# **MDL-2001**

# Laser Barcode Scan Engine



# **Highlights**

- Features a 650 nm visible laser diode that scans bi-directionally
- · Extremely fast scan rate of 100 scans/second
- Small size makes it easy to mount and integrate into space constrained areas
- Connects via 12 pin FFC connector
- Programmable software with a wide variety of options
- Low profile, square scan engine—dimensions of 0.80" x 0.44" x 0.71" and weight of 0.17 ounces
- Engineering kit available—enables faster time to market
- Two year warranty



# **MDL-2001**

# **Product Specifications**

### COMMUNICATION

SERIAL CMOS: 12 pin FFC connector

# **POWER**

VOLTAGE REQUIREMENT: 3.3V ± 10%
CURRENT CONSUMPTION: Maximum 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 (EAN 8), R>20 mm (EAN 13) MINIMUM RESOLUTION AT PCS 0.9: 5 mil (0.127 mm)

MINIMUM PCS VALUE: 0.45

# DEPTH OF FIELD AT PCS 0.9 CODE 39:

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

Postal Authority code

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 BARCODE (POSTAL CODES): Chinese Post, Korean

### DURABILITY

### **TEMPERATURE:**

Operation: -4 to 149 °F (-20 to 65 °C) Storage: -22 to 158 °F (-30 to 70 °C)

# HUMIDITY:

Operation: 5 - 90% (non-condensing) 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 ft (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 (WXHXD):  $0.80 \times 0.44 \times 0.71$  in

(20.4 x 11.2 x 18.0 mm)

WEIGHT BODY: Ca. 0.17 oz (4.7 g)

### REGULATORY AND SAFETY

PRODUCT COMPLIANCE: RoHS, JIS-C-6802 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



