

Electronic Shelf Label System



Innovates to connect your stores with the highest eficiency

The new Electronic Shelf Labels (ESL) are battery powered electronic displays for automatic shelf prices update.

Back office information can be displayed on ESL: price changes, stock inventory, stock-outs, orders in progress and more.

ESL has been designed to interact with users, not only to show the correct prices, but also to optimize store operations.









The ESL technology is a trusted partner among retailers worldwide. We strive to enhance the shopping experience by developing cutting edge technology and providing services to solve our clients' in-store challenges. Our innovative spirit begins with our global team, improves The ESL system is designed to replace traditional pricing labels and ensures the price updates in stores are instant and accurate. Additionally, the ESL system can reduce operational costs, optimize supply chain management and add dynamic features to retail business management. the way we operate, and ultimately helps us deliver compelling end-toend solutions.

As an integrated and professional Electronic shelf label (ESL) manufacturer, is aiming to provide clients with world One of the major trends in retail is called Omni-channel which is a crosschannel business model used to enhance customer experience.

In this new model, ESL plays an important role of connecting online/ offline channels and synchronizing class ESL solutions and services. The ESL system is based on our customized Wireless Application Protocol Technology, which is widely applied in every type of retail environment including hypermarkets, shopping malls, boutiques, chain stores, pharmacies and other retail sectors using price labels.



RH3STNESL / RH33STNESL

Maximum Information, Minimum Space

Minimal facing: suitable for accessories, perfume, hygiene and beauty products.



RH3FNESL / RH33MNESL

E-ink Display its Best-selling Format

Compact and functional design. Perfect in for any of department.



Technical Features

Model: 1.5

Size: 48 x 35 x 15.8 mm

Weight: 27 g

Temperature: 0 °C ~ 30 °C

Update time: up to 18.000 labels per hour

Barcode: frontal

Tri-color LED indicator



Display

 $Technology: three\ pigment\ electronic\ ink\ system$

Size: 27.60 x 27.60 mm

Resolution: 152 x 152 pixel

Visual angle: > 170°

DPI: 140

Display colors: black/white/red/yellow

Battery

Battery: 1 x CR 2477

Battery life: 5 years (1 update per day)

Feature

NFC technology

Built-in interactive NFC chip

Technical Features

Model: 2.1

Size: 70 x 35 x 13. 2 mm

Weight: 36 g

Temperature: 0 °C ~ 30 °C

Update time: up to 18.000 labels per hour

Barcode: frontal

Tri-color LED indicator

Display

Technology: three pigment electronic ink system

Size: 48.55 x 23.71 mm

Resolution: 255 x 122 pixel

Visual angle: > 170°

DPI: 131

Display colors: black/white/red/yellow

Battery

Battery: 2 x CR 2450

Battery life: 5 years (4 updates per day)

Feature

NFC technology

RH3XMNESL / RH33XMNESL

Personalized and Perfect Visibility

Compact and functional design. Ideal for visualizing text and graphics.



RH3LNESL / RH33LNESL

Personalized and Perfect Visibility

High-definition display.

Perfect for text and graphic visualization.



Technical Features

Model: 2.6

Size: 84 x 41 x 13.1 mm

Weight: 43 g

Temperature: 0 °C ~ 30 °C

Update time: up to 18.000 labels per hour

Barcode: frontal

Tri-color LED indicator

Display

Technology: three pigment electronic ink system

Size: 66.09 x 30.70 mm

Resolution: 296 x 152 pixel

Visual angle: > 170°

DPI: 125

Display colors: black/white/red/yellow

Battery

Battery: 2 x CR 2450

Battery life: 5 years (4 updates per day)

The resolution and DP I vary with different screen

Feature

NFC technology

Technical Features

Model: 2.9

Size: 91 x 41 x 13.1 mm

Weight: 47 g

Temperature: 0 °C ~ 30 °C

Update time: up to 18.000 labels per hour

Barcode: frontal

Tri-color LED indicator

Display

Technology: three pigment electronic ink system

Size: 66.90 x 29.06 mm

Resolution: 296 x 128 pixel

Visual angle: > 170°

DPI: 112

Display colors: black/white/red/yellow

Battery

Battery: 2 x CR 2450

Battery life: 5 years (4 updates per day)

Feature

NFC technology

Built-in interactive NFC chip



RH33XLNESL

Great Definition and Visibility

Perfect for bench top placement, fruit & vegetables and appliances sections. Enables price, QR code and bar code, all on one screen.



