

# ESL 2" and 2,7"

## Solutions

> IDEAL TOOL FOR:

Retail

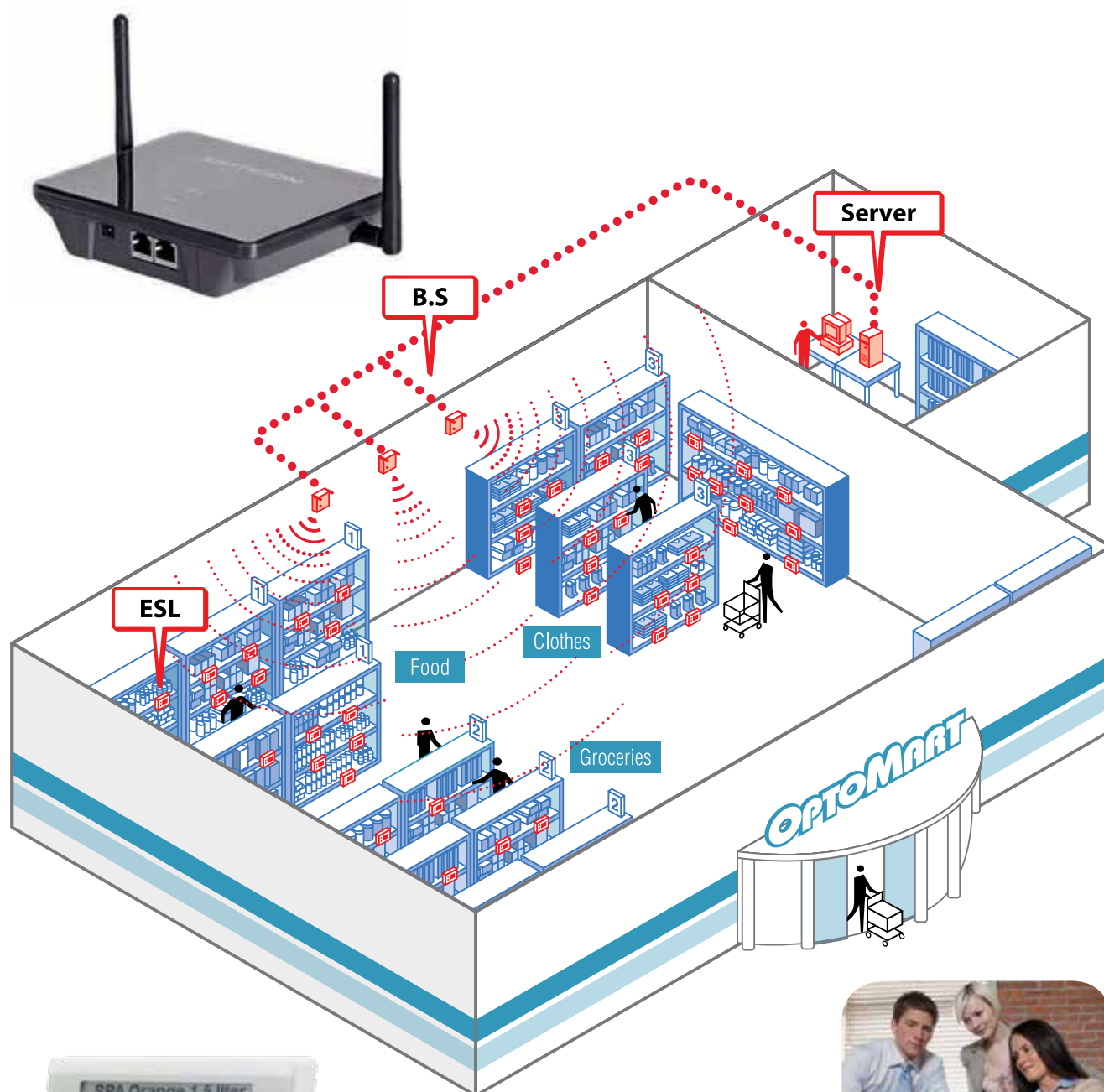
Warehousing / Logistics



# OUTLINE

## > BASE STATION

Low power consumption



## > ELECTRONIC SHELF LABEL

Flexible display



## > SERVER

# DISPLAY

Enjoy the flexibility of expression. The Opticon ESL solution utilizes a dot-matrix screen. You can display various types of information on the screen with high expressivity.

