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## Description

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 **NOTIFICATION DISCONTINUED** | Alternatives can be found under the 'Related products' tab, or contact us for assistance.

The information below is for reference purposes only.

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 1D barcode  Windows CE  Bluetooth  Wifi  USB  RS232  IP54

Model : **Opticon PHL-7112 (11457)**

Groep : *Rugged terminal - With 1D scan engine, Windows CE 5.0, Bluetooth, WiFi, USB, RS232, IP54*

Datasheet: [Opticon PHL7112](#)

Opticon PHL7112 ruggedized terminal combines data collection by barcode laser scanning with manual data entry using the alphanumeric keypad. The data from the Opticon PHL7112 can directly be send by WLAN or Bluetooth. The 3.5" LCD display from the Opticon PHL7112 allows easy readability and the rubber grip enables comfortable scanning. The free CF I/O slot provides the opportunity to create an extra plug-in.

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## Product Features

### Windows® CE 5.0 Operating System

The Opticon PHL7112 is part of the Opticon PHL7000 series consisting of ruggedized terminals, equipped with Windows CE 5.0. All terminals in this range have several wireless communication options. WLAN and Bluetooth are standard available on the Opticon PHL7000 series. Two models are also equipped with GSM and GPRS. Additional, the serial connector provides the option to use a communication cable.

### physical design

The physical design of the Opticon PHL7112 terminals offers a convenient balance for user operation with a graphic LCD display and keypad with backlight, providing excellent viewing in dim or bright lighting. The series supports two different keypad variations (alphanumeric and full keypad), with non-erasable keys and three different scan engines (barcode laser scanner, long range barcode laser scanning and 2D CMOS imager). The terminals can withstand drops of 1.5 meter on concrete and are protected from water and dust up to IP 54 standards.

### Power

With the 3000 mAh battery (or high capacity 4000 mAh battery) and the high performance processor, the Opticon PHL7000 series can run heavy applications. The internal SD slot can expand the data storage capacity and the accessories enable optimal use of the product.

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## Specifications

- Opticon PHL-7112 Ruggedized terminal
- Article number: 11457 Opticon PHL-7112 1D WLAN/BT Numeric

## Operation

- CPU: Intel® PXA255 32-bit RISC 400Mhz
- O/S: Windows CE 5.0
- Software: Wordpad, Internet Explorer, Inbox, Active Sync, Messenger, Opticon scanner application, Accessories, Upgradeable via integrated SD
- RTC: Supports year, month, day, hour, minute, second (leap year supported)

## Memory

- FlashROM: 64 MB
- RAM: 128 MB SDRAM
- Expansion: Integrated SD, CF Type II

## 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: 2 LEDs (triple-color charging indication & dual-color scanning indication)
- Non-visual: Buzzer

## Operating keys

- Entry options: 29 backlit keys total,
- 16-key (alpha)numeric/control keypad,
- 4-way navigation keys,
- 1 function key
- 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
- 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)
- Extension: User accessible CF Type II I/O

## Power

- Rechargeable battery: Lithium-Ion 3.7V 3000mAh
- High-capacity battery: Optional 3.7V 4000mAh
- Backup battery: 1 integrated rechargeable backup battery
- Charging method: Enclosed power supply, separate cradle IRU7000, separate car charging adapter
- Battery charging time: Ca. 4 or 5.5 hours when charging through power supply, ca. 5 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 / 5 mil)

## Supported Symbologies

- Supported 1D barcode Symbologies: 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, ISBN, Industrial 2of5, Interleaved 2of5, Matrix 2of5, MSI/Plessey, Telepen
- Postal code: Chinese Post, Korean Postal Authority code

## Durability

- Temperature in operation: -10 to 50 °C / 14 to 122 °F
- Temperature in storage: -20 to 70 °C / -4 to 158 °F
- Humidity in operation: 5 - 95% (non-condensing)
- Ambient light immunity: White 4,000 lx max, Fluorescent 4,000 lx max, Direct sun 80,000 lx max
- Drop test: 1.5 m / 5 ft drop onto concrete surface
- Protection rate: IP 54

## Physical

- Dimensions (w x h x d): 91.3/78 x 192.5 x 60.6/42.2 mm 3.59/3.07 x 7.58 x 2.39/1.66 in
- Weight body: Ca. 600 g / 1 lb 5 oz (incl. battery)
- Case: Black

## Regulatory & Safety

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

## Warranty

- 2 year Manufacturer warranty / Fabrieks garantie

## Downloads

- SDK for PHL-7xxx <http://ftp.opticon.com/PHL7x00>
- To build applications, first install the appropriate Microsoft development tool (compiler) to be obtained from a local vendor.

