# NLV-5201

## 2D CMOS Imager

Stationary scanners are the easiest way to integrate a scanner component into your product or business application. The NLV-5201 performs excellent with moving objects.

## The NLV-5201; designed for embedded applications

The NLV-5201 is our latest development in the NLV series. This small 2D CMOS imager is easily integrated and scans at a fast rate. The fixed position scanner is perfect for the most demanding applications and the scanner is also very resistant with an IP65 rating.
The installed tuning function helps to easily program your settings by simply pressing the key. The 3-colors LED is a convenient assistant in this process.

## Highlights

- Fast scanning performance; 100 fps
- Custom configuration capabilities
- Improved scanning of curved, wide, poorly printed and damaged barcodes
- Exceptional motion tolerance for moving applications
- Green bar LED aim function providing laser-free aiming
- IP65

# NLV-5201
## Product Specifications

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

### Communication
RS232: 1.5 m cable without connector
USB: 1.5 m cable with USB connector

### Power
Voltage requirement: 5V ±10%
Operating Current: 265 mA, standby current: 40 mA

### Barcode scanner optics
Light source: aiming single green LED, warm white illumination LED
Scan method: CMOS area sensor, 640 x 480 pixels
Scan rate: up to 100 fps
Reading pitch angle: ± 65°
Reading skew angle: ± 65°
Reading tilt angle: 360°
Curvature: R≥20 mm (UPC12)
Min. resolution at pcs 0.9: 0.1 mm / 3.94 mil for 1D Codes, 0.169 mm / 6.6 mil for 2D and stacked Codes
Min. pcs value: 0.3
Field of view: horizontal 38˚, vertical 28.9˚
Depth of field at code 39:
53 - 126 mm (0.127 mm) / 2.09 - 4.96 in (5 mil)
52 - 237 mm (0.254 mm) / 2.05 - 9.33 in (10 mil)
69 - 433 mm (0.508 mm) / 2.72 - 17.05 in (20 mil)
Depth of field at code QR code:
60 - 111 mm (0.169 mm) / 2.36 - 4.37 in (6.7 mil)
22 - 250 mm (0.381 mm) / 0.87 - 9.84 in (15 mil)

### Supported symbologies
Barcode (1D): 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), Passport MRZ (OCR-A, OCR-B), Maxi Code (mode 2~5), MicroPDF417, MicroQR Code, PDF417, QR Code

### Durability
Temperature in operation: 0 to 50 °C / 32 to 122 °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
Electrostatic discharge protection: 6 kV contact discharge / 15 kV air discharge (non-destructive)
Drop test: 0.75 m / 2.5 ft drop onto concrete surface
Vibration test: 10 - 100 Hz with 2G for 60 min per cycle in each X, Y and Z direction.
Protection rate: IP65

### Physical
Dimensions (WxHxD): 41.1 x 24.0 x 33.0 mm / 1.62 x 0.94 x 1.3 in
Weight: Ca. 125 g / 4.2 oz (excl. cable)
Case: Zinc alloy die casting, black

### Regulatory & Safety
CE, FCC Class B, VCCI Class B, RoHS, IEC 62471, EN55032 Class B, EN55024 Class B

### Models
Lens type: SR-Standard Range (113 mm), HD-high density (63 mm), UD-Ultra high density (43 mm)

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