

# MDC-100

## CCD scanner

The MDC-100 is a strong performing CCD scanner in Opticons range of scan engines. It scans with an incredible speed of 300 scans per second and easily off numerous surfaces like a cell phone.



scale  
100%



## Highlights

- CCD linear sensor (1,500 pixels) barcode scan engine with integrated decoder
- Superior scanning performance at 300 scans/second
- Able to quickly scan 1D barcodes off cell phone displays
- All solid-state design with no moving parts equates to better MTBF
- No CDRH requirements and no warning labels needed
- Small form factor at just 2.8 x 11.5 x 15 mm (WxHxD) and weight of only 3.5 grams
- Perfect for integration into small, space-constrained mobile, medical or retail barcode scanning devices
- Low power consumption operating at 3.3V to fit your design needs
- Supports USB (HID and COM) and RS232 interfaces
- Engineering kit available - enables faster time to market
- Two year warranty

# MDC-100

## Product Specifications

### Communication

**Serial CMOS:** 12 pin FFC connector (both RS232C and USB)

### Power

**Voltage requirement:** 3.3V

**Current consumption:** Max. 120 mA

### Barcode scanner optics

**Light source:** 1 red LED

**Scan method:** CCD linear sensor

**Scan rate:** 300 scans / second

**Reading pitch angle:**  $\pm 50^\circ$

**Reading skew angle:**  $\pm 65^\circ$

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

**Curvature:** R>15 mm (EAN8)

**Min. resolution at pcs 0.9:** 0.3 mm (EAN-13)

**Depth of field at code 39:**

70 - 180 mm (0.127 mm) / 2.76 - 7.09 in (5 mil)

55 - 300 mm (0.25 mm) / 2.17 - 11.81 in (10 mil)

60 - 460 mm (0.5 mm) / 2.36 - 18.11 in (20 mil)

65 - 800 mm (1.0 mm) / 2.56 - 31.50 in (39 mil)

**Depth of field at EAN-13:**

45 - 320 mm (0.33 mm) / 1.77 - 12.60 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:** -40 to 70 °C / -40 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 100,000 lx max, Incandescent 4,000 lx max

**Drop test:** Packed in dummy case 1.8 m / 6 ft drop onto concrete surface

### Physical

**Dimensions (WxHxD):** 22.8 x 11.5 x 15 mm / 0.90 x 0.45 x 0.59 in

**Weight:** Ca. 3.5 g / 0.12 oz

### Regulatory & Safety

RoHS, IEC62471

### Items

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