## Enclosed items

- USB client cable for terminal **Article number : 11463**
- Power supply for PHL-7xxx 5,0V/2,6A **Article number : 11460**
- EU Line power cord **Article number : 11461**
- Rechargeable Battery for PHL-7xxx (3.7V/3Ah) Standard **Article number : 11459**
- Standard Battery cover **Article number : 11504**
- Handstrap **Article number : 11464**
- Stylus pen **Article number : 11465**
- Earphone/Microphone set **Article number : 11462**
- Quick guide **Article number : 11466**
- CF support guide **Article number : 11467**

## Accessories

### Sold separately.

- RS232 serial cable for PHL-7xxx **Article number : 11475**
- USB host cable for PHL-7xxx **Article number : 11476**
- Rechargeable Battery for PHL-7xxx (3.7V/4AH) High-capacity **Article number : 11470**
- High-cap Battery cover **Article number : 11505**
- Pistol grip (comes with extra stylus pen) **Article number : 11469**
- Earphone set for PHL-7xxx / GSM **Article number : 11569**
- Holster for PHL-7xxx **Article number : 11472**
- RFID card cover **Article number : 11474** (unavailable)
- IRU-7000 Single dock cradle **Article number : 11468**
- Power supply for IRU-7000 Single dock cradle **Article number : 11477**
- USB host client cable for IRU-7000 **Article number : 11573**
- RS232 Communication cable for IRU-7000 **Article number : 90201**
- PHL-7000 Car Mount **Article number : 11695**
- Car charging adapter for PHL-7000 Car Mount **Article number : 11473**
- 4-Slots Battery Charger for PHL-7xxx incl Power supply **Article number : 11471**

## Optical specifications on 1D model

- Light source: 650 nm visible laser diode
- Scan method: vibrating mirror
- Scan rate: 100 scans/sec
- Decode rate: 100 decodes/sec
- Reading pitch angle: +35 - +0°, 0 - -35°
- Reading skew angle: -8 - -50°, +8 - +50°
- Reading tilt angle: +20 - +0°, 0 - -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 inches (res. 1.00 mm / 39 mil),
- 50 - 420 mm / 1.97 - 16.54 inches (res. 0.5 mm / 20 mil),
- 50 - 260 mm / 1.97 - 10.24 inches (res. 0.25 mm / 10 mil),
- 50 - 150 mm / 1.97 - 5.91 inches (res. 0.15 mm / 6 mil),
- 60 - 120 mm / 2.36 - 4.72 inches (res. 0.127 / 5 mil)

**Optical specifications on 2D model**

- Light source: illumination 4 red LEDs 630 nm, aiming 2 green LEDs
- Scan method: CMOS area sensor (gray-scale)
- Photo sensor: 1024 (V) x 1280 (H) Pixels
- Reading pitch angle: -50 - 0°, 0 - +50°
- Reading skew angle: -60 - 0°, 0 - +60°
- Reading tilt angle: 360°
- Curvature: R>15 (EAN8), R>20 (EAN13)
- Min. Resolution at PCS 0.9: 0.127 mm / 5 mil at PDF 417, 0.1mm / 3.9 mil at Code 39, 0.169 mm, 6.7 mil at Data Matrix, QR Code
- Min. PCS value: 0.45
- Depth of field: at PCS 0.9, PDF417
- 50 - 215 mm / 1.97 - 8.46 in (res. 0.339 mm / 13 mil),
- 95 - 135 mm / 3.74 - 5.31 in (res. 0.127 / 6 mil)
- Field of view: horizontal: 47°, vertical: 37.5°

**Models**

| Options            | PHL-7112 | PHL-7114 | PHL-7214 | PHL-7254 |
|--------------------|----------|----------|----------|----------|
| W-Lan              | ◆        | ◆        | ◆        | ◆        |
| Bluetooth          | ◆        | ◆        | ◆        | ◆        |
| GSM/GPRS           | ◆        | ◆        | ◆        | ◆        |
| CF-II              | ◆        |          |          |          |
| 1D barcode scanner | ◆        | ◆        | ◆        | ◆        |
| 2D barcode scanner |          |          |          | ◆        |
| Alphanumeric       | ◆        | ◆        |          |          |
| Full keypad        |          |          | ◆        | ◆        |