

# H22

## Beyond Smart, It's Brilliant

> **BARCODE LASER SCANNER**

Ideal tool for:

Logistics & Courier Services

Postal

Field Service & Field Sales

Facility & Security





The H22 is designed with the technology and ruggedness to meet the demands of businesses that deploy field workers. The interactive mobile computer with excellent reading and touch screen performance uses the latest Windows Mobile® 6.5.3 platform providing the latest technology for mobile applications.

As well as providing a stable platform for interacting with the operator, the mobile computer collects signatures and is able to take a photographic record of an observed event or issue - vital operations for a successful field-based solution.

# Scanning

## > 1D ENGINE

The integrated Opticon engine captures a wide range of linear barcode symbologies. The laser scan engine reads barcodes at a speed of 100 scans per second.

## > 2D ENGINE

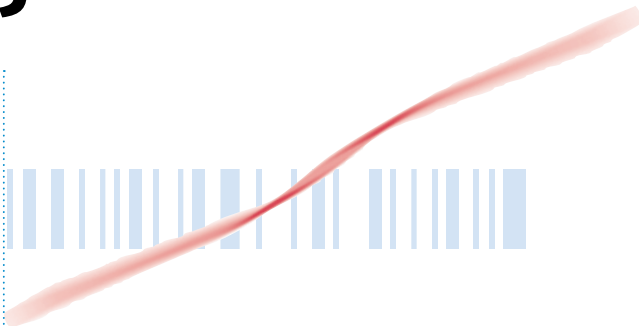
For more scanning options Opticon provides the model with a 2D imager. Besides linear barcodes, this engine also reads 2D and stacked codes, both from traditional media (labels etc.) as well as from the screens of other mobile devices.

## > RFID

For rapid identification of RFID tagged items, take the H22 with RFID reader. The RFID antenna placed in the battery cover of the terminal reads tags on assets, providing highly accurate information.

## > CAMERA

The 3.2 megapixel color camera with auto-focus and flash light supports visual information to any issue.



## > SCREEN

The sharp 3.7" color display with touch screen is among the largest screens available for mobile terminals. It provides users with an extremely user friendly interface for any field worker application.

## > HOUSING

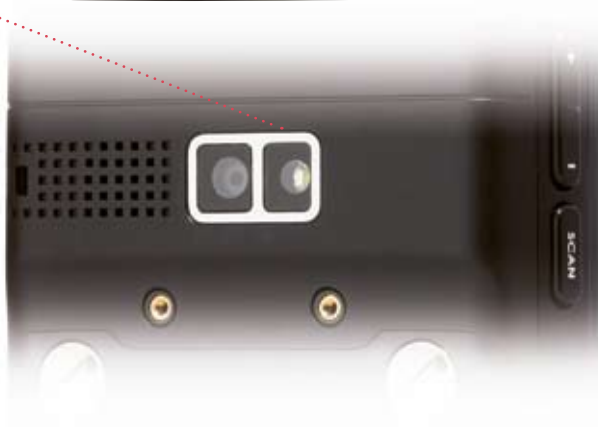
With its rugged housing, the H22 can withstand multiple drops onto concrete from 1.5 meters as well as adverse environmental conditions, with its IP 65 compliant design.

## > KEYPAD

Maximize efficient data entry and choose the keypad that meets the requirements of your specific business applications. The H22 is available with an (alpha)numeric layout or a complete QWERTY keypad.

# H22 Highlights

- > Windows Mobile 6.5.3
- > 3.2 megapixel color camera with auto-focus and flash light
- > Assisted GPS
- > 3.7" touch screen
- > 3G, 3.5G
- > IP 65



# Communication

## > SIGNATURE CAPTURING

Use the color camera to capture signatures from paper or use the large 3.7" touch screen for signature writing on the screen and have it captured by your business application.

## > 3G AND 3.5G

The H22 provides cellular communication for phone calls and data package services. The third generation distribution channels provide more capacity and higher data rates.

## > AGPS

GPS can help mobile workers to find their destination and can also provide a business with vital information regarding the whereabouts of its field workers.

## > USB OTG

Get connected to other USB products without the interference of a host. Several hardware extensions can be plugged onto the H22.

## > BLUETOOTH 2.1

A Bluetooth® radio allows you to wirelessly connect and communicate with any Bluetooth enabled peripheral.



## > WIRELESS LAN

Log on to any available WiFi® network supporting internet browsing and connect to your enterprise ERP system.



