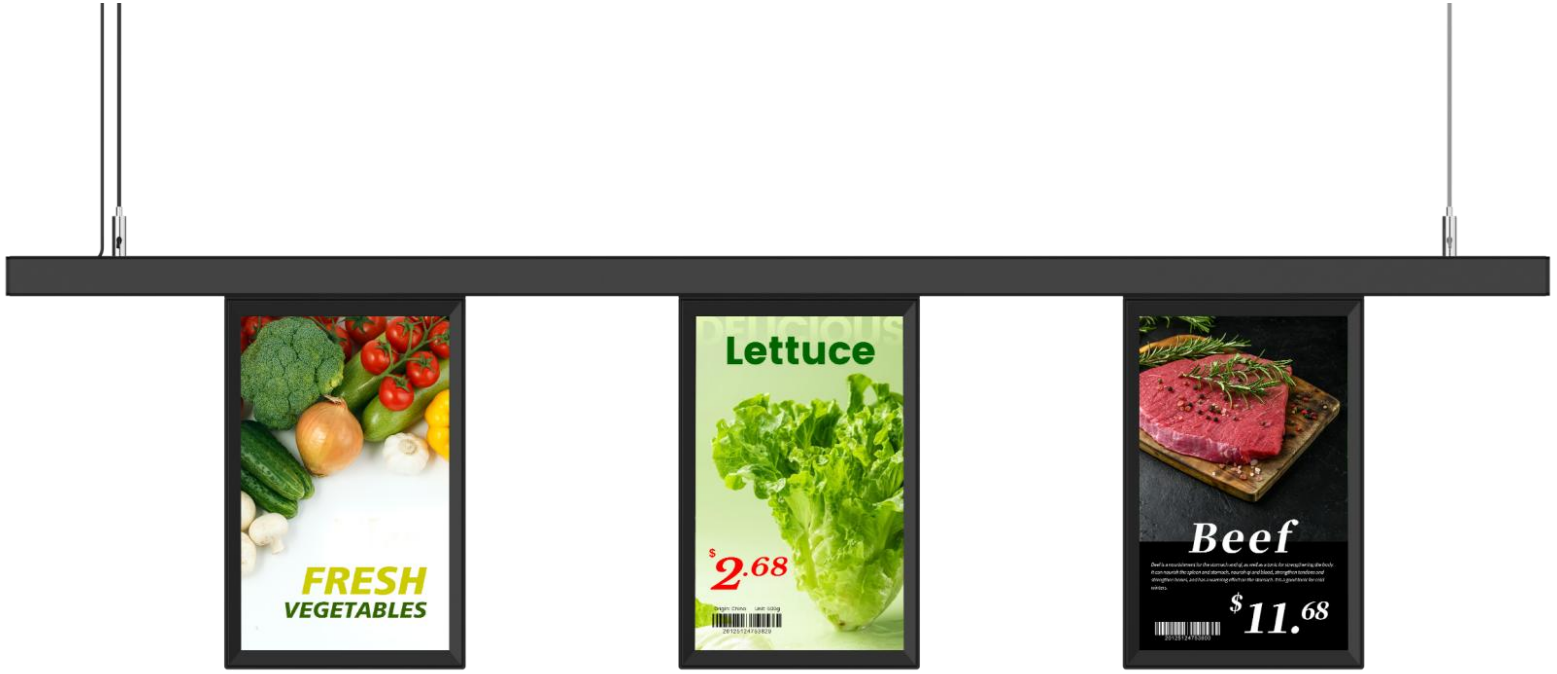
Screen Size	10.1 inch IPS
External Size	258 x 157 x 14.2 mm
Weight	340g
Resolution	800 x 1280 Pixels
Storage	128MB (Customizable)
Picture Format	PNG, JPG, etc
Image size	10-20MB
Video Format	MP4, AVI, (480P, 720P)
Video size	<80MB
Connection Mode	WIFI
Port	MIPI
Power Consumption	4W (12V 300MA)
Operating Temperature	0 to 50 °C
Storage Temperature	- 10 to 60 °C

ESL (Hardware)

Dual Screen

10.1 Inch Full Color LCD Signage

Screen Size	10.1 inch IPS
External Size	242 x 155 x 12.6 mm
Weight	465g
Resolution	800 x 1280 Pixels
Storage	128MB (Customizable)
Picture Format	PNG,JPG, etc
Image size	10-20MB
Video Format	Mp4, AVI, (480P)
Video size	< 80MB
Connection Mode	WIFI
Port	MIPI
Power Consumption	8W (12V 600MA)
Brightness	200
Voltage	9-28V
Guide Rail Length	1000*27*20mm
Guide Rail Material	Aluminium Alloy
Operating Temperature	0 to 60 °C
Storage Temperature	- 20 to 80 °C



