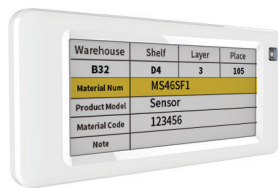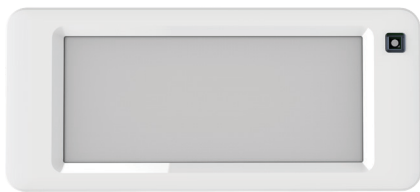# SE-290
2.9 inch E-paper Display

The SE-290 is a high-resolution, fully graphical, e-paper display that supports black, white, red (SE-290R) and yellow (SE-290RY) colors. The label has a high-efficiency RGB LED to provide enhanced visual attention and a location indicator.

Highlights

- Enables on-demand, real-time pricing, promotions and product information

- Improves efficiency by reducing waste, minimizing errors and decreasing labor costs

- E-Paper display technology boasts a high-contrast ratio and superior viewing angle

- Features 4 colors including complementary red and yellow

- High-efficiency RGB LED

- Optional NFC for application versatility

- Adjustable LED brightness and duty cycle

- 100% display content flexibility and customizable template design

- Centralized system administration with the Opticon ESL Web Server Software

- Bistable display technology allows image to be retained with loss of power

- High-contrast display supports scannable 1D and 2D barcodes

- Extensive accessories catalog offering secure, durable and attractive mounting solutions

- Five-year battery lifespan (5 updates/day)

- Extremely low power consumption

- 2.4 Ghz, 802.15.4 based protocol

- 296 x 128 pixels

SE-290

Product Specifications

Operation

CPU: 64 MHz Arm® Cortex™-M4
Clock frequency: 32 MHz

Memory

Internal ROM: 192 KB
Internal RAM: 24 KB
External ROM: 1 MB

Operating indicators

LED: 1, RGB, adjustable brightness and duty level

Communication

Range: typical 25 meter indoor; 100 meter open-field
Radio frequency: 2.4 GHz (2405 - 2480 MHz)
Radio transmission speed: up to 250 kbps
Protocol: IEEE 802.15.4 based
Capacity: 1,500 ESL displays per base station

Power

Battery: 2x CR2450 lithium primary batteries
Lifespan: Approximately 5 years at room temperature with 5 updates per day, no LED usage

Display

Size: 2.9'', 296 x 128 pixels (WxH),
black, white, red (SE-290R), or
black, white, red, yellow (SE-290RY)
Active area: 66.9 x 29.1 mm (WxH)
Pixel Pitch: 112 dpi

Durability

Temperature in operation: 0 to 40 °C / 32 to 104 °F
Temperature in storage: -20 to 60 °C / -4 to 140 °F
Humidity in operation: 40 - 60% (non-condensing)
Humidity in storage: 40 - 60% (non-condensing)

Physical

Dimensions (WxHxD): 94 x 43.2 x 11.8 mm / 3.7 x 1.7 x 0.46 in
Weight: Ca. 38.0 g / 1.34 oz

Regulatory & Safety

Product compliance: CE, FCC, RoHS, REACH

Models

SE-290R: black, white and red display
SE-290RY: black, white, red and yellow display
NFC: optional

Accessories

Refer to the SE-Range Accessories brochure online at: https://opticon.com/product-category/display-solutions/mounting/

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