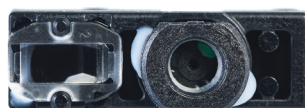# MDC-200
CCD scanner

With faster scanning performance (300 sps) then previous generations, the MDC-200 CCD scan engine rapidly and easily scans barcodes off numerous surface types—including mobile phone displays. This extremely small, affordable, yet high performance scan engine is an ideal barcode scanning solution for a wide variety of embedded barcode scanning applications.

Highlights

- Smaller form factor than the MDC-100: 7.5 mm (H) vs. 11.5 mm

- 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

- Supports USB (HID and COM) and RS-232 interfaces

- No CDRH requirements and no warning labels needed

- Small form factor at just 22.8 x 7.5 x

- 15 mm (WxHxD) and weight of only 2.6 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

- Engineering kit available – enables faster time to market

- Two year warranty

MDC-200
Product Specifications

Communication
Serial CMOS: 12 pin FFC connector (both RS-232C 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: ± 50°
Reading skew angle: ± 65°
Reading tilt angle: ± 25°
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 7.5 x 15 mm /
0.90 x 0.30 x 0.59 in
Weight: Ca. 2.6 g / 0.09 oz

Regulatory & Safety
RoHS, IEC62471

Items
Sold separately: MEK-3100 development board (With
power supply, RS-232 cable, USB cable, PCBs)

☰ OPTICON

www.opticon.com