ESL（Accessories)

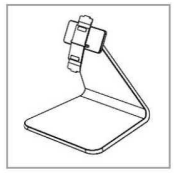
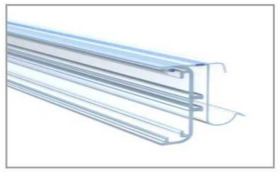
ESL Rail

Table Stand

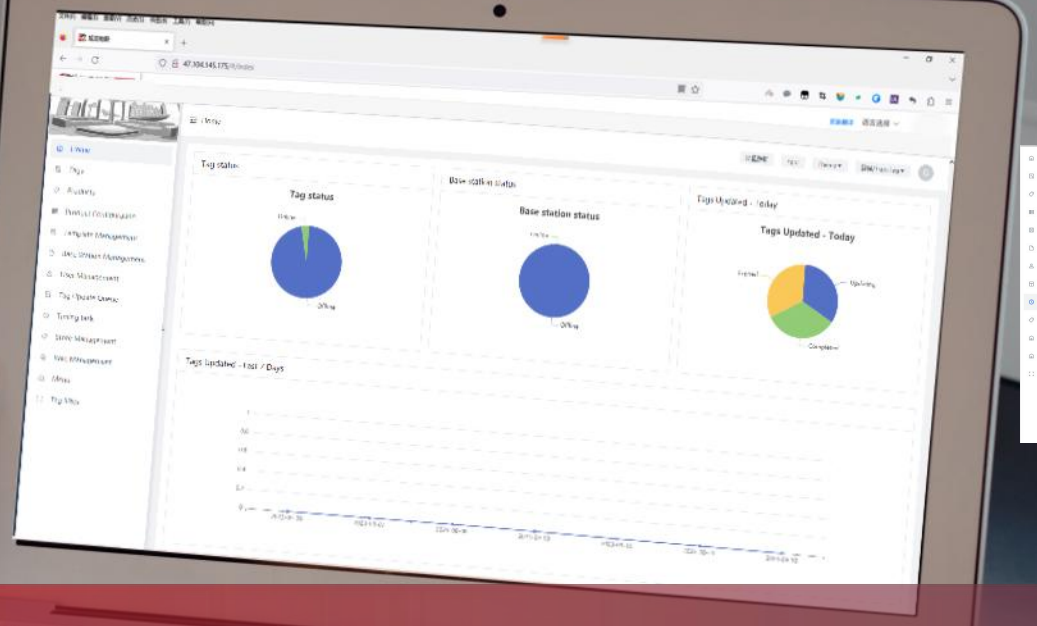
Universal Clamp Holder

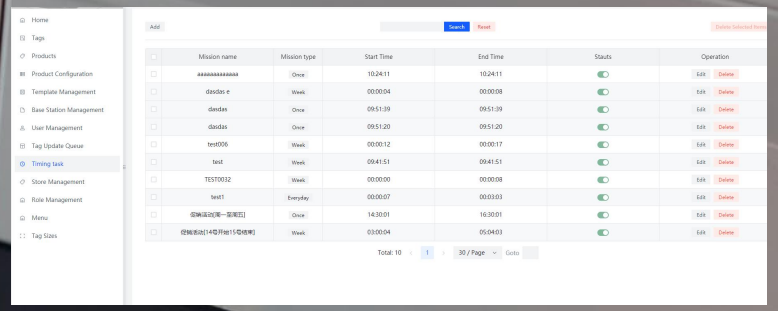
more……

Multiple accessory installations, support customization……

Item No.	GDBJ001	GDBJ002	GDBJ003	WXJ004	TXGG005	TMDGDJ006 (with 3M Glue) / TMDG006 (without 3M Glue)	CXGJ007
Picture							
Product Name	Table Stand	Table Stand	Table Stand	Universal Clamp Holder	T hook Set	Rail Clip	Crowbar

ESL Management System (**software**)



