

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
- The free SDK unlocks button customization: change pages, control LEDs, send events to back-end systems, and define short/long/double press actions for fast, interactive workflows.
- Operates efficiently in temperatures between -15 to 65°C and 0 to 40°C (color dependent)
- 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: -15 to 65 °C / 5 to 149 °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: -25 to 60 °C / -13 to 140 °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/>