

H-22

1D laser or 2D CMOS Imager

The H-22 is a rugged mobile computer and offers a sleek and rugged design that is ideal for today's mobile workers in field sales and service, inventory control, asset management, security and inspections and merchandising.



Highlights

- Rugged and reliable smartphone with fully integrated 1D laser or 2D imager barcode scanner
- Windows Mobile 6.5.3 for familiar and convenient navigation
- Marvell® PXA320 806MHz CPU
- 3.7" brilliant color transfective TFT touchscreen display, 480 x 640 pixels with adjustable backlight
- Communications: Bluetooth 2.1, Wi-Fi (802.11 b/g), WWAN (3G/3.5G), AGPS, USB and Infrared
- Rear facing 3.2 MP auto-focus digital color camera, LED flash
- Memory: 512 MB ROM, 256 MB RAM and user accessible microSD
- IP65 rating against dust and moisture, survives multiple 1.5 m drops to concrete
- Compact form factor - 151 x 75 x 25 (W x H x D) and 340 grams (including battery)
- High capacity 3.7 3060mAh Lithium-Ion battery
- Two year warranty

H-22

Product Specifications

Operation

CPU: Marvell PXA320 806MHz
O/S: Microsoft Windows Mobile 6.5.3
Software: Wordpad, Internet Explorer, Active Sync, Opticon scanner application, Upgradeable via integrated microSD card slot
RTC: Supports year, month, day, hour, minute, second (leap year support)

Memory

Nand Flash: 512 MB
SDRAM: 256 MB
Expansion: User accessible MicroSDHC

Display

Type: Blanview TFT LCD, 262k color display with touch screen
Size: 3.7", 480 x 640 pixels

Operating indicators

Visual: LEDs (red/orange/green)
Non-visual: Vibrate, Buzzer

Operating keys

Entry options: (alpha) Numeric keyboard or QWERTY keyboard, navigation key (scroll + select), function keys, 10 enabled by color key, control keys, 1 power key, Windows Mobile key, OK 2 phone keys, reset key, volume key, 4 scan keys, reconfigurable

Communication

USB: OTG, client and host
IRDA: Ver 1.4, 2400 bps - 115.2 kbps (SIR), 576 kbps - 1.152 Mbps (MIR)
Bluetooth: 2.1 + EDR, class 2
W-LAN: Wi-Fi, IEEE.802.11 b/g/n
Telecom: GPRS/EDGE (quad-band 850/900/1800/1900), 3G UMTS (WCDMA band, I,II,V,VI,VIII), 3.5G UMTS (HSDPA 7.2m / HSUPA 5.76 M)
GPS: Integrated AGPS
Audio: Speaker/microphone (mono), headset connector (stereo)
Extension: User accessible microSD i/o
RFID

Power

Rechargeable battery: Lithium-Ion 3.7V 3060 mAh

Backup Battery: 18mAh for main battery hotswap

Charging method: Enclosed power supply, separate car charging adapter, separate cradle

Camera

Color camera: 3.2 megapixels, auto-focus, LED flash

Barcode Scanner Optics

Light source: 650 nm visible laser diode
Scan rate: 100 scans/seconds
Reading pitch angle: $\pm 35^\circ$
Reading skew angle: -50 to -8° , $+8$ to $+50^\circ$
Reading tilt angle: $\pm 20^\circ$
Curvature: $R > 15$ mm (EAN8), $R > 20$ mm (EAN13)
Min. pcs value: 0.45
Depth of field at code 39: 65 - 645 mm (1.00 mm) / 2.56 - 25.39 in (39 mil), 45 - 415 mm (0.5 mm) / 1.77 - 16.34 in (20 mil), 45 - 255 mm (0.25 mm) / 1.77 - 10.04 in (10 mil), 45 - 145 mm (0.15 mm) / 1.77 - 5.71 in (6 mil), 55 - 115 mm (0.127 mm) / 2.17 - 4.53 in (5 mil)

2D Imager Optics

Light source: Aiming laser diode, illumination LEDs
Scan method: CMOS area sensor, 900 x 512 pixels, gray scale
Scan rate: Up to 80 fps, after auto-focus activation (100 ms after triggering)
Image format: Bitmap, JPEG, TIFF
Reading pitch angle: $\pm 50^\circ$
Reading skew angle: $\pm 50^\circ$
Reading tilt angle: 360°
Min. pcs value: 0.45
Field of view: Horizontal 40° , Vertical 23°
Depth of field at code 39: 45-1000mm (0.127mm) / 1.77-39.37in (5mil), 45-110mm (0.127mm) / 1.77-4.33in (5mil), 50-260mm (0.254mm) / 1.97-10.24in (10mil), 120-1000mm (1.0 mm) / 4.72-39.37in (39mil)
Depth of field at QR code: 45-65mm (0.127mm) / 1.77-2.56in (5mil), 45-250mm (0.381mm) / 1.77-9.84in (15mil)
Supported standards: ISO 14443A/B, Mifare Classic 1k, Mifare Classic 4k, Mifare Ultralight, Mifare DESfire 2k, 4k and 8k, ISO 15693, I-code, Felica

Frequency: 13.56 MHz

Reading distance: Up to 70 mm (depending on card/tag type)

Supported symbologies

Barcode (1D): AN/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
Postal Code: Chinese Post, Korean Postal Authority code
2D code: Aztec code, Aztec runes, Codablock F, Composite Codes, Data Matrix (ECC200/ECO-140), Maxi Code (mode 2-5), Micro QR code, MicroPDF417, PDF417, QR code

Durability

Temperature in operation: -10 to 50°C / 14 to 122°F
Temperature in storage: -30 to 80°C / -22 to 176°F (main battery storage: -20 to 60°C / -4 to 140°F)
Humidity in operation: Up to 95% (non-condensing)
Humidity in storage: Up to 95% (non-condensing)
Drop test: 1.5 m / 5 ft drop onto concrete surface
Protection rate: IP65

Physical

Dimensions (WxHxD): 151 x 75 x 25 mm / 5.94 x 2.95 x 0.98 in
Weight body: Ca. 340 g / 12 oz (inc. battery)
Case: Black

Regulatory & Safety

Product compliance: CE, FCC, PTCRB, GCF, RoHS, CTIA/IEEE1725, IEC60825-1 Class 2

Items

Enclosed: USB AC Adapter, USB cable, Wriststrap, Ear microphone, Stylus + cord
Sold Separately: CRD-22 cradle (USB OTG, Active sync, charging), Pistol grip, car holder kit, standard battery Lithium-ion 3060 mAh