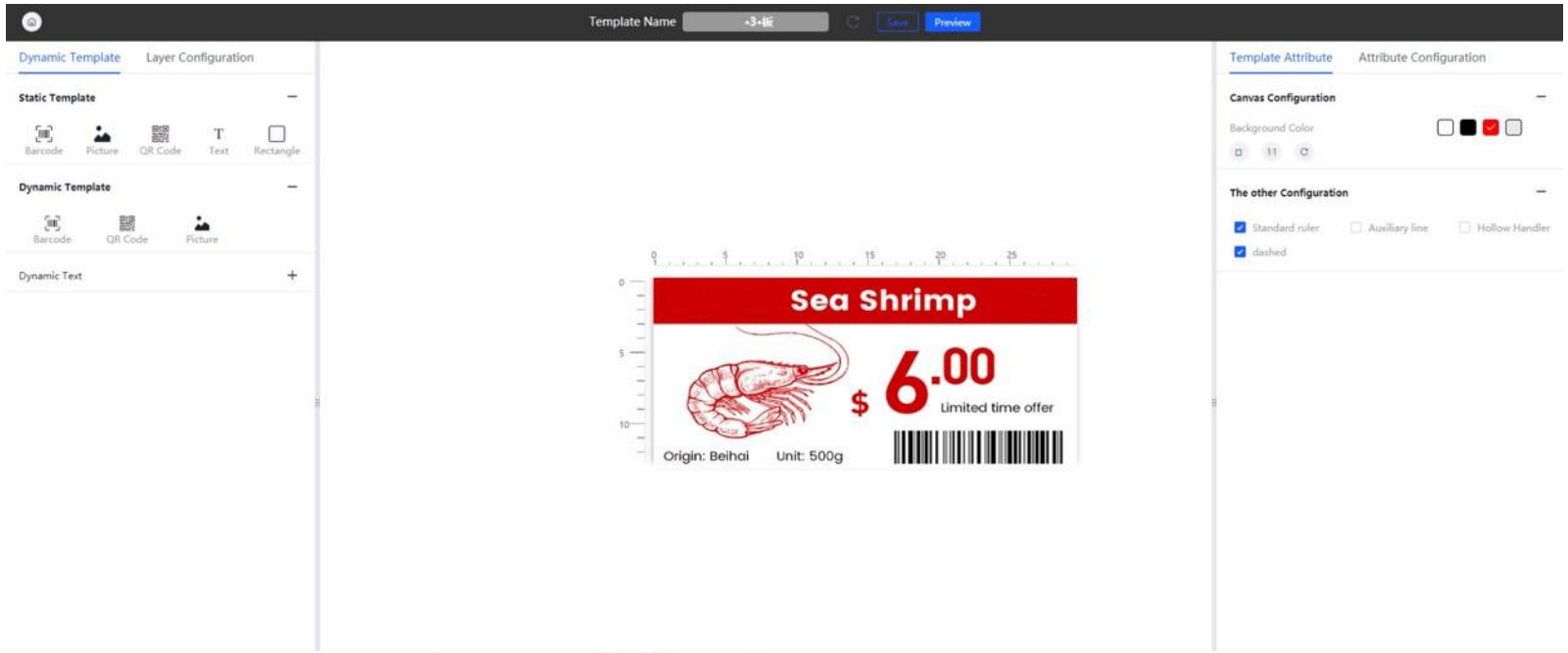


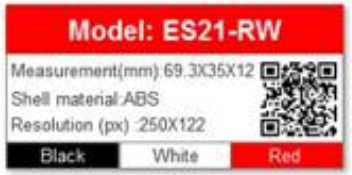
Main Functions

- ◆Commodity management
- ◆Label management
- ◆Base station management
- ◆Template design
- ◆Sending queue
- ◆Commodity field management

- ◆ Supports interface independent linkup
- ◆ Supports single user or multi-users centralized data management
- ◆ Supports user-store control or headquarters direct control

ESL Management System (Template Design)