Technical Features

Model: 4.2

Size: 104.8 x 94 x 11.8 mm

Weight: 115 g

Temperature: 0 °C ~ 30 °C

Update time: up to 18.000 labels per hour

Barcode: frontal

Tri-color LED indicator

Display

Technology: three pigment electronic ink system

Size: 84.80 x 63.60 mm

Resolution: 300 x 400 pixel

Visual angle: > 170°

DPI: 110

Display colors: black/white/red/yellow

Battery

Battery: 4 x CR 2450

Battery life: 5 years (4 updates per day)

Feature

NFC technology Waterproof

RH33XXLNESL

Highly Effective Communication

More effective promotions, thanks to its large screen allowing high-definition images for an impacting visual effect



Technical Features

Model: 5.8

Size: 138.2 x 113.6 x 12.3 mm

Weight: 160 g

Temperature: 0 °C ~ 30 °C

Update time: up to 18.000 labels per hour

Barcode: frontal

Tri-color LED indicator

Display

Technology: three pigment electronic ink system

Size: 118.78 x 88.22 mm

Resolution: 648 x 480 pixel

Visual angle: > 170°

DPI: 138

Display colors: black/white/red/yellow

Battery

Battery: 4 x CR 2450

Battery life: 5 years (4 updates per day)

Feature

NFC technology Waterproof

RH33XXXLNESL

Highly Effective Communication

More effective promotions, thanks to its large screen allowing high-definition images for an impacting visual effect.



Technical Features

Model: 7.5

Size: 183.9 x 126.9 x 13.2 mm

Weight: 270 g

Temperature: 0 °C ~ 30 °C

Update time: up to 18.000 labels per hour

Barcode: frontal

Tri-color LED indicator

Display

Technology: three pigment electronic ink system

Size: 163 x 98 mm

Resolution: 640 x 384 pixel

Visual angle: > 170°

DPI: 100

Display colors: black/white/red/yellow

Battery

Battery: 6 x CR 2450

Battery life: 5 years (4 updates per day)

Feature

NFC technology

RH33XXXXLNESL

Highly Effective Communication

More effective promotions, thanks to its large screen allowing high-definition images for an impacting visual effect



Technical Features

Model: 10.2

Size: 235.5 x 174 x 12.6 mm

Weight: 365 g

Temperature: 0 °C ~ 30 °C

Update time: up to 18.000 labels per hour

Barcode: frontal

Tri-color LED indicator • •

Display

Technology: three pigment electronic ink system

Size: 215.52 x 143.68 mm

Resolution: 640 x 384 pixel

Visual angle: > 170°

DPI: 113

Display colors: black/white/red/yellow

Battery

Battery: 6 x CR 2450

Battery life: 5 years (4 updates per day)

Feature

NFC technology

Built-in interactive NFC chip



RH3MFNESL

E-ink Display in its Best-selling Format

Compact and functional design. Perfect for any of department.



Technical Features

Model: 2.1

Size: 70 x 35 x 14.5 mm

Weight: 37 g

Temperature: -20 °C ~ 0 °C

Update time: up to 18.000 labels per hour

Barcode: frontal

Tri-color LED indicator



Technology: two pigment electronic ink system

Size: 48.55 x 23.71 mm

Resolution: 212 x 104 pixel

Visual angle: > 170°

DPI: 111

Display colors: black/white

Battery

Battery: 1 x low temperature battery

Battery life: 4 years (1 update per day)

Feature

NFC technology/Freezer label on request

RH3XMFNESL

E-ink Display in its Best-selling Format

Compact and functional design. Ideal for visualizing text and graphics.



