

H-21

Rugged Mobile Device



Highlights

- Rugged and reliable smartphone with fully integrated 1D laser or 2D imager barcode scanner
- Windows Mobile 6.5 for familiar and convenient navigation
- Qualcomm® MSM7225 528 MHz CPU
- 2.8" 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: 256 MB NAND Flash, 256 MB RAM and user accessible microSD
- IP64 rating against dust and moisture, survives multiple 5 foot drops to concrete
- Compact form factor – 2.64" x 5.31" x 0.87" (WxHxD) and 8.3 ounces (including battery)
- High capacity 3.7 3060mAh Lithium-Ion battery
- Two year warranty

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Product Specifications

OPERATION

CPU: Qualcomm MSM7225 528 Mhz
OS: Microsoft® Windows Mobile® 6.5

MEMORY

NAND FLASH: 256 MB
RAM: 256 MB
EXPANSION: User accessible microSD + HC

DISPLAY

TYPE: Graphic Transflective TFT LCD with touch panel, 16-bit color with adjustable backlight
SIZE: 2.8", 480 x 640 pixels, Portrait / Landscape

OPERATING INDICATORS

VISUAL: 2 LEDs (red/orange/green/blue)
AUDIBLE: Vibrate, buzzer

COMMUNICATION

USB: OTG, client and host
IRDA: Version 1.3, 2400 bps - 115.2 kbps (SIR),
576 KBPS - 1.152 Mbps (MIR)
BLUETOOTH: Version 2.1 + EDR, class 2
W-LAN: Wi-Fi, IEEE.802.11b/g
TELECOM: GPRS/EDGE (quad-band 850/900/1800/1900), 3G UMTS (WCDMA band 1,II,V,VI), 3.5G UMTS (HSDPA 7.2M/HSUPA 5.76 M)
GPS: Integrated A-GPS
AUDIO: Speaker/microphone (mono), headset connector (stereo)
EXTENSION: User accessible micro-SD I/O

POWER

RECHARGEABLE BATTERY: Lithium-ion 3.7 V 3060mAh
BACKUP BATTERY: 6mAh
CHARGING METHOD: AC adapter, cradle, car charger

CAMERA

COLOR CAMERA: 3.2 megapixels, auto-focus, LED flash

BARCODE LASER SCANNER OPTICS (H-21A MODEL)

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 mm (EAN8), R>20 mm (EAN13)
MINIMUM RESOLUTION AT PCS 0.9: 0.127 mm/5 mil
MINIMUM PCS VALUE: 0.45
DEPTH OF FIELD: At PCS 0.9 Code 39
39 mil (1.0 mm): 2.56 - 25.39 in (65 - 645 mm)
20 mil (0.5 mm): 1.77 - 16.34 in (45 - 415 mm)
10 mil (0.25 mm): 1.77 - 10.04 in (45 - 255 mm)
6 mil (0.15 mm): 1.77 - 5.71 in (45 - 145 mm)
5 mil (0.127 mm): 2.17 - 4.53 in (55 - 115 mm)

2D IMAGER OPTICS (H-21B MODEL)

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
IMAGE FORMAT: Bitmap, JPEG
READING PITCH ANGLE: -50 to 0°, 0 to +50°
READING SKEW ANGLE: -50 to 0°, 0 to +50°
READING TILT ANGLE: 360°
MINIMUM RESOLUTION AT PCS 0.9: 0.127 mm/5 mil
MINIMUM PCS VALUE: 0.45
FIELD OF VIEW: Horizontal 40°, Vertical 23°
DEPTH OF FIELD:
QR Code: 5 mil (0.127 mm) 1.77 – 2.56 in (45 - 65 mm)
QR Code: 15 mil (0.381 mm) 1.77 – 9.84 in (45 - 250 mm)
Code 39: 5 mil (0.127 mm) 1.77 – 4.33 in (45 - 110 mm)
Code 39: 10 mil (0.254 mm) 1.97 – 10.24 in (50 - 260 mm)
Code 39: 39 mil (1.0 mm) 4.72 - 39.37 in (120 - 1000 mm)

SUPPORTED SYBLOGIES (BARCODE SCANNER)

BARCODE (1D): JAN/UPC/EAN incl. add on, Codabar/NW-7, Code 39, Code 93, Code 128, GS1-128 (EAN-128), GS1 DataBar (RSS), IATA, Industrial 2of5, Interleaved 2of5, ISBN-ISMN-ISSN, Matrix 2of5, MSI/Plessey, S-Code, Telepen, Tri-Optic, UK/Plessey
BARCODE (2D): Composite Codes, MicroPDF417, PDF417
POSTAL CODE: Chinese Post, Korean Postal Authority code

SUPPORTED SYBLOGIES (2D IMAGER)

BARCODE (1D): JAN/UPC/EAN incl. add on, Codabar/NW-7, Code 39, Code 93, Code 128, GS1-128 (EAN-128), GS1 DataBar (RSS), IATA, Industrial 2of5, Interleaved 2of5, ISBN-I SMN-ISSN, Matrix 2of5, MSI/Plessey, S-Code, Telepen, Tri-Optic, UK/Plessey
BARCODE (2D): Aztec Code, Aztec Runes, Codablock F, Composite Codes, Data Matrix (ECC200/ECO-140), Maxi Code (mode 2~5), MicroPDF417, Micro QR Code, PDF417, QR code
POSTAL CODE: Chinese Post, Korean Postal Authority code, Postnet, Intelligent Mail Barcode (IMB)

DURABILITY

TEMPERATURE:
Operation: 14 - 122 °F (-10 - 50 °C)
Storage: -40 - 140 °F (-40 - 60 °C)
HUMIDITY:
Operation: up to 90% (non-condensing)
Storage: up to 90% (non-condensing)
DROP TEST: 1.5 m/5 ft drop onto concrete surface
INGRESS PROTECTION: IP64

PHYSICAL

DIMENSIONS (WXHXD): 2.64 x 5.31 x 0.87 in (67 x 135 x 22 mm)
WEIGHT: 8.3 oz (Ca. 235 g) (incl. battery)
CASE: black

REGULATORY AND SAFETY

PRODUCT COMPLIANCE: CE, FCC, VCCI, PTCRB, GCF, RoHS, JIS-C-6802 Class 2, IEC 60825-1 Class 2, FDA CDRH Class II

ENCLOSED ITEMS

USB AC adapter, Lithium-ion 3060mAh battery, USB cable, carrying case, hand strap, ear microphone headset, screen protector, getting started CD, stylus + tether

SOLD SEPARATELY

SINGLE-SLOT DESKTOP CRADLE
VEHICLE CRADLE KIT
CAR CHARGING ADAPTER

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