EE-153R

1.5 Inch E-Paper Display



Highlights

- E-Paper display technology boasts a high contrast ratio and superior viewing angle
- 100% display content flexibility and centralized administration of all devices and content
- Bi-Stable display, so the image will remain on the display even after power is disconnected
- Extremely long battery life: 5 years at room temperature (two internal CR2450 Lithium batteries, update frequency: 2 times per day)
- High contrast display allows scanning of bar codes off the display using a standard barcode laser scanner
- Display can be remotely updated via bidirectional communication using a 2.4 GHz wireless network (IEEE 802.15.4)
- Key metrics: 1.54 inch, 152 x 152 pixels (WxH), black, white and red resolution, 8:1 contrast ratio and 140 DPI
- Dimensions: 1.90" x 1.66" x 0.45" (WxHxD) and weight: 0.79 ounces (including batteries)
- A wide variety of secure, durable and esthetically pleasing display shelf mounting options and accessories for in-store shelving are available



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Product Specifications

OPERATION

CPU: 8051 8-bit MCU CLOCK FREQUENCY: 32 MHz

MEMORY

INTERNAL ROM: 96 KB
INTERNAL RAM: 6 KB

COMMUNICATION

RANGE: Typical 25 meters indoor; 100 meters open-field

RADIO FREQUENCY: 2.4 GHz (2405 - 2480 MHz)
RADIO TRANSMISSION SPEED: Up to 250 kbps

PROTOCOL: IEEE 802.15.4 based

NUMBER OF EE-153R ESL'S PER BASE STATION:

2,500

POWER

BATTERY: 1x CR2450 Lithium primary battery

OPERATING VOLTAGE: 1.9~3.3V NOMINAL VOLTAGE: 3.0V

 ${\color{red} \textbf{USABLE TIME:}} \ \textbf{Approximately 5 years at room}$

temperature, with 1 update per day

DISPLAY

SIZE: 1.54 in, 152 x 152 pixels (WxH), black, white and red

ACTIVE AREA (WXH): 27.51 x 27.51 mm

CONTRAST RATIO: 8:1 PIXEL PITCH: 140 dpi

DURABILITY

TEMPERATURE:

Operation: 32 to 104 °F (0 to 40 °C) Storage: -4 to 122 °F (-20 to 50 °C)

HUMIDITY

Operation: 20 - 60% (non-condensing) Storage: 20 - 60% (non-condensing)

PHYSICAL

<code>DIMENSIONS</code> (WXHXD): $1.90 \times 1.66 \times 0.45$ in

(48.4 x 42.2 x 11.5 mm) WEIGHT: Ca. 0.79 oz (22.3 g)

REGULATORY AND SAFETY

PRODUCT COMPLIANCE: EN 60950-1:2006 +A11:2009+ A1:2010+A12:2011+A2:2013, IEC 60950-1:2005 (2nd Edition)+Am 1:2009+Am 2:2013, EN55022: 2010, EN55024: 2010, FCC, WEEE 2012/19/ EU, ROHS 2011/65 EC

ACCESSORIES

Various mounting options are available, refer to Accessories for Opticon EE Range ESL brochure for details

