

OPTICON

Companion Scanner

PX-20

2D Bluetooth® Companion Scanner

Bluetooth (HID/SPP/SSP)

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 iOS or Windows host device affordable
- Ready-to-go out of the box—just pair it with your Bluetooth device
- Supports Secure Simple Pairing (SSP), Serial Port Profile (SPP) and Human Interface Device (HID) Bluetooth profiles for added flexibility
- Free SDK allows customized scanning behavior
- Memory: FlashROM 512 kB, RAM 96 kB, External FlashROM 1024 kB
- Small form factor: weighs only 1.4 oz, 2.8 x 1.34 x 0.59 in (LxWxD)
- Audible and visible feedback after a successful scan
- USB rechargeable, high capacity Lithium-Ion battery
- Extremely reliable and durable (IP54, 6 ft drop to concrete)
- Comprehensive two year warranty protects your investment

Operation

- **CPU:** RX62N 32-bit MCU
- **OS:** Proprietary
- **Software:** Multiple applications available (also programmable in C-language, free software development kit with free RX compiler)
- **RTC:** Supports year, month, day, hour, minute, second (leap year supported)

Memory

- **System FlashROM:** 512 kB
- **External FlashROM:** 1024 kB
- **RAM:** 96 kB

Operating indicators

- **Visual:** 1 LED (red/green/blue)
- **Audible:** Buzzer

Operating keys

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

Communication

- **USB:** MicroUSB, VCP
- **Bluetooth:** Version 2.1, SPP, HID, SSP, 1 to 1 connection, master/slave mode, authentication and encryption

Power

- **Operating Time:** 20 hours (1 scan/minute including Bluetooth communication), 35 hours (1 scan/minute, Bluetooth not activated)
- **Charging Method:** Enclosed USB cable

2D Imager Optics

- **Light Source:** Green aiming LED, 2 illumination red LEDs
- **Scan Method:** CMOS area sensor, 752 x 480 pixels
- **Scan Rate:** Up to 60 fps
- **Reading Pitch Angle:** -50 to 0°, 0 to +50°
- **Reading Skew Angle:** -50 to 0°, 0 to +50°
- **Reading Tilt Angle:** 360°
- **Focal Distance:** 5.12 in (130 mm) from front
- **Curvature:** R ≥ 0.79 in (20 mm)
- **Minimum Resolution at PCS 0.9:** 5 mil (0.127 mm)
- **Minimum PCS Value:** 0.30
- **Field of View:** Horizontal 40.6°, Vertical 26.4°
- **Depth of Field:**
 - Code 39 at 5 mil (0.127 mm): 0.30 - 0.41 in (90 - 125 mm)
 - Code 39 at 10 mil (0.254 mm): 0.18 - 0.66 in (55 - 200 mm)
 - Code 39 at 20 mil (* - 0.508 mm): 0.98 in (* - 300 mm)
 - Code 95 at 8.4 mil (0.212 mm): 3.74 - 4.72 in (120 mm)
 - Code 95 at 15 mil (0.381 mm): 2.36 - 7.87 in (60 - 200 mm)

*The depth of field depends on the view angle and symbol length

Supported Symbolologies

- **Barcode (1D):** UPC-A, UPC-A Add-on, UPC-E, UPC-E Add-on, EAN-13, EAN-13 Addon, EAN-8, EAN-8 Add-on, JAN-8, JAN-13, Code 39, Tri-Optic, Codabar (NW-7), Industrial 2 of 5, Interleaved 2 of 5, S-Code, IATA, Code 93, Code 128, MSI/Plessey, UK/Plessey, TELEPEN, Matrix 2of5, Code 11, GS1 DataBar, GS1 DataBar Limited, GS1 DataBar Expanded, Composite GS1-DataBar, Composite GS1-128, Composite EAN, Composite UPC
- **Barcode (2D):** PDF417, MicroPDF417, Codablock F, QR Code, Micro QR Code, DataMatrix (ECC 0 - 140 / ECC 200), MaxiCode (Modes 2 to 5), Aztec Code, Chinese Sensible Code
- **Barcode (Postal Codes):** Chinese Post, Korean Postal Authority code

Durability

- **Temperature:**
Operation: 14 to 122 °F (-10 to 50 °C)
Storage: -4 to 140 °F (-20 to 60 °C)
- **Humidity**
Operation: 20 - 85% (non-condensing)
Storage: 20 - 85% (non-condensing)
- **Ambient Light Immunity:** Fluorescent 10,000 lx max, Direct sun 100,000 lx max, Incandescent 10,000 lx max
- **Drop Test:** 6 ft (1.8 m) drop onto concrete surface
- **Protection Rate:** IP 54

Physical

- **Dimensions (WxHxD):**
1.34 x 2.8 x 0.59 in (34 x 71 x 15 mm)
- **Weight (Body):** Ca. 1.4 oz (40 g) (incl. battery)
- **Case:** ABS, Black

Regulatory and Safety

- **Product Compliance:** CE, FCC, VCCI, RoHS, JIS-C-6802 Class 2, IEC 60825-1 Class 2, FDA CDRH Class II, IEC62471, EN60950-1, IEC60950-1, EN55022, EN55024

Enclosed Items

- USB cable, neck strap