H-31 & H-33

2D CMOS Imager

Built with a durable and intelligent design, the H-31/H-33 is ideal for today's mobile workforce. Implementing a variety of applications that make it an optimal tool to be used in areas such as: field sales, inventory management, and logistics.

Highlights

- Rugged mobile computer with a fully integrated, Opticon high speed 2D imager barcode scanner
- Two models available; H-31 has Wi-Fi and the H-33 has 4G with GPS
- Android 9 for familiar and convenient navigation
- Android Enterprise Recommended (AER) certified
- Qualcomm SDM450 A53 1.8 GHz Octa-core
- 5" brilliant color touchscreen display with Gorilla® Glass
- Communications: Bluetooth 4.1 LE, WLAN, Wi-Fi, NFC, USB, GPS (H-33)
- Rear facing 16 MP auto-focus digital camera, LED flash with torch
- IP67 rating against dust and moisture, survives multiple 1.8 m drops to concrete, MIL-STD 810G with bumper
- Memory: 64GB EMMC, 4GB LPDDR3 RAM and MicroSD
- Compact form factor: 77 x 158 x 16.9 mm (W x H x D) and 330 grams
- User/field-replaceable battery packs, 4,000mAh, no special tool needed, supports hot-swap mode, extended battery packs available
- Supports Qualcomm Quick-Charge 3.0
- Two year warranty and OptiCare comprehensive warranty option

H-31 & H-33

Product Specifications

Operation
CPU: Qualcomm SDM450 A53 1.8Ghz Octa-core
O/S: Android 9

Memory
EMMC: 64GB
RAM: LPDDR3 4GB
Expansion: MicroSD

Display
Type: FHD, capacitive multi touch panel, color screen, Gorilla Glass
Size: 5"
Brightness: 520 cd/m2 (nits) typical

Operating indicators
Visual: 3 LEDs
Non-visual: Vibrate, dual speakers (max 90dB)

Operating keys
Entry options: 1 power key, 2 volume keys, 2 (programmable) scan keys, 2 function keys, 3 OS keys

Communication
Bluetooth: 4.1 LE
W-LAN: Wi-Fi, IEEE 802.11 a/b/g/n/ac
WAN (H-33): WCDMA, GSM, LTE
NFC: ISO14443-4 (type A & B), ISO15693, Mifare, Felica (ISO/IEC18092)
GPS: GPS/GLONASS/Beidou/QZSS (H-33 only)

Sensors
Accelerometer, Light sensor, Gyroscope, E-compass, Proximity

Power
Main battery: Lithium-Ion 3.7V 4000mAh (standard), Lithium-Ion 3.7V 5720mAh (optional)
Backup battery: Rechargeable RTC battery, battery swap
Charging technology: Qualcomm Quickcharge 3.0 (USB 2.0)

Camera
Rear facing camera: 16 MP, auto-focus, LED flash with torch

2D Imager optics
Light source: Aiming green LED, warm white illumination LED
Scan method: CMOS area sensor, 640 x 480 pixels, greyscal 10-bits
Scan rate: Up to 100 fps
Reading pitch angle: -65 to 0°, 0 to +65°
Reading skew angle: -65 to 0°, 0 to +65°
Reading tilt angle: 360°
Curvature: R>15 mm (EAN8), R>20 mm (EAN13)
Min. resolution at pcs 0.9: 0.1 mm / 4 mil
Min. pcs value: 0.2
Field of view: Horizontal 38°, Vertical 28.9°
Depth of field at code 39:
52 - 126 mm (0.127 mm) / 2.05 - 4.96 in (5 mil),
46 - 246 mm (0.254 mm) / 1.81 - 9.68 in (10 mil),
60 - 466 mm (0.508 mm) / 2.36 - 18.35 in (20 mil)
Depth of field at QR code:
64 - 106 mm (0.169mm) / 2.52 - 4.17 in (6.7 mil),
30 - 234 mm (0.381mm) / 1.18 - 9.21 in (15 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 2of5, Interleaved 2of5, ISBN-ISSN-IS-MN, Matrix 2of5, MSI/Plessey, S-Code, Telepen, Tri-Optic, UK/Plessey
Postal code: Chinese Post, Intelligent Mail Barcode, Korean Postal Authority code, POSTNET
2D code: Aztec Code, Aztec Runes, Chinese Sensible code, Codablock F, Composite codes, Data matrix (ECC200), Passport MRZ (OCR-B), maxi Code (mode 2-5), MicroPDF417, MicroQR Code, PDF417, QR Code

Durability
Temperature in operation: -10 to 50 °C / 14 to 122 °F
Temperature in storage: -30 to 60 °C / -22 to 140 °F (without battery)
Humidity in operation: 10% to 90% (non-condensing)
Humidity in storage: 10% to 90% (non-condensing)
Drop test: 1.5m / 5 ft drop onto concrete surface, MIL-STD 810G. 1.8m / 6 ft drop onto concrete surface, MIL-STD 810G with protective bumper
Protection rate: IP67

Physical
Dimensions (WxHxD): 77 x 158 x 16.9 mm / 3.03 x 6.22 x 0.67 in
Weight body: Ca. 330 g / 11.2 oz (inc. battery)
Color: Black

Regulatory & Safety
Product compliance: CE, CB, FCC, NCC, BSMI(TBD), IEC62133, UN38.3, Ul2054, RoHS, WEEE, REACH

Items
Enclosed: Standard battery, hand strap, USB cable
Sold Separately: Extended battery, extended battery cover, USB adapter (QC3.0), protection bumper, pistol grip, stylus, holster, OptiCare comprehensive care for 2, 3 or 5 years
Cradle (charging and communication): USB or ethernet single charge cradle, cradle power adapter

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