

# SE-214F

## 2.1 inch E-paper Display

The SE-214F is a high-resolution, fully graphical, e-paper display built to work efficiently in low temperature environments (-25° to 25°C) and ideal for freezer and cold storage applications. The label has a high-efficiency RGB LED to provide enhanced visual attention and a location indicator.



## Highlights

- Works efficiently in cold environments from -25 °C to 25 °C
- IP67 rating against dust and moisture
- 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 black and white pixel colors
- 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
- Extremely low power consumption
- 2.4 Ghz, 802.15.4 based protocol
- 250 x 122 pixels

# SE-214F

## 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: 2,000 ESL displays per base station

### Power

Battery: special low temperature lithium battery

Lifespan: Approximately 5 years at room temperature with 5 updates per day, no LED usage

### Display

Size: 2.1", 250 x 122 pixels (WxH), black and white

Active area: 48.6 x 23.7 mm (WxH)

Pixel Pitch: 130 dpi

### Durability

Temperature in operation: -25 to 25 °C / -13 to 77 °F

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

Humidity in operation: 40 - 60% (non-condensing)

Humidity in storage: 40 - 60% (non-condensing)

Protection rate: IP67

### Physical

Dimensions (WxHxD): 71.5 x 38.5 x 15.2 mm /  
2.81 x 1.52 x 0.6 in

Weight: Ca. 35.0 g / 1.2 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/>