

# SE-290A

## 2.9 inch E-paper Display

The SE-290A is an e-paper display with RGB LED to provide visual attention and a location indicator. It operates efficiently in temperatures up to 40/50°C. Additionally, it includes an independent button function, making it suitable for warehouse picking and other similar scenarios.



## 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
- It includes an independent button function, making it suitable for warehouse picking and other similar scenarios
- Operates efficiently in temperatures up to 40/50°C
- 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-290A

## 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

**Button:** for instant user feedback and pick-to-light applications

### 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 (SE-290A), or

black, white, red, yellow (SE-290ARY)

**Active area:** 66.9 x 29.1 mm (WxH)

**Pixel Pitch:** 112 dpi

### Durability

**SE-290A:**

**Temperature in operation:** 0 to 50 °C / 32 to 122 °F

**Temperature in storage:** -25 to 60 °C / -13 to 140 °F

**SE-290ARY:**

**Temperature in operation:** 0 to 40 °C / 32 to 104 °F

**Temperature in storage:** 0 to 40 °C / 32 to 104 °F

**Humidity in operation:** 45 - 70% (non-condensing)

**Humidity in storage:** 45 - 70% (non-condensing)

### Physical

**Dimensions (WxHxD):** 103.5 x 43.2 x 12.6 mm /  
4.07 x 1.7 x 0.49 in

**Weight:** Ca. 41.7 g / 1.47 oz

### Regulatory & Safety

**Product compliance:** CE, FCC, RoHS, REACH

### Models

**NFC:** optional

### Accessories

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