



# PHL1300

pocket  
handheld terminal

*The PHL-1300 is a new member of Opticon PHL series laser hand-held terminals.*

*It is the smallest (132x55x33mm by dimensions and 170g\* by weight) among the family products, but with full features of 16 bit MPU, 8MB memory, and graphic LCD display.*

*The IRU-1300 is a communication and re-charging cradle for PHL-1300. It interfaces to a host PC with RS-232C or RS-485.*

## Features

- Pocket size and light weight
- 8 MB Memory available
- Rechargeable Lithium-Ion battery pack
- Serial data transmission by cradle
- Keypad with cellphone look and feel

## Benefits

- Easy to carry
- Enables continuous working
- Long life battery
- Easy data storage into the computer system
- Less instructions required



## IRU1300

communication and charging  
cradle for terminal

# SPECIFICATIONS PHL 1300 pocket handheld terminal

## Electrical specifications

Main battery	<input type="checkbox"/> Lithium-Ion rechargeable (Opticon item) <input type="checkbox"/> Alkaline AA-size batteries (optional user item)
Main battery operating time	<input type="checkbox"/> Li-Ion: When making every 5 seconds 1 scan with 1 sec laserbeam on and 0.2 sec. green LED on and 0.2 sec. buzzer on, operating time is: approx. 36 hours <input type="checkbox"/> Alkaline: When making every 5 seconds 1 scan with 1 sec laserbeam on and 0.2 sec. green LED on and 0.2 sec. buzzer on, operating time is: approx. 78 hours <input type="checkbox"/> Different operation conditions affect the operating time
Backup battery	Lithium CR2032
Backup battery operating time	3 weeks backup time
Battery management	<input type="checkbox"/> Low voltage indicated on the terminal display. <input type="checkbox"/> When battery is low the terminal switches off automatically.
Charging method	Recharging Lithium-Ion pack in terminal via cradle

## Optical specifications

Light source	650 nm visible laser diode
Scan rate	100 scans/sec
Decode rate	100 decodes/sec
Reading width	min. 40 mm.
Resolution at PCS 0,9	0.15 mm (6mil)
Min. PCS Values	0.45
Depth of field	70 - 380 mm (at PCS 0.9, res. 1.0 mm)

## Supported symbologies

Chinese Post 2of5  
Codabar incl. ABC and CX  
Code 39 - Code 93 - Code 128  
EAN-8 incl. +2,+5  
EAN-13 incl. +2,+5  
IATA - Industrial 2of5 - Interleaved 2of5  
Italian Pharmaceutical  
Laetus  
Matrix 2of5  
MSI/Plessey - UK/Plessey  
S-Code  
Telepen  
UPC-A incl. +2,+5 - UPC-E incl. +2,+5

## Functionality

Memory	<input type="checkbox"/> ROM: 32 kB <input type="checkbox"/> FlashROM:(O/S and program) 2 x 256 kB (total 512 kB) <input type="checkbox"/> fast RAM: 2 kB <input type="checkbox"/> RAM (data storage): 8 MB battery backed up D-RAM
Microprocessor	16-bit
Real time clock	Quartz RTC, time and date programmable, leap year handling, (accuracy $\pm$ 60 sec./month)
Display	<input type="checkbox"/> 96x64 Pixels graphic LCD with backlight <input type="checkbox"/> Character fonts: 5/10 lines x 16 characters
Keyboard	<input type="checkbox"/> 19 keys total (18 keys user definable) <input type="checkbox"/> Alpha/Numeric mode
Programming	Functionality is provided by user application. The application may be downloaded from PC via cradle.
Interfaces supported	<input type="checkbox"/> RS232 supported by cradle <input type="checkbox"/> IrDAsupported on terminal <input type="checkbox"/> RS485 supported by cradle
Transmission speed	Baudrate: 2400 - 15200 bps

## Environmental specifications

Temperature	<input type="checkbox"/> -10 - +40 °C in operation <input type="checkbox"/> -20 - +60 °C in storage
Humidity (non condensing)	<input type="checkbox"/> 20 - 80 % in operation <input type="checkbox"/> 20 - 90 % in storage
Shock: drop:	1.5 m drop onto concrete surface
Shock: vibration:	10 - 50 Hz with 1G for 30 min, cycle for X,Y,Z.
Ambient light rejection	<input type="checkbox"/> fluorescent 3.000 lux max. <input type="checkbox"/> direct sun 50.000 lux max.
Emission	According to EN50081, part 1
Immunity	According to EN50082, part 1
Safety, Laser class	According to IEC825, Class I laserproduct

## Physical specifications

Dimensions (l x w x d)	132 x 55 x 33 mm
Case material	ABS
Weight	body (incl. battery): ca. 170 g (depending on battery type)

# SPECIFICATIONS IRU 1300 charging and communication station

## Electrical specifications

Power supply	9V DC
Battery charging time	when battery in terminal: 8 hours charge

## Functionality

Interfaces supported	<input type="checkbox"/> RS232 <input type="checkbox"/> RS485
Serial communication	<input type="checkbox"/> RS232 Baudrate: 1200 - 115200 <input type="checkbox"/> RS485 Baudrate: 1200 - 115200
Transmission modes	<input type="checkbox"/> Half duplex RS232 <input type="checkbox"/> Half duplex RS485
Parity	Odd, Even, None

## Environmental specifications

Temperature	<input type="checkbox"/> 0 - 40 °C in operation <input type="checkbox"/> -20 - 70 °C in storage
Humidity (non condensing)	<input type="checkbox"/> 30 - 85 % in operation <input type="checkbox"/> 30 - 90 % in storage
Shock: vibration:	10 - 50 Hz with 1G for 30 min, cycle for X,Y,Z.
Emission	According to EN50081, part 1
Immunity	According to EN50082, part 1

## Physical specifications

Dimensions (l x w x h)	134 x 78 x 75 mm
Case material	ABS
Standard connector	RS232 - D Sub 9P Female RS485 - 6 pins modular plug

Preliminary specifications are subject to change without notice. Printed 07-2002