Technical Features

Model: 2.1

Size: 84 x 41 x 13.1 mm

Weight: 43 g

Temperature: -20 °C \sim 0 °C

Update time: up to 18.000 labels per hour

Barcode: frontal

Tri-color LED indicator

Display

Technology: two pigment electronic ink system

Size: 60.09 x 30.70 mm

Resolution: 296 x 152 pixel

Visual angle: > 170°

DPI: 125

Display colors: black/white

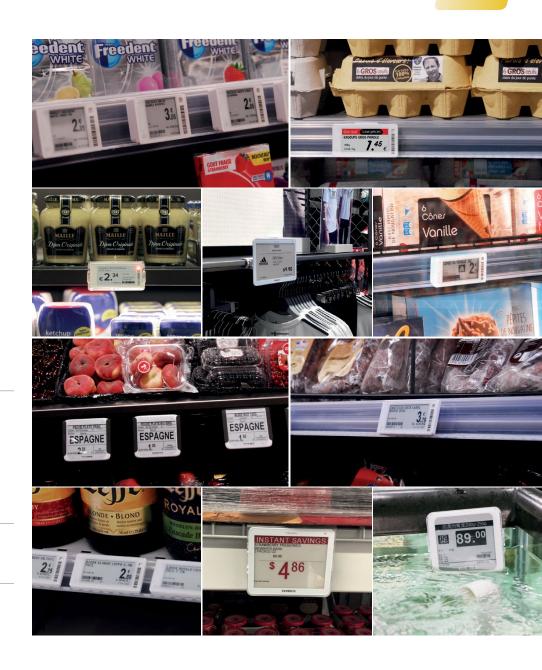
Battery

Battery: 1 x low temperature battery

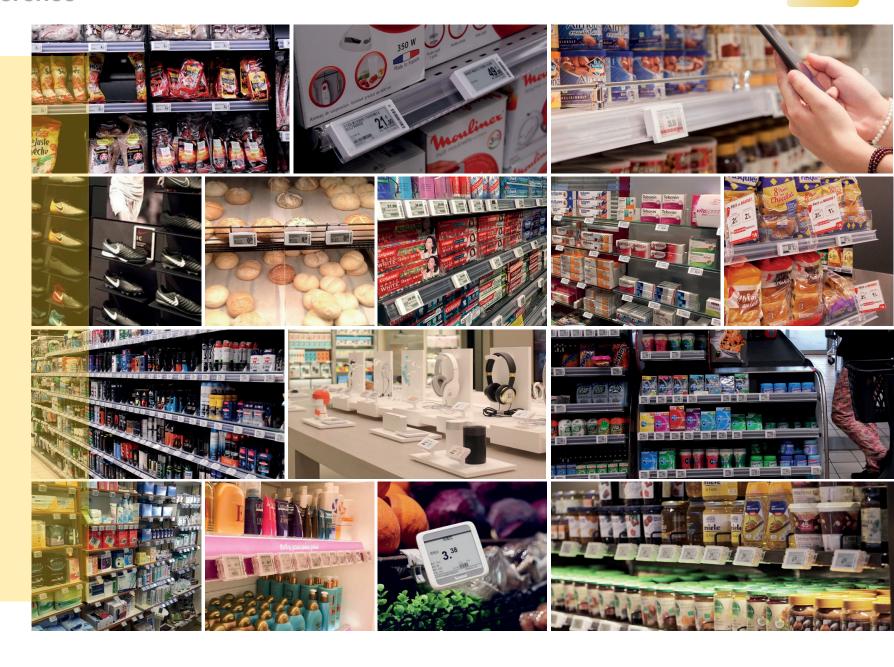
Battery life: 4 years (1 update per day)

Feature

NFC technology/Freezer label on request



Reference





Access point RH309851C

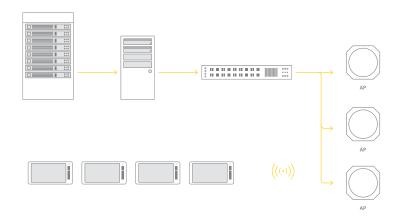


MODEL	RH309851C
INPUT VOLTAGE	DC12V or POE af/at
CPU	528MHz ARM
COLOR	WHITE (BLACK OPTIONAL)

TRANSMIT POWER	< 10dBm
BAND FREQUENCY	2.400~2.4835GHz
CONNECTION RATE	10/100M

ESL AP is vital component of Electronic Shelf Label system, it is a data transmission link responsible for the important tasks of data forwarding:

- > Forwarding uplink data: ESL access point connects to ESL-Working over a wired network and sends price changes, inventory, templates and other data to ESL;
- **> Forwarding downlink data:** The ESL access point operates in 2.4G protocolspecification, based on the ESL radio protocol standard to ESL-Working platform to forward ESL heartbeats and other information.



