

# H-27

## Android Mobile Computer Integrated 1D or 2D Barcode Scanner



Android

WWAN (2.5G/3.5G)

Wi-Fi

Bluetooth

Micro SD I/O

### + Features and Benefits

- Rugged mobile computer with fully integrated 1D laser or 2D imager barcode scanner
- Android 4.2.2 for familiar and convenient navigation
- Qualcomm® Snapdragon™ S4 MSM8960 Dual core Krait 1.5GHz CPU
- 4.3" brilliant color touchscreen display with Gorilla® Glass, anti-reflective coating and signature capture
- Communications: Bluetooth 4.0, Wi-Fi (802.11 a/b/g/n), WWAN (2.5G/3.5G), AGPS, NFC, USB and Infrared
- Rear facing 5.0 MP auto-focus digital camera, flash LED
- Memory: 8GB Flash NAND, DDR2 1GB SDRAM and microSD up to 32GB
- IP65 rating against dust and moisture, survives multiple 5' drops to concrete
- Compact form factor – 3.03" x 5.79" x 0.75" (w x h x d) and 8.5 ounces (including battery)
- High capacity 3.7 2860mAh Lithium-Ion battery
- Two year warranty

## Operation

- **CPU:** Qualcomm MSM8960 Dual core Krait 1.5GHz
- **OS:** Android 4.2.2

## Memory

- **eMMC:** 8G
- **SDRAM:** DDR2 1GB
- **Expansion:** MicroSD up to 32GB

## Display

- **Type:** TFT LCD (350 nits), capacitive touch panel, color screen
- **Size:** 4.3", 800 x 480 pixels
- **Protection:** Gorilla glass v2
- **Coating:** Anti reflective

## Operating Indicators

- **Visual:** 2 LEDs (red/green)
- **Audible:** Vibrate

## Operating Keys

- 1 power key
- 2 volume keys
- 2 scan keys
- 4 Android navigation keys

## Communication

- **Bluetooth:** 4.0
- **WLAN:** Wi-Fi, IEEE.802.11 a/b/g/n
- **WWAN:** 2G (850/900/1800/1900), 3G (850, 900, 1700, 1900, 2100)
- **WWAN Data:** GPRS, EDGE, UMTS, HSPA+
- **Ethernet:** via USB-to-Ethernet adapter (supported USB-to-Ethernet chipsets AX8817x, AX88178, AX88178A, AX88772, RTL8150)
- **NFC:** NFC-A (ISO14443-3A), NFC-B (ISO14443-3B), NFC-F (JIS 6319-4), isoDep (ISO 14443-4), NFC Forum Tag Types 1, 2, 3, 4, iISO18092, NFC-V (iISO15693), MiFARe Classic, MiFARe Ultralight, nDeF on MiFARe Classic
- **GPS:** Integrated GPS and GLONASS
- **Audio:** Speaker/ receiver /microphone/3.5 mm headset (CTIA)/Bluetooth (HSP, HFP, A2DP)
- **USB:** Micro USB OTG, System connector with USB OTG and charging

## Sensors

- Accelerometer, Magnetometer, Gyroscope, Photometer, Proximity

## Power

- **Main Battery:** Lithium-Ion 3.7V 2860mAh (sold separately)
- **Backup Battery:** Lithium Polymer 3.7V, 80mA for main battery hotswap

- **Operating Time:** 8 hours (LCD on, 3G on), standby time 325 hours
- **Battery Charging Time:** 2-2.5 hours
- **Charging Technology:** Qualcomm Quickcharge 1.0

## Camera

- **Rear Facing Camera:** 5 MP, auto-focus, flash LED

## Barcode Scanner Optics

- **Light Source:** 650 nm visible laser diode
- **Scan Rate:** 100 scans/sec
- **Reading Pitch Angle:** -35° to 0°, 0° to +35°
- **Reading Skew Angle:** -50° to -8°, +8° to +50°
- **Reading Tilt Angle:** -20° to 0°, 0° to +20°
- **Curvature:** R>15 (EAN8), R>20 (EAN13)
- **Minimum PCS Value:** 0.45
- **Depth of Field (At PCS 0.9, Code 39):**  
39 mil (1.00 mm): 2.76 - 25.59 in (70 - 650 mm)  
20 mil (0.5 mm): 1.97 - 16.54 in (50 - 420 mm)  
10 mil (0.25 mm): 1.97 - 10.24 in (50 - 260 mm)  
6 mil (0.15 mm): 1.97 - 5.91 in (50 - 150 mm)  
5 mil (0.127 mm): 2.36 - 4.72 in (60 - 120 mm)

## Supported Symbologies Barcode Scanner

- **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, ISBN, Industrial 2of5, Interleaved 2of5, Matrix 2of5, MSI/Plessey, Telepen
- **Barcode (2D):** Composite Codes, MicroPDF417, PDF417
- **Barcode (Postal Codes):** Chinese Post, Korean Postal Authority code

## 2D Imager Optics

- **Light Source:** Aiming green LED, illumination LEDs
- **Scan Method:** CMOS area sensor, 752 x 480 pixels, gray scale
- **Scan Rate:** Up to 60 fps
- **Image Format:** Windows Bitmap, jpeg, tiff
- **Gradulation:** 256, 16, 2
- **Image Output Mode:** 4 resolutions (full, 1/2, 1/3, 1/4), 2 ranges (horizontal, vertical)
- **Reading Pitch Angle:** -50° to 0°, 0° to +50°
- **Reading Skew Angle:** -50° to 0°, 0° to +50°
- **Reading Tilt Angle:** 360°
- **Curvature:** R>16 mm (10-digit Codabar), R>20 mm (12-digit UPC)
- **Minimum Resolution at PCS 0.9:**  
7 mil (0.169 mm) at PDF417  
8 mil (0.212 mm) at QR Code and DataMatrix

- **Minimum PCS Value:** 0.3
- **Field of View:**  
Horizontal: 40.6°  
Vertical: 26.4°
- **Depth of Field (Code 39):**  
5 mil (0.127 mm) 3.35 - 4.92 in (85 - 125 mm)  
10 mil (0.254 mm) 2.56 - 8.07 in (65 - 205 mm)  
20 mil (0.508 mm) 2.36 - 11.61 in (60 - 295 mm)
- **Depth of Field (At QR Code):**  
8.4 mil (0.212 mm) 3.54 - 4.53 in (90 - 115 mm)  
15 mil (0.381 mm) 2.17 - 7.68 in (55 - 195 mm)

## Supported Symbologies 2D Imager

- **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, Han Xin Code (Chinese Sensible Code)
- **Barcode (Postal Codes):** Chinese Post, Korean Postal Authority code

## Durability

- **Temperature:**  
Operation: 14 - 122 °F (-10 - 50 °C)  
Storage: -4 - 158 °F (-20 - 70 °C) (without battery)
- **Humidity:**  
Operation: 5% - 95% (non-condensing)
- **Drop Test:** 5 ft (1.5 m) onto concrete surface
- **Protection Rate:** IP 65

## Physical

- **Dimensions (WxHxD):** 3.03 x 5.79 x 0.75 in (77 x 147 x 19 mm)
- **Weight Body:** Ca. 8.5 oz (244 g) (incl. battery)
- **Color:** Black

## Enclosed Items

- **Battery Power Adapter**
- **Quick Start Guide**
- **Ear Phone**
- **Micro USB to DC Cable**

## Sold Separately

- **CRD-27:** Single bay cradle, charging and communication