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Engines

MSL-1400 Laser scanner

The MSL-1400 is an undecoded laser barcode scan engine featuring an extremely fast scan rate of 100 scans/second. Its small form factor makes it easy to mount and integrate into space constrained areas and it also performs well in LED lighted environments.









Highlights

- Undecoded laser barcode scan engine
- Features bi-directional scanning with a 650nm visible laser diode
- Extremely fast scan rate of 100 scans/second
- Small size makes it easy to mount and integrate into space constrained areas
- Output is digital barcode pattern (TTL) via 10 pin FFC connector
- Performs well in LED lighted environments

- Low profile, rectangular scan engine-dimensions of 28 x 8 x 14 mm, weighs 8.4 grams
- Engineering kit available-enables faster time to market
- Two year warranty

MSL-1400 Product Specifications



Communication

Digital output: 10 pin FFC connector with SOS (start of Scan) and Signal (digitized barcode signal) lines

Power

Voltage requirement: 3.3V Current consumption: Max. 65 mA

Barcode scanner optics

Light source: 650 nm visible laser diode Scan method: Bi-directional scanning Scan rate: 100 scans / second Reading pitch angle: 0° Reading skew angle: 15° Reading tilt angle: 0° Curvature: R>20 mm (UPC) Min. resolution at pcs 0.9: 0.076 mm / 3 mil Min. pcs value: 0.9

Depth of field at code 39:

7.5 - 10 mm (0.076 mm) / 0.30 - 0.39 in (3 mil) 11 - 10 mm (0.127 mm) / 0.43 - 0.39 in (5 mil) 26 - 10 mm (0.15 mm) / 1.02 - 0.39 in (5.9 mil) 110 - 10 mm (0.20 mm) / 4.33 - 0.39 in (7.9 mil) 32.5 - 12 mm (0.254 mm) / 1.28 - 0.47 in (10 mil) 43 - 25 mm (0.508 mm) / 1.69 - 0.98 in (20 mil) 42.5 - 30 mm (1.016 mm) / 1.67 - 1.18 in (40 mil)

Depth of field at code 128:

32 - 10 mm (0.18 mm) / 1.26 - 0.39 in (7.1 mil) Depth of field at UPC/EAN: 31.5 - 24.5 mm (0.33 mm) / 1.24 - 0.96 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 / 1.1 x 0.32 x 0.55 in Weight: Ca. 8.4 g / 0.3 oz

Regulatory & Safety

RoHS, IEC 60825-1 : 2014, EN60825-1: 2014 Class 1

Items

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

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