

## F31

2D CMOS imager with auto-focus

 **USB (VCP)**

### + Related products



#### M5

- Stationary device
- 2D CMOS imager
- RS232, Keyboard Wedge, USB (HID/VCP)
- IP 52, ABS, up to 50 fps



#### NLV2001

- Stationary device
- Barcode laser scanner
- RS232, Keyboard Wedge, USB (HID/VCP)
- IP 67, Metal



#### OPI2201

- Cabled device
- 2D CMOS imager with auto-focus
- RS232, Keyboard Wedge, USB

### Operating indicators

- Visual: 1 LED (red/green/orange)
- Non-visual: Buzzer

### Communication

- USB: Ver. 1.1, VCP, USB-A connector

### Power

- Voltage requirement: 5V ± 10%
- Current consumption: Max.195mA

### 2D Imager Optics

- Light source: Aiming laser diode, illumination LEDs
- Scan method: CMOS area sensor, 900 x 512 pixels, gray scale
- Scan rate: Up to 80 fps, after auto-focus activation (100 ms after triggering)
- Image format: Bitmap, JPEG
- Reading pitch angle: -50 to 0°, 0 to +50°
- Reading skew angle: -50 to 0°, 0 to +50°
- Reading tilt angle: 360°
- Min. resolution at PCS 0.9: 0.127 mm / 5 mil
- Min. PCS value: 0.45
- Field of view: Horizontal 40°, Vertical 23°
- Depth of field: At \*QR Code\* and Code 39  
\*45 - 65 mm / 1.77 - 2.56 in (0.127 mm / 5 mil)\*,  
\*45 - 250 mm / 1.77 - 9.84 in (0.381mm / 15 mil)\*,  
45 - 110 mm / 1.77 - 4.33 in (0.127 mm / 5 mil),  
50 - 260 mm / 1.97 - 10.24 in (0.254 mm / 10 mil),  
120 - 1000 mm / 4.72 - 39.37 in (1.0 mm / 39 mil)

### Supported Symbolologies

- 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
- Postal code: Chinese Post, Intelligent Mail Barcode, Korean Postal Authority code, POSTNET
- 2D code: Aztec Code, Aztec Runes, Chinese Sensible code, Codablock F, Composite codes, Data Matrix (ECC200/ECO-140), Maxi Code (mode 2~5), MicroPDF417, Micro QR Code, PDF417, QR code

### Durability

- Temperature in operation: 0 to 45 °C / 32 to 113 °F
- Temperature in storage: -20 to 60 °C / -4 to 140 °F
- Humidity in operation: 20 - 85% (non-condensing)
- Humidity in storage: 20 - 90% (non-condensing)
- Ambient light immunity: Fluorescent 10,000 lx max, Direct sun 100,000 lx max, Incandescent 10,000 lx max
- Antistatic electricity: 15kV (non-destructive)
- Drop test: 0.75 m / 2.5 ft drop onto concrete surface
- Protection rate: IP 42

### Physical

- Dimensions (w x h x d):  
46 x 25 x 58 mm / 1.81 x 0.98 x 2.28 in
- Weight body: Ca. 50 g / 1.8 oz (excl. cable)
- Case: ABS, Black

### Regulatory & Safety

- Product compliance: CE, FCC, VCCI, RoHS, IEC 60825-1 Class 2, FDA CDRH Class II

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