

# OPTICON

# Windows CE



# PHL8212

Barcode laser scanner

IrDA



Serial connector  
Serial cradle

## + Related products

### PHL8112

- Windows CE
- Barcode laser scanner
- Bluetooth, W-LAN (WiFi), serial connector
- IP 65

### PHL7214

- Windows CE
- Barcode laser scanner
- Bluetooth, W-LAN (WiFi), GSM/GPRS, serial connector
- IP 54, Full keypad

### H19B

- Windows Mobile
- 2D CMOS imager
- Bluetooth, W-LAN (WiFi), GSM/GPRS/EDGE, miniSD I/O
- GPS, IP 54



## Operation

- CPU: Intel® PXA270 32-bit RISC 520Mhz
- O/S: Windows CE 5.0
- Software: Wordpad, Internet Explorer, Inbox, Active Sync, Messenger, Opticon scanner application, Accessories, Upgradeable via user accessible SD
- RTC: Supports year, month, day, hour, minute, second (leap year supported)

## Memory

- FlashROM: 128 MB
- RAM: 128 MB SDRAM
- Expansion: User accessible SD + HC

## Display

- Type: Graphic Transflective TFT with touch panel, 256K color with adjustable backlight
- Size: 3.5", 240 x 320 pixels
- Mode: Portrait

## Operating indicators

- Visual: 1 LED (red/green scanning indication)
- Non-visual: Buzzer

## Operating keys

- Entry options: 44 backlit keys total, 26 alpha(numeric) keys, 2 navigation keys, 4 function keys, 1 custom key, control keys, 1 power key, 3 scan keys

## Communication

- RS232: Baudrate 150 bps - 115.2 kbps, serial cable connector
- USB: Ver. 1.1, full speed, serial cable connector client, optional host
- IrDA: Baudrate automatically determined, including IrDA protocol stack
- Bluetooth: Ver. 1.2, SPP, DUN, OPP, HID (only keyboard support), output power class 2, range 5-10 m
- W-LAN: 802.11b/g, CCK, TKIP, WEP, WPA, WPA2, EAP, LEAP, PEAP, AES, PSK (pre-shared, static, dynamic), Cisco CCX compatible Ver. 4
- Audio: Speaker/microphone (mono), headset connector (stereo)

## Power

- Rechargeable battery: Lithium-Ion 3.7V 2200mAh
- High-capacity battery: Optional 3.7V 4000mAh
- Backup battery: 1 rechargeable backup Lithium-Ion Polymer battery
- Charging method: Enclosed power supply, separate cradle IRU8000, separate car charging adapter
- Battery charging time: Ca. 3 or 5.5 hours when charging through power supply, ca. 4 or 7 hours when charging by cradle Standard battery (resp. Standard or High-capacity battery)

## Barcode scanner Optics

- Light source: 650 nm visible laser diode
- Scan method: Vibrating mirror
- 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 (EAN8), R>20 (EAN13)
- Min. PCS value: 0.45
- Depth of field: At PCS 0.9, Code 39  
70 - 650 mm / 2.76 - 25.59 in (1.00 mm / 39 mil),  
50 - 420 mm / 1.97 - 16.54 in (0.5 mm / 20 mil),  
50 - 260 mm / 1.97 - 10.24 in (0.25 mm / 10 mil),  
50 - 150 mm / 1.97 - 5.91 in (0.15 mm / 6 mil),  
60 - 120 mm / 2.36 - 4.72 in (0.127 mm / 5 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-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

## 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: 5 - 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):  
82 x 155 x 31/33 mm / 3.23 x 6.10 x 1.22/1.30 in
- Weight body: Ca. 360 g / 12.7 oz (incl. battery)
- Case: Black

## Regulatory & Safety

- Product compliance: CE incl. LVD, FCC, cUL, RoHS, TUV, JIS-C-6802 Class 2, IEC 60825-1 Class 2, FDA CDRH Class II

## Enclosed items

- Power supply 100-240V/0.6A, 50/60 Hz, 5V/2.6A + Power cord
- Standard battery 3.7V 2200mAh
- USB client cable
- Hand strap
- Stylus + Spring cord
- Ear microphone (stereo)

## Sold separately

- IRU8000 Cradle: Serial communication, charging
- IRU7004 spare battery charger
- High-capacity battery Lithium-Ion 3.7V 4000mAh
- GSM ear microphone (mono)
- RS232 serial cable
- USB host cable
- Car charging adapter
- Nylon case fixed clip

Copyright Opticon. All rights reserved. This information is subject to change without prior notice. For availability, contact your local representative.

- **The Netherlands:** Hoofddorp  
- **France:** Issy Les Moulineaux  
- **Germany:** Dietzenbach  
- **Italy:** Castel Maggiore (BO)  
- **Spain:** Valencia  
- **Sweden:** Järfälla  
- **United Kingdom:** Luton, Bedfordshire  
- **U.S.A.:** Renton, WA  
- **Japan:** Warabi City

- **Taiwan:** Taipei  
- **P.R.China:** Shanghai  
- **Australia:** Kariang  
- **Brazil:** São Paulo

Opticon Sensors Europe B.V  
European headquarters  
Opaallaan 35  
2132 XV Hoofddorp  
The Netherlands  
phone: +31 (0)23-5692700  
fax: +31 (0)23-5638266  
email: sales@opticon.com  
internet: www.opticon.com

**OPTICON**  
WWW.OPTICON.COM