OPTICON

Companion Scanner

OPN-3002i

2D Bluetooth®
Companion Scanner

Apple MFi

Bluetooth (HID/SPP)

USB (HID/VCP)

+ Features and Benefits

• 2D CMOS imager rapidly scans and decodes 1D and 2D barcodes

• Price point makes real-time barcode scanning with an Android™, Apple®, Blackberry® or Windows® devices affordable

• Ready-to-go out of the box, just pair it with your Bluetooth device

• Supports Apple MFi, SPP and HID Bluetooth profiles for added flexibility

• Conveniently holds over 20,000 scans when batch mode is required

• Small form factor: weighs only 2 oz, 3.27 x 1.42 x 0.85 in (LxWxD)

• Audible and visible feedback after a successful scan

• USB rechargeable, high capacity Lithium-Ion battery

• Extremely durable and reliable with a comprehensive two-year warranty that protects your investment

+ Product Specification

Operation

- **CPU:** 32 bit CISC, 96 MHz
- **OS:** Proprietary
- **Software:** Proprietary
- **RTC:** Supported

Memory

- **System Flash:** 512 KB + 32 KB
- **Storage Flash:** 1 MB
- **RAM:** 96 KB

Operating Indicators

- **Visual:** LEDs (red, green, blue)
- **Audible:** Buzzer, volume adjustable
- **Physical:** Vibrator, strength adjustable

Operating Keys

- **Entry Options:** 1 Trigger key and 1 multi-function key

Communication

- **USB:** Full Speed, HID/VCP
- **Bluetooth:** 2.1 (Secure Simple Pairing support), HID/SPP, Class 2 (10 meter range)

Power

- **Rechargeable Battery:** Lithium-Ion polymer 3.7V 600 mAH
- **Operating Time:** 10 hours (1 scan/5 seconds, Bluetooth connected)
- **Charging Method:** USB

2D Imager Optics

- **Light Source (illumination):** 2 Red LED floodlights
- **Light Source (aiming):** 1 Green LED (bar shape)
- **Sensor:** WVGA (752 w x 480 h) 2D CMOS
- **Scan Rate:** 60 fps
- **Motion Tolerance:** Up to 2m/sec
- **Reading Pitch Angle:** ± 50°
- **Reading Skew Angle:** ± 50°
- **Reading Tilt Angle:** 180°
- **Focus Distance:** 4.9 in (124.8 mm)
- **Minimum PCS:** 0.30

Minimum Resolution:

- 1D Barcode: 5 mils (0.127 mm)
- Composite Barcode: 6.65 mils (0.169 mm)
- 2D Barcode: 8.35 mils (0.212 mm)

- **Field of View:** horizontal 41°, vertical 26.4°

Curve Tolerance (PCS 0.9):

- Codabar (10 digit): R ≥0.63 in (16 mm)
- UPC (12 digit): R ≥0.79 in (20 mm)

Depth of Field:

- Code 39 at 5 mils (0.127 mm): 3.54 - 4.33 in (90 - 110 mm)
- Code 39 at 10 mils (0.254 mm): 2.56 - 7.28 in (65 - 185 mm)
- Code 39 at 20 mils (0.508 mm): 2.56 - 10.24 in (65 - 260 mm)
- Code 128 at 7.87 mils (0.20 mm): 3.35 - 6.50 in (85 - 165 mm)
- UPC at 13 mils (0.33 mm): 2.17 - 7.68 in (55 - 195 mm)
- PDF417 at 6.65 mils (0.169 mm): 3.35 - 5.31 in (85 - 135 mm)
- PDF417 at 10 mils (0.254 mm): 2.56 - 7.09 in (65 - 180 mm)
- QR Code at 8.35 mils (0.212 mm): 3.54 - 4.33 in (90 - 110 mm)
- QR Code at 15 mils (0.381 mm): 2.17 - 7.09 in (55 - 180 mm)
- Data Matrix at 10 mils (0.254 mm): 3.35 - 5.31 in (85 - 135 mm)

Supported Symbologies

- **Barcode (1D):** UPC/EAN/JAN (standard, composite, addon), Code 39, Codabar (NW7), Industrial 2 of 5, Interleaved 2 of 5, Code 128, Code 93, IATA, MSI/Plessey, UK/Plessey, Telepen, Code 11, Matrix 2 of 5, JPN, GS1-Databar (Limited, Expanded, Composite), GS1-128 (standard, composite)
- **Barcode (2D):** PDF417, micro PDF417, Codablock F, QR Code, Micro QR Code, Data Matrix (ECC 000-140 & ECC 200), Aztec Code, Aztec Runes, Chinese Sensible Code, Maxicode
- **Barcode (Postal Codes):** Chinese Post Matrix 2 of 5, Korean Postal Authority, Intelligent Mail Barcode, Postnet

Durability

- **Temperature:**
  Operation: 32° - 122° F (0° - 50° C)
  Storage: -4° - 140° F (-20° - 60° C)
- **Humidity:**
  Operation: 20 - 85% RH (non-condensing, non-freezing)
  Storage: 20 - 85% RH (non-condensing, non-freezing)
- **Ambient Light Immunity:**
  Fluorescent: 10,000 lx max
  Incandescent: 10,000 lx max
  Sunlight: 100,000 lx max
- **Drop Test:** 5 ft (1.5 m) onto to concrete
- **Vibration Test:** 1 hour at 10 - 100Hz
- **Protection Rate:** IP42

Physical

- **Dimensions (WxHxD):** 3.27 x 0.85 x 1.42 in (83 x 21.5 x 36 mm)
- **Body Weight:** 2 oz (57 g)

Regulatory and Safety

- **LED Safety:** IEC 62471-1:2006 Risk License Group
- **Product Safety Standards:** EN60950-1:2005, IEC60950-1:2006
- **EMC:** EN55022, EN55024, FCC Part 15 Subpart C (Subpart B Class B), Class B VCCI
- **Certification Standards:** CE
- **Other:** Apple MFi License, Bluetooth Logo Authenticator

Enclosed Items

- OPN-3002i, USB cable (data/charging), Lanyard (neck strap)

OPTICON

WWW.OPTICONUSA.COM