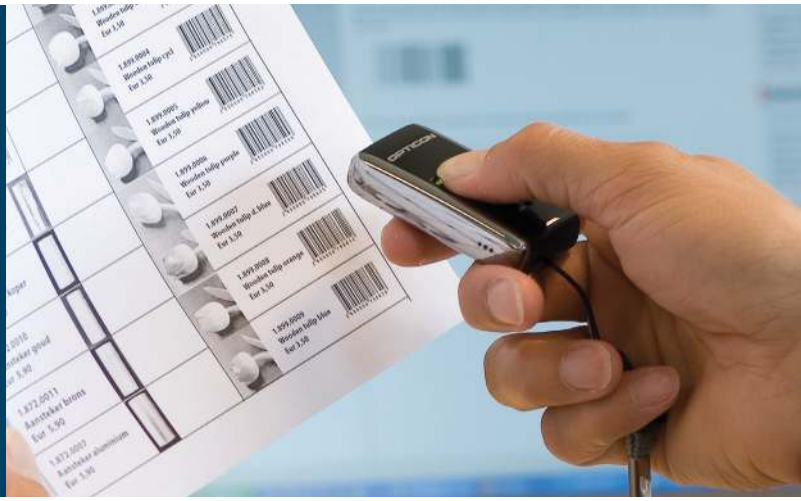
OPN-2500

Laser engine

The OPN-2500 allows real-time barcode scanning into any Bluetooth device, as well as scanning in batch mode. It is extremely small and lightweight, and it comes at an affordable price point that enables any business to integrate barcode scanning into their mobile applications.









Highlights

- Price point makes real-time barcode scanning with any Bluetooth host device affordable
- HID (Human Interface Device), DFU (Device firmware update), UART (Serial port emulation), BAS (Battery service), OptiConnect service
- Bluetooth 5.4 Low Energy
- Ready-to-go out of the box, just pair it with your Bluetooth device or connect with USB
- High speed 100 scans/second laser barcode scanner
- The internal flash memory safely stores your data even without active connection
- 3-in-1 default application (Bluetooth, OPN2001 and Batch application)
- Fully configurable and customizable using OptiConnect, OptiConfigure and the OPN Companion application. Integrate with your own applications using our free SDKs
- By supporting a wide range of Bluetooth and USB interfaces and configurable batch capabilities, it integrates seamlessly with almost any existing or new barcode application
- When connected to the optional finger trigger, the scanner transforms into a ring scanner, perfect for hands-free operations and streamlined workflows.
- Audible and visible feedback
- USB-C charging/communications port. It supports USB-HID (keyboard), USB-COM (serial port profiles: USB-CDC and USB-VCP) and USB-MSD (hard disk)
- High capacity Lithium-Ion battery
- Two year warranty

OPN-2500

Product Specifications

Operation
CPU: 32-bit
O/S: Proprietary
Software: 3-in-1 default applications (Bluetooth, OPN2001, and Batch application)
RTC: Supports year, month, day, hour, minute, second (leap year supported)

Memory
Flashrom: 1 MB
SRAM: 256 kB
External Flashrom: 2 MB

Operating indicators
Visual: 2 LED (RGB)
Non-visual: buzzer

Operating keys
Entry options: 2 keys (1 scan button, 1 function key)

Communication
USB: USB-C, USB-VCP, USB-CDC, USB-HID, USB-MSD
Bluetooth: Ver. 5.4, HID (Human Interface Device), DFU (Device firmware update), SPP (Serial port emulation), BAS (Battery service), OptiConnect service

Power
Rechargeable battery: lithium-Ion Polymer 3.7V 250 mAh
Operating time (batch): 12,500 scans (1 scan / 5 sec)
Operating time (Batch, idle): >6 months
Operating time (Bluetooth): 12,000 scans (1 scan / 5 seconds)
Operating time (Bluetooth, idle): >1 month
Data retention time: Indefinite
Charge method: Enclosed USB-C cable

Barcode scanner optics
Light source: 650 nm visible laser diode
Scan method: Vibrating mirror
Scan rate: Up to 100 scans / second
Reading pitch angle: ± 35º
Reading skew angle: -50º to -8º, +8º to +50º
Reading tilt angle: ± 20º
Curvature: R>15 (EAN 8), R>20 (EAN 13)
Min. resolution at pcs 0.9: 0.127 mm / 5 mil
Min. PCS value: 0.2
Depth of field:
70 - 550 mm (1.00 mm) / 2.76 - 21.65 in (39 mil)
50 - 380 mm (0.5 mm) / 1.97 - 14.96 in (20 mil)
50 - 230 mm (0.25 mm) / 1.97 - 9.06 in (10 mil)
50 - 130 mm (0.15 mm) / 1.97 - 5.12 in (6 mil)
60 - 110 mm (0.127 mm) / 2.36 - 4.33 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, ISBN-ISMN-ISSN, 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 ºC / 32 to 104 ºF
Temperature in storage: -20 to 60 ºC / -4 to 140 ºF
Humidity in operation: 20% to 85% (no frost, non-condensing)
Humidity in storage: 20% to 85% (no frost, non-condensing)
Ambient light immunity: Incandescent 4,000 lx max, Fluorescent 4,000 lx max, direct sun 80,000 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. 29 g / 1 oz (incl. battery)
Case: ABS, Black

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

Items
Enclosed: USB-C cable, Neck strap
Sold separately: Silicon cover, Finger trigger

OPTICON

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