TECHNICAL DETAILS:

Linux

OS linux embedded operations system supports ethernet port upgrade

4-way antenna

Designed to support transmit parallel communication

Automatic

Configures and connects to ESL-Working

LED Indicator

Displays assigned number and information about any error status communication

Compatibility

Supports all generations of LCD and EPD ESL

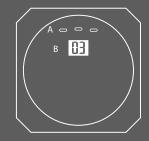
Power Supply Options

Supports both DC power supply and POE power supply

Visualization

A. 3-group LED : one green LED, indicates the power state. Two red /green color LEDs, indicates the operational state of the base station RF sub-system

B. 2-digit LED: green, displays base station identification code







Shopweb Smart Retail System (Shopweb) is the third generation of the ESL smart electronic price management platform. Shopweb caneffectively manage store commodities, prices, inventory and other information in real-time. Additionally, the system can accurately synchronize all information to stores anywhere in the world. Shopweb uses the industry-leading modular design concept to provide a standardized interface. Customers do not need to transform their existing ERP system, only in accordance with Shopweb interface specification, the product data will be delivered to Shopweb and the system integration will be completed.

Moreover, Shopweb will automatically send the correct commodity data to customer's different stores.

Product Features

> Easy To Use

The software is designed to meet the needs of different users, which is user friendly and has practical query function.

> Advanced

Shopweb is using internationally recognised advanced technology, making the design more user friendly. By fully considering the characteristics of electronic price label and paying attention to the practicality of the system, Shopweb uses the most advanced software and hardware environment and this reflects the advanced nature of the system.

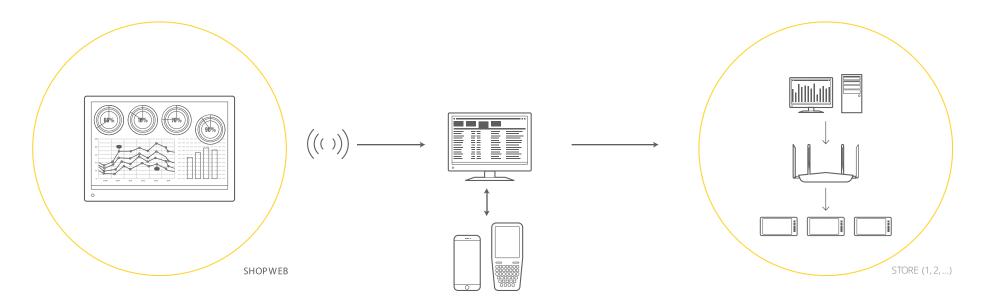
> Extendibility

The system has excellent compatibility. With the continuous development of Internet technology, the system can be easily upgraded.

> Stability

The system is able to handle multiple tasks at the same time. In the event of unexpected circumstances, the system can handle and error notification, and can be recovered in a timely manner to reduce unnecessary losses.





- Store Management
 The system supports functions such as adding, modifying, viewing, enabling and disabling.
-) User Management The system supports functions such as viewing, modifying and deleting; it can also assign stores and give permissions to users.
- 3) Commodity Management Users can view, add, modify, delete commodities in the system; also bind or unbind price label according to commodity number.
- 4) Label Management The system supports importing data or deleting data, binding or unbinding labels with commodities, and refreshing label screen.

5) Data Statistics

The system supports viewing the updated records and historical price changes of commodities, as well as the updated records and historical price changes of price labels.

- 6) Early-warning Monitor The system can monitor A P and docking time, and abnormal data will be sent to designated personnel.
- 7) Internationalization
 The system can set the default
 language, the language can be
 switched through the interface



ESL-Working is the core the Electronic Shelf Label (ESL) network system. It controls all of the access points (AP) and labels in each store, collects and processes data, and sends information to labels via AP.

FUNCTION

> Bind

Bind connects labels with products on shelf and enables the labels to display the correct information.

> Unbind

Unbind disconnects labels with products. The labels will display "OFF" or appointed templates after unbinding.



> Netlink

ESL -Working system recognizes the unique ID of each label and communicates with the selected label. Labels are divides in different network groups for effective communication. Additionally, the system is able to relocate the labels in other groups and optimize communication.

> Heartbeat

Labels communicate on 2.4 GHz and broadcast their ID to the AP every three minutes. The AP monitors the frequency and sends labels' data status to the ESL-Working system. Meanwhile, The AP also sends feedback every minute to the ESL Working system. This is what we call the Heartbeat, which ensures the system receives and monitors the status in a timely manner.



> Roaming

The ESL-Working roaming functions automatically assigns the A P's to the labels. This dynamic function ensures continuous communication between the system and the labels, even when labels are moved around.

> OpenPlatform

The open platform supports the development of new functionalities.

> API Interface

ESL-Working system has a standard AP for users Ito personalize GUI (Graphical User Interface).

The interface is compatible with functions including label update, binding, unbundling, LED indicator, multiple-pages, state query & summary, configuration modification, template update and label ROM update.