## > DIMENSIONS DISPLAY

2", 200 X 96 PIXELS

2,7", 264 X 176 PIXELS



## > DIMENSIONS 2" LABEL

Electronic Shelf Label	
Image	
Size	(H) 32 x (W) 70 x (D) 15 mm Max (H) 1.26 x (W) 2.76 x (D) 0.59 in. Max
Dot Number	200 x 96 dots

# INTERACT

Enjoy the extra features which support your daily operations. By utilizing the barcode display system, you can drastically reduce the time to check price data, carry out sales and inventory control or to change the shop layout. The Opticon ESL solution does not only provide up to date price information, it also identifies which products have been moved to other shelves.

Use an Opticon mobile scanning device for an up to date stock overview while in the shop. The H21, equipped with the latest wireless communication technologies provides you instant data.

## 1D / Laser

Portable Terminal Boasting a Stylish Design

### H21

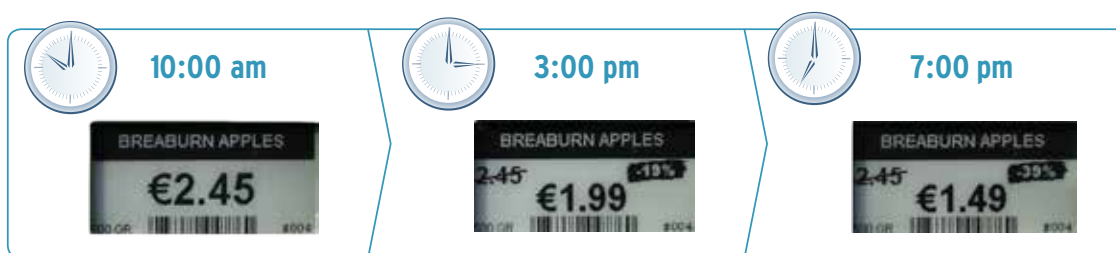


- Light and compact design
- Laser scan engine with built-in decoder
- Standard equipped with WiFi, Bluetooth and 3G / 3.5G



## > QUICK DATA UPDATE

The Opticon ESL solution is especially suitable to carry out a prompt price reduction. Simply program the time and price of the product for each time zone and the labels will automatically promote the sales of your products and reduce your inventories.



# COMMUNICATE

Use a portable terminal, a barcode on the ESL display and a WiFi connection to the server to instantly update price information of specific products. Here is what you can do to update price information without the need to leave the store.

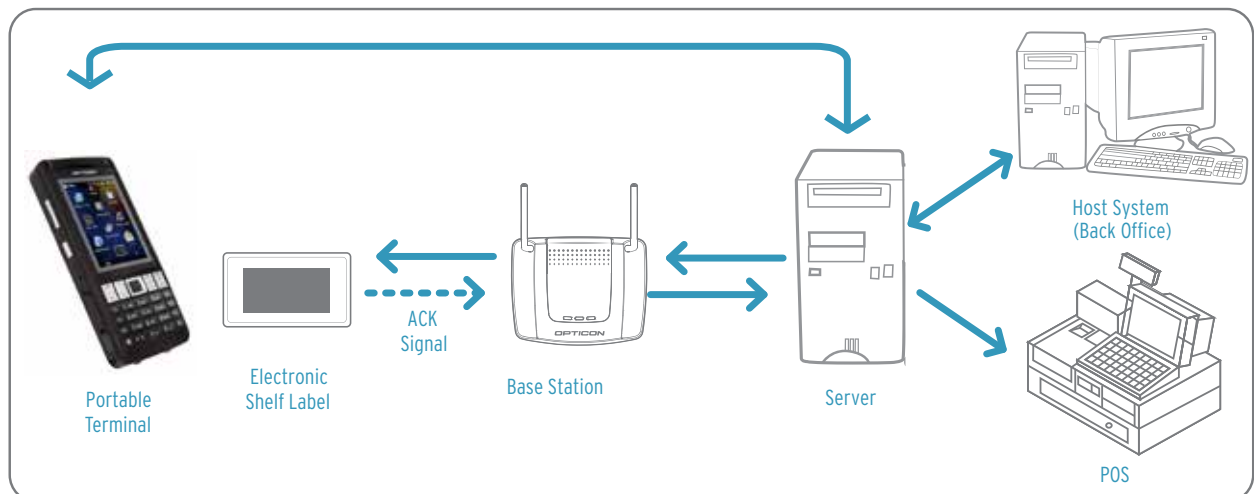
**Step 1:** Use an Opticon scanning device and scan the barcode on the ESL label

**Step 2:** Update the price information on the scanning device

**Step 3:** Send the updated price information from the terminal to the server via WiFi

The server price information will be updated automatically. The price information on the ESL label will be updated within a **few seconds** after that. The ESL label will send a signal to the server to confirm the update of the price information.

