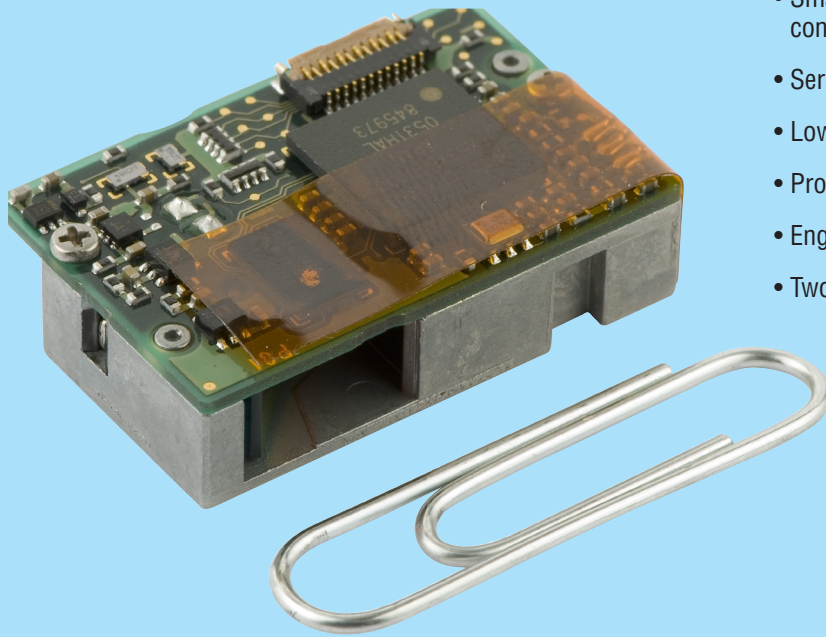


MDL-1000

Laser Barcode Scan Engine



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

MDL-1000

Product Specifications

COMMUNICATION

SERIAL CMOS: 12 pin FFC connector

POWER

VOLTAGE REQUIREMENT: 3.3V \pm 10%

CURRENT CONSUMPTION: Max. 125mA

BARCODE SCANNER OPTICS

LIGHT SOURCE: 650 nm visible laser diode

SCAN METHOD: Bi-directional scanning

SCAN RATE: 100 scans/sec

READING PITCH ANGLE: -35 to 0°, 0 to +35°

READING SKEW ANGLE: -50 to -8°, +8 to +50°

READING TILT ANGLE: -20 to 0°, 0 to +20°

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

MINIMUM RESOLUTION AT PCS 0.9: 0.127 mm / 5 mil Min. PCS value: 0.45

DEPTH OF FIELD: At PCS 0.9 Code 3

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

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

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

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

5 mil (0.127 mm) 2.36 - 4.72 in (60 - 120 mm)

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

2D CODE: Composite codes, MicroPDF417, PDF417

POSTAL CODE: Chinese Post, Korean Postal Authority code

DURABILITY

TEMPERATURE IN OPERATION: -4 to 149 °F (-20 to 65 °C)

TEMPERATURE IN STORAGE: -22 to 158 °F (-30 to 70 °C)

HUMIDITY IN OPERATION: 5 - 90% (non-condensing)

HUMIDITY IN STORAGE: 5 - 90% (non-condensing)

AMBIENT LIGHT IMMUNITY:

Fluorescent 4,000 lx max

Direct sun 80,000 lx max

Incandescent 4,000 lx max

DROP TEST: packed in dummy case 6 foot (1.8 m) drop onto concrete surface

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

PHYSICAL

DIMENSIONS (W X H X D): 1.10 x 0.31 x 0.71 in (28 x 7.8 x 18 mm)

WEIGHT BODY: Ca. 10 g / 0.35 oz

REGULATORY AND SAFETY

PRODUCT COMPLIANCE: RoHS, JIS C6802 Class 2, IEC60825-1 Class 2, FDA CDRH Class II

SOLD SEPARATELY

MEK1000 SDK (Development board, Getting started disc, RS232 cable), Connection cable, Power supply 100-240V/0.5A, 50/60 Hz, 5V/2A

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