

# OPTICON

## H19

Beyond Smart. It's Genius.



Ideal tool for:

- ✓ Logistics
- ✓ Mobility
- ✓ Retail
- ✓ Healthcare



Scan



Interact



Communicate

# OPTICON



# H19

Beyond Smart. It's Genius.





# Scan

## HIGH-PERFORMANCE SCANNING AND COMMUNICATION

The Opticon H19 is a first of its kind advanced smartphone, featuring Microsoft® Windows Mobile® 6 Professional. Built to last, the H19 can withstand multiple drops onto concrete from four feet as well as adverse environmental conditions, with its IP54 compliant design. Always keep in touch, with the standard communication options: Bluetooth®, WiFi®, GSM/GPRS/EDGE and GPS. More than just a smartphone, the H19 reveals its true genius with an embedded barcode scanner, allowing you to collect barcode data, interact with your mobile software solution and send your information to a central ERP system. One device - a world of opportunities!



### + 1D

Opticon integrated its industry leading laser scan engine, reading barcodes at a speed of 100 scans per second. This engine is integrated in the H19A.

### + 2D

The H19B is equipped with Opticon's 2D CMOS imager engine. Besides barcodes, this imager also reads 2D and stacked codes.



### + Signature Capture and Touch Operation

The H19 also features a 2.8-inch color LCD display that can be used for touch screen operations such as signature capture as well as having the ability to instantly rotate the screen layout when required for increased working area.

# Interact

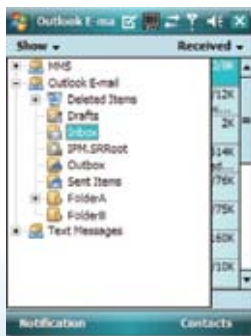


The Opticon H19 is all about interaction. Opticon started with the Microsoft® Windows Mobile® 6 Professional



operating system as its core platform, and built up from there. The Windows platform supports Microsoft® Windows Mobile® 6 Professional features like Direct Push e-mail technology, Internet browsing, synchronization with Outlook® Mobile Calendar, Contacts and e-mail, and the ability to work on applications in the Office® Mobile suite such as Word®, Excel® and PowerPoint®.

## + Microsoft® Office Outlook® Mobile



Need a personal secretary? Outlook® Mobile comes handy when you need to check or up-date your calendar, contact information or tasks on the road. Enjoy the enhanced direct push e-mail technology while you are out of the office.

## + Microsoft® Office® Mobile



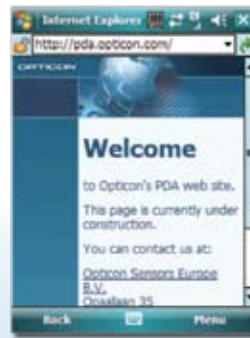
Use Office® Mobile to create or edit documents or to give a presentation while you are out of the office. Perform on the spot best when you are needed.

## + Windows Live® for Windows Mobile®



Need to go back to your office for a quick brain storm? What about using Windows Live® for Windows Mobile® and save your time?

## + Internet Explorer® Mobile



Need to check the internet? Use Internet Explorer® Mobile and get connected to the world.

# Communicate

## EXTENDING THE DESKTOP BEYOND THE DESK

With this slim function smartphone you can e-mail on the move or carry out operations and maintain communication away from the office. Your workforce will have on demand access to well-known applications as well as extensions of custom enterprise applications regardless of the physical location.



### + BLUETOOTH 2.4 GHZ Bluetooth™

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

### + VOIP PREPARED



The WLAN integration and microphone support offer a platform to install VoIP (Voice over IP) software tools. The only investment is a one-time training for speech recognition. The communication technology to send the voice over IP to the host and vice versa is already available.

### + GPS

The integrated GPS module will help your workforce to easily find their destination. They can record the geographical location with their other registrations, like adding real-world coordinates (X,Y) to the scanned data.

