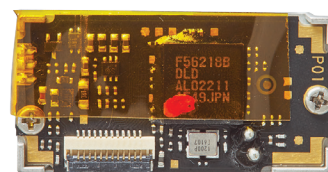
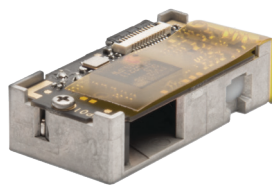
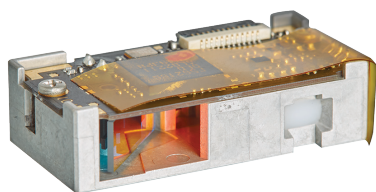


MDL-1500

Laser scanner

The MDL-1500 laser barcode scan engine features a small form factor making it an ideal solution for integration into space-constrained devices. In addition, its low power consumption and enhanced scanning range accommodates a wide array of applications and environments.



Highlights

- Features bi-directional scanning with a 650nm visible laser diode
- Fast scan rate of 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
- 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 nm visible laser diode

Scan method: Bi-directional scanning

Scan rate: 100 scans / second

Reading pitch angle: $\pm 45^\circ$

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

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

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)(Exl. stacked), IATA, Industrial 2of5, Interleaved 2of5, ISBN-ISSN-ISMN, Matrix 2of5, MSI/Plessey, S-Code, Telepen, Tri-Optic, UK/Plessey

Postal code: Chinese Post, Korean Postal Authority code

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

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