template7.png

template8.png

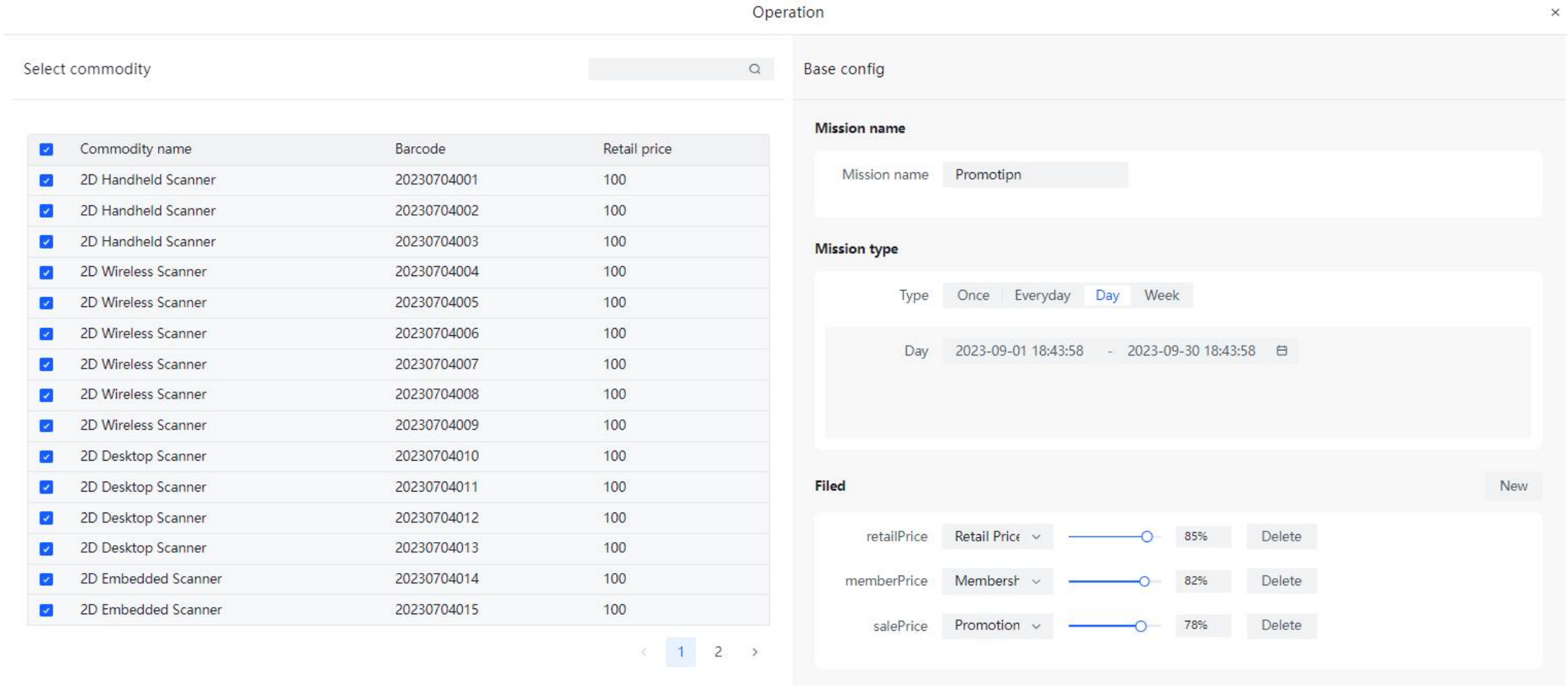
template9.png

template10.png

Rich template editing functions

ESL Management System (Timing Task)

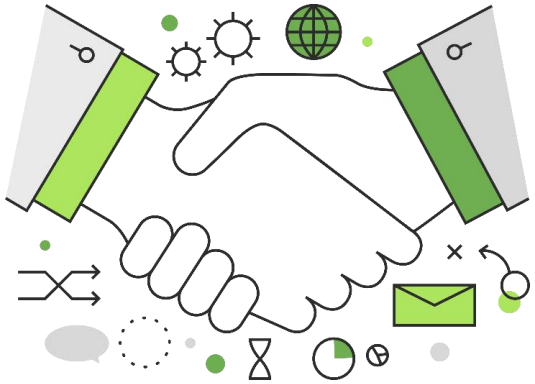
Set the price change task in advance, when the time is up, automatically change the price, automatically change the display template, efficient and easy to operate.



Software Cooperation

1. Use Water world ESL software directly

customer uses ESL hardware and ESL software from Water world only, which is deployed and used independently and is not associated with any third party. Typical applications are shops with few categories, such as bakeries, dairy stores, 3C brand stores and so on.

