

This ruggedized terminal is equipped with Windows CE™ operating system. Features are: 400Mhz Intel XScale CPU, 64 MB FlashROM, 128 MB SDRAM and full colour 3.5" LCD display. Opticon provides the terminal with a scanner for automatic identification and entry of codes. The options for identification are 1D, 2D or RF-ID reading. For data exchange W-LAN, GSM/GPRS, or Bluetooth can be integrated..

## Product Features

### Windows® CE 5.0 Operating System

User friendly Windows compatible environment

### High Capacity Battery

3000 mAh working power or more

### Wireless communication

WiFi(802.11b) + Bluetooth + GSM/GPRS options

### Integrated scanner

Standard barcode scanner or 2D scanner or optional RFID plug-in

### IP54 Certified

Dust protected / Splashed water proof

Cabled

**Wireless**

Stationary

OEM

**OPTICON**  
always scanning for new ID's

## Specifications

### PHL 7000 Ruggedized terminal

#### Electrical specifications

Main battery: Standard Li-Ion battery pack, 3.7V, 3000 mAh, Optional High Capacity Li-Ion battery pack 3.7V, 4000 mAh  
Backup battery: 1 integrated rechargeable backup battery  
Charging method: Built-in battery charger by power adapter (110~240V AC / 50/60Hz input, 5V DC / 2.6A output)

#### Identification

Supported barcode symbologies (1D): on 1D or 2D model: JAN/UPC/EAN incl. add on, Codabar/NW-7, Code 11, Code 39, Code 93, Code 128, IATA, Industrial 2of5, Interleaved 2of5, Korean Postal Authority code, Matrix 2of5, MSI/Plessey, RSS-14, RSS Limited, RSS Expanded, Telepen / on 1D model: Chinese post, Code 39 incl. Full ASCII, Italian Pharmaceutical, ISBN, UCC/EAN-128 / 2D model: UK/Plessey, S-Code, Composite Component (CC-A/B/C)  
Supported RF tags: with RF-ID plug in on W-LAN/Bluetooth model, inform about the options  
Supported 2D symbologies: on 2D model: Aztec Code, Aztec Runes, Data Matrix (ECC200/EC0-140), Maxi Code (mode 2-5), MicroPDF417, PDF417 QR code

#### Communication

Interface USB: client, optional host  
Interface W-LAN: 802.11b, WEP, WPA, PSK  
Interface Bluetooth: class II compliant, range 5-10 m, SPP, OBEX  
Interface GSM/GPRS: optionally built in module, tri-band 900/1800/1900  
Other interfaces: optional CF-II Slot

#### Functionality

Memory FlashROM: 64 MB  
Memory RAM: 128 MB SDRAM and optional SD-card memory  
Microprocessor: 400Mhz, Intel® PXA255 32 bits RISC CPU  
Real time clock: Quartz RTC, time and date programmable, leap year handling  
Display: 3.5" 240 X 320 Graphic Transflective TFT, 256K Color LCD with LED adjustable Backlight, 4-Wire Resistance Type Touch Panel  
Character fonts: min. 4 lines x 14 characters, max. 10 lines x 18 characters  
Indicators: Triple-color charging indication, Dual-color scanning indication  
Keyboard: Numeric keypad: 16-keys, Full keypad: 43-keys  
Input devices: Stylus or finger operation / built-in Scanner operation  
Programming: Pre-loaded Software: Windows® CE 5.0 Professional, .NET Compact Framework 2.0, IE 6.0, Inbox, Active Sync, upgradable via SD card

#### Environmental specifications

Temperature in operation: -10 to +50 °C / +14 - +122 F  
Temperature in storage: -20 - +70°C / -4 - +158 F  
Humidity in operation: 5 - 95 % (non condensing)  
Ambient white light immunity: 4,000 lx max  
Ambient fluorescent light immunity: 4,000 lx max  
Ambient direct sun light immunity: 80,000 lx max  
Shock drop test: 1.5 m / 5 ft drop onto concrete surface  
Protection (dust and moisture, IEC529): IP 54

#### Physical specifications

Dimensions: depending on model:  
H - numeric model: 192.5 / 7.58 inches,  
H - full key model: 219.5 mm / 8.64 inches,  
W: 91.3/78 mm / 3.59/3.07 inches,  
D - 1D model: 60.6/42.2 mm / 2.39/1.66 inches,  
D - 2D model: 64.6/42.2 mm / 2.54/1.66 inches  
Weight body: depending on model (Including standard battery):  
min. Ca. 600 g / 1 lb 5 oz ,  
max. Ca. 665 g / 1 lb 7 oz  
Connector LIF: supports RS232, USB 1.1 Client, USB 1.1 Host, DC-IN and 100mA 5V DC out

#### Regulatory

Laser safety class: JIS-C-6802 Class 1, IEC 60825-1 Class 1, FDA CDRH Class I  
Product compliance: CE, FCC, cUL, RoHS

#### Enclosed items

Cable: USB client cable for terminal  
Power supply: AC Adapter 5V DC 2.6A, AC Power cord  
Main battery pack: Standard battery pack 3.7V DC 3000 mAh  
Strap: Handstrap  
Operating tool: Stylus  
Other: Ear microphone, CF support guide

#### Accessories

Sold separately  
Cable: RS232 serial cable for terminal, USB host cable for terminal  
Main battery optional: High-capacity Li-Ion Battery Pack 3.7V DC 4000mAh  
Charger: AC adapter for single dock/battery charging 5V DC 6.5 A, Car charging adapter  
Single cradle: Single dock IRU 7000, AC adapter for single dock/battery charging 5V DC 6.5 A  
Case: Holster  
Grip: Pistol  
Protection: LCD Protective Film

#### 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			■	■