### + WIRELESS LAN 802.11B



The H19 can easily log into any WiFi® network, supporting Internet browsing and connection into your enterprise network.

### + GSM/GPRS/EDGE

The H19 is an advanced smart phone, supporting GSM/GPRS/EDGE cellular communication. Cellular communication allows your employees to take full advantage of Internet, e-mail and VoIP.

### + CHARGING AND COMMUNICATION

The H19 can be charged by the dedicated single cradle (CRD19) or multi-cradle (CRD19E4) with charging and communication features. The single cradle is equipped with two slots for charging both the docked terminal and a spare battery. External communication is supported by the USB interface. The multi-cradle contains 4 slots and 4 spare battery charging bays. External communication is provided by the Ethernet interface.





## ✓ Logistics



### Applications

- On-line delivery confirmation
- Controlling (error reduction)
- Signature capturing
- Customer relationship management
- Route tracking (GPS)

Scanning devices in logistic environments need to be ruggedized when used both indoor and outdoor. Article information and logistic specific information are essential to keep track of the good in the logistic process. Truck drivers on the road scan bills and other documents with the H19 and transfer the collected information to the host system instantly. The GPS module enables tracking of locations and recording of geographical locations by adding real-world coordinates to the scanned data.

## ✓ Mobility



### Applications

- Customer relationship management
- E-mail service
- Inventory management
- Signature capturing
- Route tracking (GPS)

The H19 will help you serve your customers faster, more effectively and collect detailed information accurately and effectively. This ruggedized smartphone is the perfect tool for both your sales force and service force in the field. It keeps your mobile workers connected to the inventory system, ERP and other applications. The continuing exchange of information between the mobile worker and the back office creates an up-to-date enterprise system.

## ✓ Retail



### Applications

- Customer relationship management
- Order entry
- Inventory management
- Stock movement/replenishment
- Loss prevention
- Price checking
- Signature capturing

The Opticon H19 will revolutionize the Retail world! It can serve as a mobile Point of Sale device, a tool for store and operations management, mobile merchandising and allocation management tool, and loss prevention tool. This advanced mobile device will streamline every aspect of your retail operation from better inventory management to better merchandise decision-making to increased customer throughput. The H19 will increase sales and enhance your customer interaction.

## ✓ Healthcare



### Applications

- Intramural care efficiency
- Prescription tracking
- Order entry
- Equipment inventory
- Extramural care optimizing
- Records tracking
- Instant data mutations

Opticon's H19 brings information and access to those who need it most: healthcare professionals. The H19 in conjunction with any Healthcare Information System will provide real time access to patient information, drug information or to treatment orders. The Opticon H19 can perform as a single device that can augment or even replace several devices that doctors and nurses rely on every day. From emergency room triage to treatment and prescription orders to bedside scanning, the H19 will make healthcare professionals provide more efficient administration and error free care.

## + Basic Product Specifications

### Operation

- CPU: Samsung S3C2440A 400 Mhz
- O/S: Microsoft® Windows Mobile® 6 Professional
- Software: Excel Mobile, Powerpoint Mobile, Word Mobile, Internet Explorer, ActiveSync, Internet sharing, Pocket MSN, Phone application, Opticon scanner application, Accessories
- RTC: Supports year, month, day, hour, minute, second (leap year supported)

### Memory

- FlashROM: 512 MB
- RAM: 64 MB
- Expansion: User accessible miniSD

### Display

- Type: Graphic Transflective TFT LCD with touch panel, 16-bit color with adjustable backlight
- Size: 2.8", 240 x 320 pixels
- Mode: Portrait / Landscape

### Operating indicators

- Visual: 2 LEDs (red/orange/green/blue)
- Non-visual: Vibrate, Speaker (.wav)

### Operating keys

- Entry options: 24 keys total, 12 key (alpha)numeric keypad, 5-way navigation keys, function key, backspace key, 1 power key, 2 hot keys, 2 phone keys, reset key, volume key, voice record, 2 scan keys, virtual keyboard, handwriting recognition