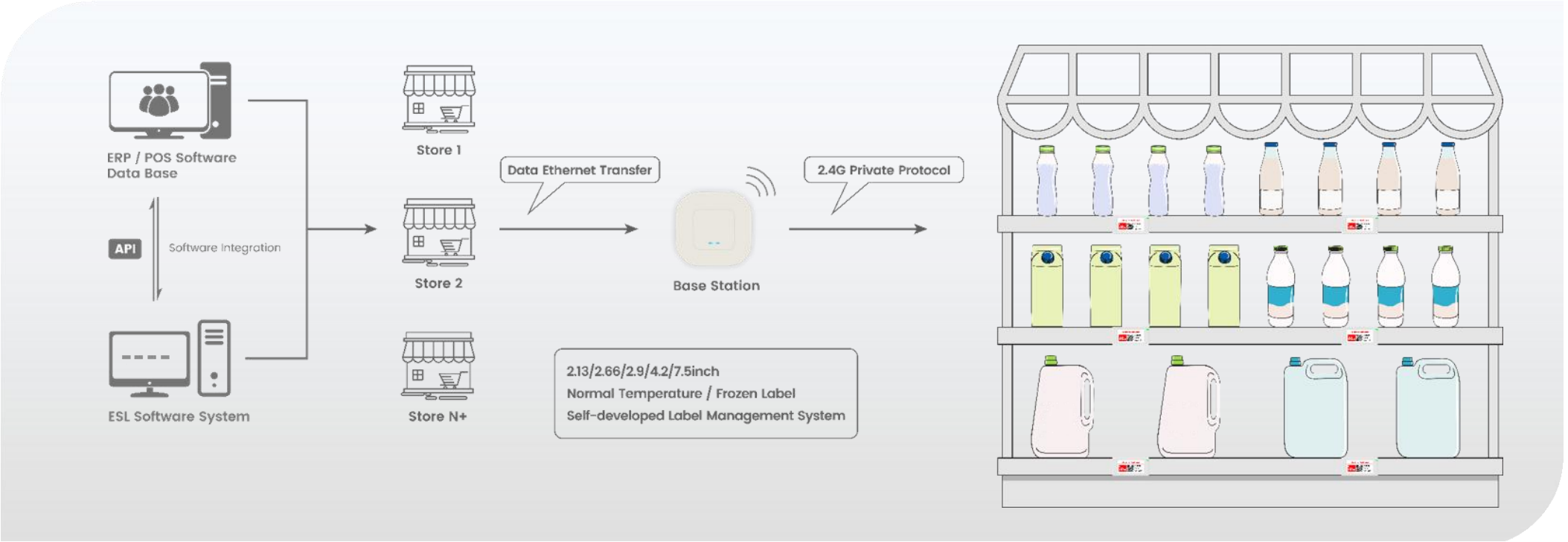


2. Integrate Water world ESL software with Customer's ERP-POS System

Typical final customers are supermarket chains, which generally have a large number of categories, who have their own ERP-POS system, such customers need to interconnect with their ERP-POS system in advance. The main customer group can be supermarkets owners, software agents, software developers, solution provider and so on.

System Deployment

Using Water world SAAS platform

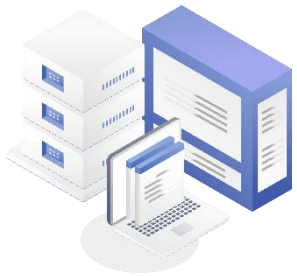


Software integration

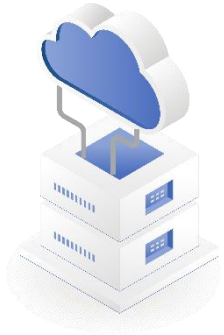
- ✓ Water world provide free API for easy integration, system integration is completed by the clients themselves.
- ✓ The system integration can also be completed by Water world (customer provides the software API), and the project delivery time is 2 weeks after the contract is confirmed.

System Deployment

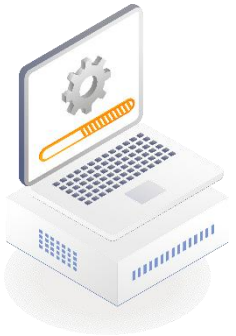
Deployed at Client's Local Server



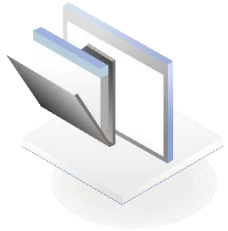
Water world SAAS



Client's Private Cloud Deployment

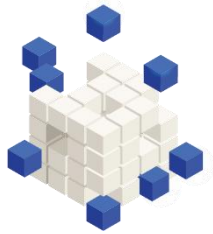


Client's Local Server Deployment



Super Administrator

Head Office



Branch Office

Service and Support

- ✓ Software customization
- ✓ System integration
- ✓ System deployment
- ✓ System configuration
- ✓ Project consulting
- ✓ 2 Years warranty on hardware
- ✓ Labels and Base Station support online upgrade
- ✓ Completely independent research and development

Thank you !