## > VOICE OVER IP

The WLAN integration and microphone support offer a platform to install VoIP. The external software tools for speech recognition can make use of the integrated communication technology.



## > IRDA 1.3

This indoor short-range communication wave connects to other IrDA equipped computer peripherals.

## > CHARGING AND COMMUNICATION

The H22 can be charged by the dedicated cradle with charging and communication features.

## Vital features for a successful field-based solution

# Markets

## > POSTAL

### APPLICATIONS:

- Get real-time routing information
- Capture signatures
- Get a proof of delivery
- Increase route efficiency

## > LOGISTICS & COURIER SERVICES

### APPLICATIONS:

- Stay connected with business operations
- Get real-time routing information
- Capture signatures
- Collaborate with colleagues
- Get a proof of delivery
- Manage inventory

## > FIELD SERVICE & FIELD SALES

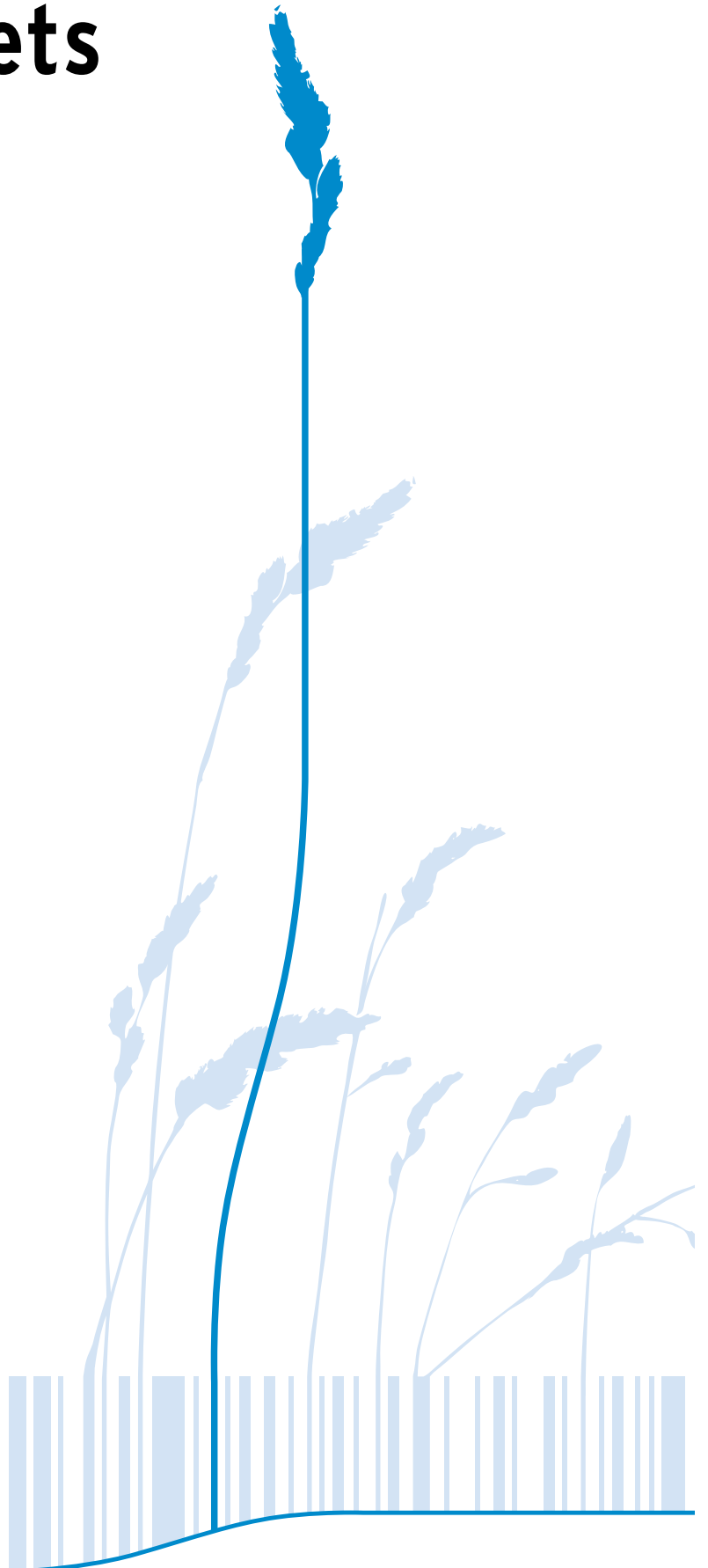
### APPLICATIONS:

