

# OPN-2001

## Laser scanner

The OPN-2001 makes barcode data collection simple. Scan a barcode and it is automatically stored. This small USB scanner is perfect for data-capture applications in healthcare, inventory control and retail.



## Highlights

- Simple, one-touch barcode scanning
- Most affordable USB batch scanner
- Small form factor: 32 x 62 x 16 mm and weighs only 28 grams
- Easily fits into a pocket or on a key chain
- High speed 100 scans/second laser barcode scanner
- Stores over 15,000 barcodes plus timestamps
- USB rechargeable, high capacity Lithium-Ion battery
- Audible and visible feedback after a successful scan
- Leverage the free Software Development Kit (SDK) to customize scanning behavior
- Scanner comes with USB data/charging cable and neck lanyard
- Backed by a two year warranty

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## Product Specifications

### Operation

CPU: 32-bit

O/S: Proprietary

RTC: Supports year, month, day, hour, minute, second (leap year supported)

### Memory

Flashrom: 512 kB (Data storage >15.000 barcodes+ timestamp)

Ram: 64 kB

### Operating indicators

Visual: 1 LED (red/green/orange)

Non-visual: buzzer

### Operating keys

Entry options: 2 keys total, 1 clear key, 1 scan key

### Communication

USB: Mini USB, ver. 1.1, USB-VCP, (USB-HID on request)

### Power

Rechargeable battery: Lithium-Ion 3.7V 150 mAh

Operating time(active): 3.000 scans (1 scan / 5 sec)

Operating time(idle): > 1 year

Charge method: Enclosed USB cable

Battery charging time: Ca. 2,5 hours

### Barcode scanner optics

Light source: 650 nm visible laser diode

Scan method: Vibrating mirror

Scan rate: Up to 100 scans / second

Trigger mode: Manual

Reading pitch angle:  $\pm 30^\circ$

Reading skew angle:  $-50^\circ$  to  $-8^\circ$ ,  $8^\circ$  to  $+50^\circ$

Reading tilt angle:  $\pm 20^\circ$

Curvature:  $R > 15$  mm (EAN8),  $R > 20$  (EAN13)

Min. resolution at PCS 0.9: 0.127 mm / 5 mil

Min. PCS value: 0.45

### Depth of field at UPC:

60 - 570 mm (1.0 mm) / 2.36 - 22.44 in (39 mil)

40 - 360 mm (0.5 mm) / 1.57 - 14.17 in (20 mil)

40 - 220 mm (0.25 mm) / 1.57 - 8.66 in (10 mil)

40 - 120 mm (0.15 mm) / 1.57 - 4.72 in (6 mil)

50 - 100 mm (0.127 mm) / 1.97 - 3.94 in (5 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), IATA, Industrial 2 of 5, Interleaved 2 of 5, ISBN-ISSN-ISMN, Matrix 2 of 5, MSI/Plessey, UK/Plessey, S-Code, Telepen, Tri-Optic  
Postal code: Chinese Post, Korean Postal Authority code

### Durability

Temperature in operation: 0 to 40 °C / 32 to 104 °F

Temperature in storage: -20 to 60 °C / -4 to 140 °F

Humidity in operation: 20% to 85% (non-condensing)

Humidity in storage: 20% to 90% (non-condensing)

Ambient light immunity: Fluorescent 3,000 lx, direct sun 50,000 lx, incandescent 3,000 lx max

Drop test: 1.5 m / 5 ft drop onto concrete surface

Vibration test: 10 - 100Hz with 2G for 30 min

Protection rate: IP42

### Physical

Dimensions (W x H x D): 32 x 62 x 16 mm / 1.26 x 2.44 x 0.63 in

Weight body: Ca. 28 g / 1 oz (incl. battery)

Case: ABS, Black

### Regulatory & safety

Product compliance: CE, FCC, VCCI, RoHS, JIS-C-6802 Class 2, IEC60825-1 Class 2, FDA CDRH Class II

### Items

Enclosed: Mini USB cable, Neck strap