### Communication

- USB: Mini USB, Ver. 1.1., client
- Bluetooth: Ver. 1.2, range up to 10 m
- W-LAN: WiFi, IEEE.802.11b/g
- Telecom: GSM/GPRS/EDGE, quad-band 850/900/1800/1900, GSM Class 12, EDGE Class 10
- GPS: NMEA 0183, SiRF Star III, 57.6 kbps
- Audio: Speaker/microphone (mono), headset connector (stereo)
- Extension: User accessible miniSD I/O

### Power

- Rechargeable battery: Lithium-Ion Polymer 4.2V 1580mAh
- High-capacity battery: Optional 4.2V 2600mAh
- Backup battery: Lithium rechargeable
- Operating time: Talk time 4 hours, Standby time 150 hours
- Data retention time: Backup battery 5 minute RTC after main battery removal, 168 hours RTC in main battery low power
- Charging method: Enclosed power supply, separate USB cable, separate car charging adapter, separate cradle CRD19 series with spare battery bay
- Battery charging time: Ca. 4 or 8 hours when charging through power supply, ca. 6 or 12 hours when charging by USB cable connected to PC (resp. Standard or High-capacity battery)

### Barcode scanner Optics

- H19A:
  - 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

- H19B:
  - Light source: Illumination 4 red LEDs 630 nm, aiming 2 green LEDs
  - Scan method: CMOS area sensor
  - Field of view: Horizontal 47°, Vertical 37.5°
  - Depth of field: At PCS 0.9 PDF417
    - 50 - 215 mm / 1.97 - 8.46 in (0.339 mm / 13 mil),
    - 95 - 135 mm / 3.74 - 5.31 in (0.127 mm / 5 mil)

### Supported Symbolologies

- Barcode (1D): JAN/UPC/EAN incl. add on, Codabar/NW-7, Code 39, Code 93, GSI-128 (EAN-128), GSI 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: Composite Codes, MicroPDF417, PDF417 Extra H19B: Aztec Code, Aztec Runes, Codablock F, Data Matrix, (ECC200/ECO-140), Maxi Code (mode 2~5), Micro QR Code, QR code

### Durability

- Temperature in operation: -10 to 50 °C / 14 to 122 °F
- Temperature in storage: -20 to 60 °C / -4 to 140 °F
- Humidity in operation: 20 - 80% (non-condensing)
- Humidity in storage: 20 - 90% (non-condensing)
- Drop test: 1.2 m / 4 ft drop onto concrete surface
- Protection rate: IP 54

### Physical

- Dimensions (w x h x d):  
62.3 x 140.8 x 25.5 mm / 2.45 x 5.54 x 1.00 in
- Weight body:  
H19A: Ca. 195 g / 6.9 oz (incl. battery)  
H19B: Ca. 200 g / 7.1 oz (incl. battery)
- Case: Black

### Regulatory & Safety

- Product compliance:  
H19A: CE, FCC, VCCI, PTCRB, GCF, RoHS, JIS-C-6802 Class 2, IEC 60825-1 Class 2, FDA CDRH Class II  
H19B: CE, FCC, cUL, RoHS, JIS-C-6802 Class 2, IEC 60825-1 Class 2, FDA CDRH Class II

### Enclosed items

- Power supply 100-240V/0.25A, 50/60 Hz, 5V/1A
- Standard Lithium-Ion Polymer battery 4.2V 1580mAh
- USB cable (client cable)
- Leather case
- Belt clip
- Neck strap
- Hand strap
- Ear microphone
- Getting started disc
- Stylus

### Sold separately

- CRD19 Cradle: Serial communication, charging
- CRD19E4 Cradle: Multi-cradle, 4 slots, Ethernet communication, charging
- High-capacity Lithium-Ion Polymer battery 4.2V 2600mAh
- Car charging adapter
- Car holder kit
- Leather case with window

### Models

- Scan versions: Barcode scanner, 2D imager