- Manage orders
- Update CRM information on the spot
- Capture signatures
- Collaborate with colleagues
- Reference manuals
- Stay connected with business operations

## > FACILITY & SECURITY

### APPLICATIONS:

- Conduct inventory lists
- Record check-out items
- Make visit reports
- Stay connected with business operations
- Report theft & loss



# H22

## > BASIC PRODUCT SPECIFICATIONS

### OPERATION

**CPU:** Marvell PXA320 806MHz **O/S:** Microsoft® Windows Mobile® 6.5.3

### MEMORY

**NAND FLASH:** 512 MB **SDRAM:** 256 MB **EXPANSION:** User accessible microSD + HC

### DISPLAY

**TYPE:** Blanview TFT LCD, 262k color display with touch screen **SIZE:** 3.7", 480 x 640 pixels **MODE:** Portrait / Landscape

### OPERATING INDICATORS

**VISUAL:** 1 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:** Ver. 2.1 + EDR, class 2 **W-LAN:** WiFi, IEEE.802.11b/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), 3.5mm headset connector (stereo) **EXTENSION:** User accessible microSD I/O

### POWER

**RECHARGEABLE BATTERY:** Lithium-Ion 3.7V 3060mAh **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/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) Min. resolution at PCS 0.9: 0.127 mm / 5 mil **MIN. PCS VALUE:** 0.45 **DEPTH OF FIELD:** At PCS 0.9 Code 39, 65 - 645 mm / 2.56 - 25.39 in (1.0 mm / 39 mil), 45 - 415 mm / 1.77 - 16.34 in (0.5 mm / 20 mil), 45 - 255 mm / 1.77 - 10.04 in (0.25 mm / 10 mil), 45 - 145 mm / 1.77 - 5.71 in (0.15 mm / 6 mil), 55 - 115 mm / 2.17 - 4.53 in (0.127 mm / 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 **READING PITCH ANGLE:** -50 to 0°, 0 to +50° **READING SKEW ANGLE:** -50 to 0°, 0 to +50° **READING TILT ANGLE:** 360° Min. resolution at PCS 0.9: 0.127 mm / 5 mil **MIN. PCS VALUE:** 0.45 **FIELD OF VIEW:** Horizontal 40β, Vertical 23β **DEPTH OF FIELD:** at Code 39, 45 - 1000 mm / 1.77 - 39.37 in (0.127 mm / 5 mil), 45 - 110 mm / 1.77 - 4.33 in (0.127 mm / 5 mil), 50 - 260 mm / 1.97 - 10.24 in (0.254 mm / 10 mil), 120 - 1000 mm / 4.72 - 39.37 in (1.0 mm / 39 mil) **DEPTH OF FIELD:** at QR Code, 45 - 65 mm / 1.77 - 2.56 in (0.127 mm / 5 mil), 45 - 250 mm / 1.77 - 9.84 in (0.381mm / 15 mil)

### RFID (OPTIONAL)

**FREQUENCY:** 13.56 MHz **SUPPORTED STANDARDS:** ISO 14443A/B, Mifare Classic 1k, Mifare Classic 4k, Mifare Ultralight, Mifare DESFire 2k, 4k and 8k, ISO 15693, I-Code, Felica **READING DISTANCE:** Up to 70 mm (depending on card/tag type)

### SUPPORTED SYMBOLOGIES

**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 **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) **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:** IP 65

### PHYSICAL

**DIMENSIONS (W X H X D):** 151 x 75 x 25 mm / 5.94 x 2.95 x 0.98 in **WEIGHT BODY:** Ca. 340 g / 12 oz (incl. battery) **CASE:** Black

### REGULATORY & SAFETY

**PRODUCT COMPLIANCE:** CE, FCC, PTCRB, GCF, RoHS, CTIA/IEEE1725, IEC 60825-1 Class 2

### ENCLOSED ITEMS

USB AC Adapter, Standard battery Lithium-Ion 3060 mAh, USB cable, Hand strap, Ear microphone, Stylus + Cord

### SOLD SEPARATELY

**CRD22 CRADLE:** USB OTG, Active Sync, charging **CRD22E4 CRADLE:** Multi-cradle, 4 slots, Ethernet communication, charging Pistol grip, Car holder kit

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