## > SYSTEM CONFIGURATION



Opticon ESL software including dedicated ESL server management software accelerates your business in a synergy with the Opticon ESL solution.

# WHAT TO EXPECT

## > CUSTOMER SATISFACTION

- Build customer loyalty. Replacing the paper labels by professional displays provides customers the most up-to-date and easy to read price information when making purchase decisions.
- Reduce waiting times at check out caused by price checks, providing a positive feeling towards the retailer.

## > REAL TIME INFORMATION MANAGEMENT

- Increase the consistency between the price information on the server and shelf edge prices.
- Multiple stores can make use of one host system, enabling retailers to implement the corporate standard in pricing and promotion, streamlining the overall operations.
- Easily check if the staff has completed the price updates without actually having to check the shelves.

## > REDUCING COSTS

- Minimize price tag updating operations, by importing price changes to the host system at once.



# 2" & 2,7"

## > BASIC PRODUCT SPECIFICATIONS

### OPERATION

**CPU:** 8 bit ultra low power **O/S:** Proprietary

### MEMORY

**FLASH ROM:** 128 Kb **MB RAM:** 8 K

### DISPLAY

**TYPE:** EPD **SIZE:** 2", 200 x 96 pixels; 2,7", 264 x 176 pixels **MODE:** Black/white

### COMMUNICATION

**IEEE 802.15.4:** Integrated 2.4 GHz IEEE 802.15.4 compliant RF Transceiver **RANGE:** Approx. 20 meter (up to 75 meter open field)

### POWER

**RECHARGEABLE BATTERY:** 2x 600 mAh CR2450 Lithium **OPERATING TIME:** > 7 years (4 refreshes / day, 15-25°C)

### DURABILITY

**TEMPERATURE IN OPERATION:** 0 to 50°C / 32 to 122°F **TEMPERATURE IN STORAGE:** -20 to 60°C / -4 to 140°F **HUMIDITY IN OPERATION:** up to 85% **HUMIDITY IN STORAGE:** up to 85%

### PHYSICAL

**DIMENSIONS 2" LABEL (W X H X D):** 62,7 x 31,2 x 10,9 mm / 2.47 x 1.23 x 0.43 in

**DIMENSIONS 2,7" LABEL (W X H X D):** 78 x 54,5 x 12,5 mm / 3.07 x 2.15 x 0.49 in

**WEIGHT 2" LABEL:** 25 g / 0.88 oz (incl. 2 batteries) **WEIGHT 2,7" LABEL:** 45 g / 1.59 oz (incl. 2 batteries)

# BASE STATION

## > BASIC PRODUCT SPECIFICATIONS

### OPERATION

**CPU:** Cortex M3 32-bit MCU **CLOCK FREQUENCY:** 80 MHz

### MEMORY

**INTERNAL FLASH ROM:** 256 Kb **INTERNAL RAM:** 96 Kb **EXTERNAL RAM:** 8 MB

### OPERATING INDICATORS

**ETHERNET:** 2 port switch 10 Mbit/sec & 100 Mbit/sec, half duplex & full duplex

**MODULATION:** DSSS **BAND:** 2.4 GHZ, 16 channels (2394~2507 MHz) **TRANSFER SPEED:** 250 Kbits/sec (>10.000 complete image updates per hour with 2" ESL)

**MAX LOAD:** 5.000 ESLs per base station (with default ESL settings; max. load can be increased by using longer poll intervals) **RANGE:** 25 meter indoor; 100 meter open-field **PROTOCOL:** IEEE 802.15.4 based **ENCRYPTION:** None (default); 256-bits AES encryption (on request)

### POWER

**VOLTAGE REQUIREMENT:** Min 4.5V, Max 6.6V. When both Ethernet ports connected: 5V **CURRENT CONSUMPTION:** 400 mA

### DURABILITY

**TEMPERATURE IN OPERATION:** -10 to 50°C / 14 to 122°F **TEMPERATURE IN STORAGE:** -20 to 60°C / -4 to 140°F **HUMIDITY IN OPERATION:** 20 - 85% (non-condensing) **HUMIDITY IN STORAGE:** 20 - 85% (non-condensing) **DROP TEST:** 1.8 m / 6 ft drop onto concrete surface

### PHYSICAL

**DIMENSIONS WITHOUT ANTENNAS (W X H X D):** 145,1 x 110,1 x 32,4 mm / 5.71 x 4.33 x 1.28 in **WEIGHT:** Ca. 250 g / 8.8 oz (incl. antennas)

### REGULATORY & SAFETY

**PRODUCT COMPLIANCE:** FCC, VCCI, RoHS, EN60950-1, IEC 60950-1, EN 55022, EN 55024