

OPN-4000

CCD Linear Imager

The OPN-4000 enables real-time barcode scanning into any Bluetooth® device. It is extremely small, lightweight and durable making it an ideal solution for a variety of mobile applications in retail, healthcare, manufacturing, logistics, hospitality and field operations.



Highlights

- CCD linear sensor rapidly scans and decodes 1D barcodes
- Price point makes real-time barcode scanning with an Android, Apple or Windows device affordable
- Ready-to-go out of the box, just pair it with your Bluetooth device
- Supports Apple MFi (i-version), SPP and HID Bluetooth profiles for added flexibility
- Small form factor: weighs only 53 grams, 36 x 83 x 21.5 mm (W x H x D)
- Memory: 1 MB Flash ROM, 96 kB SRAM
- Audible and visible feedback after a successful scan
- USB rechargeable, high capacity Lithium-Ion battery
- Extremely durable: IP42 rating against dust and moisture and survives 1.5 m drop test
- Two year warranty protects your investment

OPN-4000

Product Specifications



Operation

CPU: 32-bit
O/S: Proprietary
RTC: supports year, month, day, hour, minute, second (leap year supported)

Memory

Flashrom: 1 MB
ram: 96 kB

Operating indicators

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

Operating keys

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

Communication

USB: Mini USB
Bluetooth: Ver. 2.1, SPP, HID, 1 to 1 connection, master / slave mode, authentication and encryption

Power

Rechargeable battery: Lithium-Ion Polymer 3.7V 600 mAh
Operating time: 25 hours (2 scans / 10 seconds incl. Bluetooth communication)
Charging method: Enclosed USB cable

Barcode scanner optics

Light source: 1 red LED
Scan method: CCD linear image sensor, 1500 pixels
Reading pitch angle: $\pm 50^\circ$
Reading skew angle: $\pm 65^\circ$
Reading tilt angle: $\pm 25^\circ$
Curvature: $R \geq 15$ (EAN 8), $R \geq 20$ (EAN 13)
Min. resolution at PCS 0.9: 0.1 mm
Depth of field at code 39:
75 - 140 mm (0.127 mm) / 2.95 - 5.51 in (5 mil)
65 - 140 mm (0.15 mm) / 2.56 - 5.51 in (6 mil)
65 - 220 mm (0.254 mm) / 2.56 - 8.66 in (10 mil)
60 - 350 mm (0.508 mm) / 2.36 - 13.78 in (20 mil)
80 - 520 mm (1.0 mm) / 3.15 - 20.47 in (39 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) (excl. stacked), IATA, Industrial 2of5, Interleaved 2of5, ISBN-ISMN-ISSN, Matrix 2of5, MSI/Plessey, UK/Plessey, S-Code, Telepen, Tri-Optic
Postal code: Chinese Post, Korean Postal Authority 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% to 85% (non-condensing)
Humidity in storage: 20% to 85% (non-condensing)
Ambient light immunity: Fluorescent 10,000 lx max, direct sun 100,000 lx max
Drop test: 1.5 m / 5 ft drop onto concrete surface
Protection rate: IP42

Physical

Dimensions (W x H x D): 36 x 83 x 21.5 mm / 1.42 x 3.27 x 0.85 in
Weight body: Ca. 53 g / 1.87 oz (incl. battery)
Case: ABS, White

Regulatory & safety

Product compliance: CE, FCC, VCCI, RoHS, IEC62471-1, EN60950-1, IEC60950-1, EN55022, EN301 489-01 V1.9.2, EN301 489-17 V2.1.1, EN300 328 V1.7.1

Items

Enclosed: USB cable, Neck strap