# **MDI-2350**

## 2D Imager Barcode Scan Engine



### **Highlights**

- CMOS image sensor 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
- · Serial CMOS via 17 pin FFC connector
- Class 1 laser for easy painting of target images
- · Auto-contrast control enables high-resolution image capture
- Adjustable illumination makes it easy to read barcodes off various surface types including LCD screens
- Low power, operates under 3.3V or 5V to fit your design needs
- Engineering kit available—enables faster time to market
- Compact form factor—CMOS camera dimensions are 1.1" x 0.56" x 0.53" while PCB decoder board dimensions are 0.73" x 0.19" x 1.19"
- Two year warranty



# **MDI-2350**

### **Product Specifications**

#### COMMUNICATION

SERIAL CMOS: 17 pin FFC connector

#### **POWER**

VOLTAGE REQUIREMENT: 3.3V ± 5%
CURRENT CONSUMPTION: Maximum 300mA

#### 2D IMAGER OPTICS

LIGHT SOURCE: Aiming laser diode, illumination LED SCAN METHOD: CMOS area sensor, 1280 x 1024 pixels, gray scale

SCAN RATE: Up to 30 fps

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

READING TILT ANGLE: 360°

MINIMUM RESOLUTION AT PCS 0.9: 5 mil (0.127 mm)

MINIMUM PCS VALUE: 0.45

FIELD OF VIEW: Horizontal 48°, Vertical 34° DEPTH OF FIELD:

At QR Code:

15 mil (0.381mm) 2.17 - 8.07 in 55 - 205 mm)

At Code 39:

10 mil (0.254 mm) 3.94 - 5.91 in (100 - 150 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 2 of 5, ISBN-ISSN-ISMN, Matrix 2of5, MSI/Plessey, S-Code, Telepen, Tri-Optic, UK/Plessey

BARCODE (2D): Aztec Code, Aztec Runes, Chinese Sensible code, Codablock F, Composite codes, Data Matrix (ECC200/EC0-140), Maxi Code (mode 2~5), MicroPDF417, Micro QR Code, PDF417, QR code

BARCODE (POSTAL CODES): Chinese Post, Intelligent Mail Barcode, Korean Postal Authority code, POSTNET

#### **DURABILITY**

#### TEMPERATURE:

Operation: -4 to 131 °F (-20 to 55 °C) Storage: -40 to 158 °F (-40 to 70 °C)

HUMIDITY:

Operation: 5 - 85% (noncondensing) Storage: 5 - 85% (noncondensing)

#### 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 5ft (1.5 m) drop

onto concrete surface MBTF: 10,000 hours

#### **PHYSICAL**

#### DIMENSIONS (WXHXD):

Camera (CMOS): 1.07 x 0.53 x 0.56 in

(27.3 x 13.4 x 14.2 mm)

PCB (decoder board): 0.73 x 0.19 x 1.19 in

(18.5 x 4.8 x 30.3 mm)

#### WEIGHT BODY:

Camera (CMOS): Ca. 0.25 oz 7 g)
PCB (decoder board): Ca. 0.13 oz (3.7 g)

#### REGULATORY AND SAFETY

RoHS, IEC 60825-1 Class 1, CDRH Class I, IEC62471



