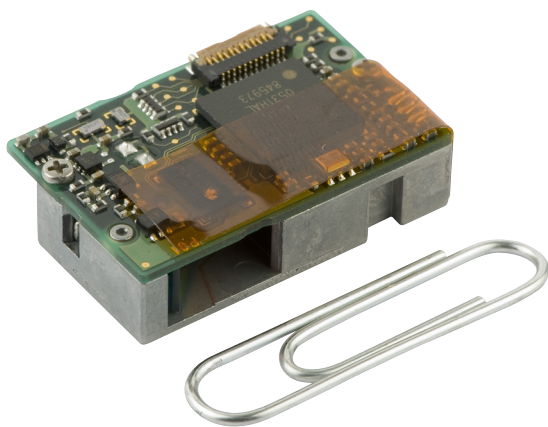


# MDL-1000

## Laser scanner

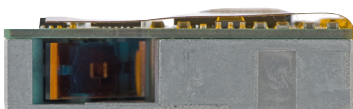
The MDL-1000 is a laser barcode scan engine with an extremely small rectangular form factor. This laser scan engine is ideal for space-constrained portable devices and has a low power consumption.



## Highlights

- Features a 650 nm visible laser diode that scans bi-directionally
- Extremely fast scan rate of 100 scans/second
- Complete barcode scan engine module with integrated decoder
- Small size makes it easy to mount and integrate into space constrained areas
- Serial CMOS communication via 12 pin FFC connector
- Low power consumption to fit your design needs
- Programmable software with a wide variety of options
- Engineering kit available - enables faster time to market
- Two year warranty protects your investment

scale  
100%



# MDL-1000

## Product Specifications

### Communication

Serial CMOS: 12 pin FFC connector

### Power

Voltage requirement: 3.3V  $\pm$  10%

Current consumption: Max. 125 mA

### Barcode scanner optics

Light source: 650 nm visible laser diode

Scan method: Bi-directional scanning

Scan rate: 100 scans / seconds

Reading pitch angle:  $\pm$  35°

Reading skew angle: -50 to 8°, 8 to +50°

Reading tilt angle:  $\pm$  20°

Curvature: R>15 mm (EAN8), R>20 mm (EAN13)

Min. resolution at pcs 0.9: 0.127 mm / 5 mil

Min. pcs value: 0.45

Depth of field at code 39:

70 - 650 mm (1.0 mm) / 2.76 - 25.59 in (39 mil)

50 - 420 mm (0.5 mm) / 1.97 - 16.54 in (20 mil)

50 - 260 mm (0.25 mm) / 1.97 - 10.24 in (10 mil)

50 - 150 mm (0.15 mm) / 1.97 - 5.91 in (6 mil)

60 - 120 mm (0.127 mm) / 2.36 - 4.72 in (5 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-ISSN-ISMN, 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 7.8 x 18 mm / 1.1 x 0.31 x 0.71 in

Weight: Ca. 10 g / 0.35 oz

### Regulatory & Safety

RoHS, JIS C6802 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)