

L-51X 2D CMOS Imager

Featuring the perfect combination of performance, durability and style, the L-51X 2D CMOS Imager scanner is designed for a variety of applications in retail, warehousing, distribution, healthcare, transportation and logistics. The L-51X scanner 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
- Rapidly scans and decodes a wide variety of 1D and 2D barcodes
- USB (HID) or RS232 interfaces available
- Replaceable interface cable
- Stand included for hands-free scanning
- 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
- Backed by a two year warranty

L-51X

Product Specifications



Operation

CPU: ARM-Cortex-A7 800MHz

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: 5V \pm 10% (USB), 4.5 - 6.5V (RS-232)

Current consumption: Typ. 400 mA

Barcode scanner optics

Light source: Aiming green LED, warm white illumination LED

Scan method: CMOS area sensor, 640 x 480 pixels

Scan rate: Up to 100 fps

Trigger mode: Manual, auto-trigger, stand detection

Reading pitch angle: \pm 65°

Reading skew angle: \pm 65°

Reading tilt angle: 360°

Curvature: R \geq 20 mm (UPC 12)

Min. resolution at PCS 0.9: 0.1 mm / 3.9 mil

Min. PCS value: 0.2

Field of view: Horizontal 38.0°, Vertical 26.4°

Depth of field at code 39:

23 - 74 mm (0.127 mm) / 0.91 - 2.91 in (5 mil)

26 - 173 mm (0.254 mm) / 1.02 - 6.81 in (10 mil)

48 - 335 mm (0.508 mm) / 1.89 - 13.19 in (20 mil)

Depth of field at code 128:

41 - 129 mm (0.2 mm) / 1.61 - 5.08 in (7.87 mil)

Depth of field at UPC:

26 - 212 mm (0.33 mm) / 1.02 - 8.35 in (13 mil)

Depth of field at PDF417:

21 - 93 mm (0.169 mm) / 0.83 - 3.66 in (5 mil)

17 - 146 mm (0.254 mm) / 0.67 - 5.75 in (10 mil)

At QR Code:

37 - 63 mm (0.169 mm) / 1.45 - 2.48 in (5 mil)

0 - 132 mm (0.381 mm) / 0 - 5.2 in (15 mil)

At DataMatrix:

39 - 65 mm (0.169 mm) / 1.54 - 2.56 in (5 mil)

19 - 113 mm (0.254 mm) / 0.75 - 4.45 in (10 mil)

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: Intelligent mail Barcode, Korean Postal Authority code, POSTNET PLANET, Japan Postal, Netherland KIX Code, UK Postal, Australian Postal Code

2D code: Intelligent Aztec Code, Chinese Sensible code, Codablock F, Data Matrix (ECC 200/ECC-000-140), Maxi Code, MicroPDF417, Micro QR Code, PDF417, QR code, Passport MRZ (OCR-B)

Durability

Temperature in operation: -5 to 50 °C / 23 to 122 °F

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

Humidity in operation: 5% to 90% (non-condensing)

Humidity in storage: 5% to 90% (non-condensing)

Ambient light immunity: Fluorescent 10,000 lx max, direct sun 100,000 lx, Incandescent 10,000 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

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. 373 g / 12.6 oz

Case: ABS/PC, Black or Black/White

Regulatory & safety

Product compliance: CE, FCC, VCCI, RoHS, IEC62471-1:2006, EN55032, EN55024, EN61000-6-1

Items

Enclosed: Stand

Models

Interface versions: RS232, USB