

EOPTICON

MDL-1500

Laser scanner

The MDL-1500 is a laser barcode scan engine with an small rectangular form factor.

This laser scan engine is ideal for space-constrained portable devices and has low power consumption.











Highlights

- Features a 650 nm visible laser diode that scans bi-directionally at 100 scans/second
- Complete barcode scan engine module with integrated decoder
- Perfect for integration into small, space-constrained mobile, medical or retail barcode scanning devices
- Small size makes it easy to mount
- Programmable software with a wide variety of options
- Low power consumption to fit your design needs
- Communication: Serial CMOS 12 pin FFC connector, USB-HID, USB-COM
- Engineering kit available—enables faster time to market
- Two year warranty

MDL-1500

Product Specifications

Communication

Serial CMOS: 12 pin FFC connector, USB-HID, USB-COM

Power

Voltage requirement: 3 ~ 3.6V Current consumption: Max. 125 mA

Barcode scanner optics

Light source: 650 mn visiblie laser diode Scan method: Bi-directional scanning

Scan rate: 100 scans / second Reading pitch angle: ± 45°

Reading skew angle: -65 to -8°, 8 to +65°

Reading tilt angle: ± 25°

Curvature: 12-digit UPC: R>20 mm

Min. resolution at pcs 0.2: 0.076 mm / 3 mil

Min. pcs value: 0.9

Depth of field at code 39:

55 - 135 mm (0.127 mm) / 2.2 - 5.3 in (5 mil) 50 - 160 mm (0.15 mm) / 2 - 6.3 in (5.9 mil)

45 - 285 mm (0.254 mm) / 1.8 - 11.2 in (10 mil) 45 - 600 mm (0.508 mm) / 1.8 - 23.6 in (20 mil)

50 - 1000 mm (1.018 mm) / 2 - 39.3 in (40 mil)

Depth of field at code 128:

50 - 210 mm (0.18 mm) / 2 - 8.2 in (7.1 mil)

Depth of field at UPC/EAN:

40 - 370 mm (0.33 mm) / 1.6 - 14.5 in (13 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), IATA, Industrial 2of5, Interleaved 2of5, ISBN-ISMN-ISSN, Matrix 2of5, MSI/ Plessey, S-Code, Telepen, Tri-Optic, UK/Plessey Postal code: Chinese Post, Korean Postal Authority code

2D code: Composite codes, MicroPDF417, PDF417

Durability

Temperature in operation: -20 to 65 °C / -4 to 149 °F Temperature in storage: -30 to 70 °C / -22 to 158 °F Humidity in operation: 5 - 90% (non-condensing) Humidity in storage: 5 - 90% (non-condensing) Ambient light immunity: Fluorescent 4,000 lx max, Sunlight 80,000 lx max, Incandescent 4,000 lx max Drop test: Packed in dummy case 1.8 m / 6 ft drop onto concrete surface

MBTF: 30,000 hours except laser diode (10.000 hours) and except mirror scan unit (10,000 hours)

Physical

Dimensions (WxHxD): 28 x 8 x 14 mm /

1.10 x 0.31 x 0.55 in Weight: Ca. 3.9 g / 0.13 oz

Regulatory & Safety

RoHS, JIS-C-6802 Class 2, IEC60825-1 Class 2, FDA CDRH Class II

Items

Sold seperately: MEK-3100 development board (With power supply, RS232 cable, USB cable, PCBs)

