

L-50 Series

CCD - Laser

Featuring the perfect combination of performance, durability and style, the Opticon L-50 series scanner is designed for a wide variety of retail applications. The L-50 scanners feels good in the hand and it looks great on the counter.



Highlights

- Sophisticated ergonomic design with an excellent price-to-performance ratio
- Ideal solution for a variety of applications in retail, warehousing, distribution, healthcare, transportation and logistics
- Available with CCD or laser barcode scanner
- Rapidly scans and decodes a wide variety of 1D barcodes
- USB (HID) or RS232 interfaces available
- Replaceable interface cable
- Top panel design allows for customer customization such as logos
- Durable and reliable — withstands drops of 1.5 meter to concrete, IP42 rating
- Available in black or white
- Stand included for hands-free scanning
- Backed by a two year warranty

L-50 Series

Product Specifications

Operation

CPU: 32-bit

Operating indicators

Visual: 1 white LED

Non-visual: buzzer

Operating keys

Entry options: 1 scan key

Communication

RS232: DB9 pin (with external power supply)

USB: ver. 2.0, HID/VCP, USB-A connector

Power

Voltage requirement: 6V \pm 10% (RS232), 5V \pm 10% (USB)

Current consumption: Typ. 165 mA (RS232), Typ. 125 mA (USB)

Physical

Dimensions (W x H x D): 75.4 x 169.5 x 121.2 mm / 2.97 x 6.67 x 4.77 in

Weight body: Ca. 145 g / 5.1 oz (excl. cable)

Cable length: 2.0 m

Dimensions Stand (W x H x D): 106 x 323 x 146 mm / 4.17 x 12.72 x 5.75 in (excl. scanner)

Weight stand: Ca. 335 g / 11.8 oz

Case: ABS/PC, Black

Regulatory & safety

Product compliance: CE, FCC, VCCI, RoHS, IEC/EN62471-1:2006, EN55022, EN55024

Items

Enclosed: Stand

Models

Interface versions: RS232, USB

L-50C

Barcode scanner optics

Light source: 624 nm, red LED

Scan method: CCD linear image sensor, 1500 pixels

Scan rate: 300 scans/sec

Trigger mode: Manual, auto-trigger, stand detection

Reading pitch angle: $\pm 50^\circ$

Reading skew angle: -65° to 8° , 8° to $+65^\circ$

Reading tilt angle: $\pm 25^\circ$

Curvature: $R \geq 15$ mm (EAN 8), $R \geq 20$ mm (EAN 13)

Min. resolution at PCS 0.9: 0.076 mm

Min. PCS value: 0.3

Depth of field at code 39:

35 - 90mm (0.127mm) / 1.38 - 3.54in (5mil)

30-120mm (0.15mm) / 1.18 - 4.72in (6mil)

15-220mm (0.254mm) / 0.59 - 8.66in (10mil)

25-350mm (0.508mm) / 0.98 - 13.78in (20mil)

40-600mm (1.0mm) / 1.57 - 23.62in (39mil)

Durability

Temp. in operation: 0 to 50 °C / 32 to 122 °F

Temperature in storage: -20 to 60 °C / -4 to 140 °F

Humidity in operation: 5% to 95% (non-condensing)

Humidity in storage: 5% to 95% (non-condensing)

Ambient light immunity: 10,000 lx max
Max drop test: 1.5 m / 5 ft drop onto concrete surface

Vibration test: 10 - 100Hz with 2G for 1 hour

Protection rate: IP42

Supported symbologies

Barcode (1D): JAN/UPC/EAn incl. add on, Codabar / NW-7, Code 11, Code 39, Code 93, Code 128, GS1-128 (EAN-128), GS1 DataBar (RSS), GS1 DataBar Limited, GS1 Databar Expanded, IATA, Industrial 2 of 5, Interleaved 2of5, ISBN-ISMN-ISSN, Matrix 2of5, MSI/Plessey-UK/Plessey, S-Code, Telepen, Tri-Optic
Postal code: Chinese Post Matrix 2of5, Korean Postal Authority code

L-50R

Barcode scanner optics

Light source: red laser, 650 nm

Scan method: 650 nm red laser diode, bi-directional scanning

Scan rate: Up to 100 scans / second

Trigger mode: Manual, auto-trigger, stand detection

Reading pitch angle: $\pm 35^\circ$

Reading skew angle: -50° to 8° , 8° to $+50^\circ$

Reading tilt angle: $\pm 20^\circ$

Curvature: $R \geq 15$ mm (EAN8), $R \geq 20$ mm (EAN13)

Min. resolution at PCS 0.9: 0.076 mm

Min. PCS value: 0.3

Depth of field at code 39:

15-65mm (0.127mm) / 0.59-2.56in (5mil)

5-95mm (0.15mm) / 0.19-3.74in (6mil)

5-205mm (0.25mm) / 0.19-8.07in (9.84mil)

5-500mm (0.5mm) / 0.19-19.69in (20mil)

25-900mm (1.0mm) / 0.98-35.43in (39mil)

Durability

Temp. in operation: -20 to 50 °C / -4 to 122 °F

Temperature in storage: -30 to 60 °C / -22 to 140 °F

Humidity in operation: 5% to 95% (non-condensing)

Humidity in storage: 5% to 95% (non-condensing)

Ambient light immunity: Fluorescent 4,000 lx, direct sun 80,000 lx

Max drop test: 1.5 m / 5 ft drop onto concrete surface

Vibration test: 10 - 100Hz with 2G for 1 hour

Protection rate: IP42

Supported symbologies

Barcode (1D): JAN/UPC/EAN incl. add on, Codabar/NW-7, Code 39, Code 93, Code 128, GS1-128 (EAN-128), GS1 DataBar (RSS), GS1 DataBar Limited, GS1 Databar Expanded, IATA, Industrial 2 of 5, Interleaved 2 of 5, ISBN-ISSN-ISMN, Matrix 2 of 5, MSI/Plessey, UK/Plessey, S-Code, Telepen, Tri-Optic, Code 11
Postal code: Chinese Post, Matrix 2 of 5, Korean Postal Authority code
2D code: PDF417, MicroPDF417