

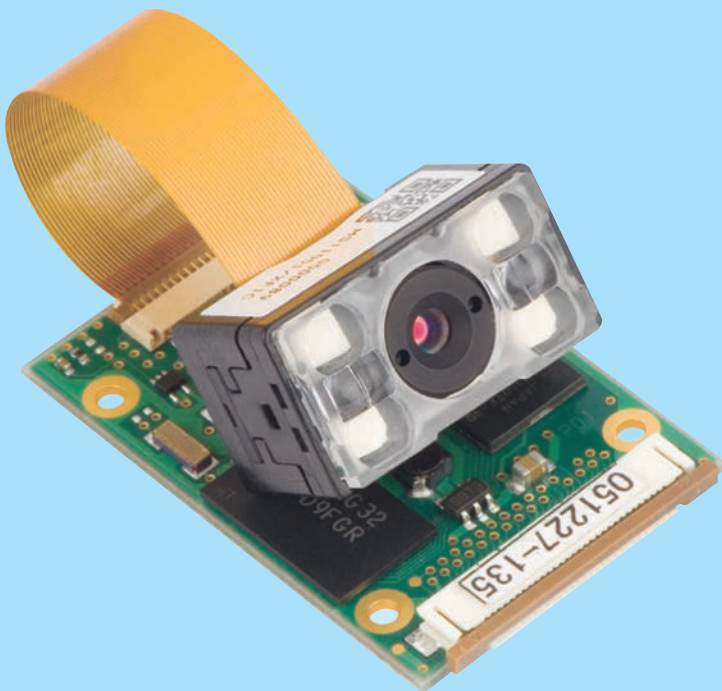
OEM

# MDI-1000

## 2D Imager Barcode Scan Engine

### Highlights

- 2D CMOS imager scan engine with fast decode speed of 30 frames per second (FPS)
- Small camera size and flexible cable length between the camera and decode board make it easy to fit into OEM devices
- Able to scan barcodes off LCD screens
- Low power consumption to fit your design needs
- Engineering kit available—enables faster time to market
- Compact form factor scan module—CMOS camera dimensions are 0.85 x 0.46 x 0.56 inches while PCB decoder board measures 0.99 x 0.17 x 1.54 inches
- Two year warranty protects your investment



# MDI-1000

## Product Specifications

### COMMUNICATION

**SERIAL CMOS:** 30 pin FFC connector

### POWER

**VOLTAGE REQUIREMENT:** 3.3V  $\pm$  5%

**CURRENT CONSUMPTION:** Maximum 410mA

### 2D IMAGER OPTICS

**LIGHT SOURCE:** Illumination 4 red LEDs 630 nm, aiming 2 green LEDs 527 nm

**SCAN METHOD:** CMOS area sensor, SXGA (1.3 million pixels), gray scale

**SCAN RATE:** Up to 30 fps

**READING PITCH ANGLE:** -50 to 0°, 0 to +50°

**READING SKEW ANGLE:** -60 to 0°, 0 to +60°

**READING TILT ANGLE:** 360°

**CURVATURE:** R>15 mm (EAN 8), R>20 mm (EAN 13)

**MINIMUM RESOLUTION AT PCS 0.9:** 0.127 mm at Code 39 and PDF417, 0.169 mm at Data Matrix and QR Code

**MINIMUM PCS VALUE:** 0.45

**FIELD OF VIEW:** Horizontal 47°, Vertical 37.5°

**DEPTH OF FIELD AT CODE 39:**

5 mil (0.127 mm) 3.74 - 5.31 in (95 - 135 mm)

10 mil (0.25 mm) 2.56 - 6.89 in (65 - 175 mm)

20 mil (0.5 mm) 1.97 - 9.65 in (50 - 245 mm)

**DEPTH OF FIELD AT QR CODE:**

13 mil (0.339) 2.76 - 6.69 in (70 - 170 mm)

8 mil (0.212) 3.54 - 5.31 in (90 - 135 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-ISSN-ISMN, Matrix 2of5, MSI/Plessey, S-Code, Telepen, Tri-Optic, UK/Plessey

**BARCODE (2D):** Aztec Code, Aztec Runes, Codablock F, Composite codes, Data Matrix (ECC200/ECO-140), Maxi Code (mode 2-5), MicroPDF417, Micro QR Code, PDF417, QR code

**BARCODE (POSTAL CODES):** Chinese Post, Korean Postal Authority code

### DURABILITY

**TEMPERATURE:**

Operation: -4 to 131 °F (-20 to 55 °C)

Storage: -13 to 158 °F (-25 to 70 °C)

**HUMIDITY:**

Operation: 5 - 90% (non-condensing)

Storage: 5 - 90% (non-condensing)

**AMBIENT LIGHT IMMUNITY:**

Fluorescent: 10,000 lx max

Direct sun: 100,000 lx max

Incandescent: 10,000 lx max

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

**MBTF:** 50,000 hours

### PHYSICAL

**DIMENSIONS (WXHXD):**

Camera (CMOS): 0.85 x 0.46 x 0.56 in (21.5 x 11.8 x 14.2 mm)

PCB (decoder board): 0.99 x 0.17 x 1.54 in (25.2 x 4.2 x 39.0 mm)

**WEIGHT BODY:**

Camera (CMOS): 0.14 oz (Ca. 3.9 g)

PCB (decoder board): 0.13 oz Ca. 3.8 g)

### REGULATORY AND SAFETY

**PRODUCT COMPLIANCE:** RoHS, IEC60825-1+A2 Class 1, JIS-C-6802 Class 1

### SOLD SEPARATELY

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

© Copyright Opticon. All rights reserved. This information is subject to change without prior notice. For availability, contact your local representative. MDI-1000\_051216

