



PHL1700

handheld laser terminal

The PHL1700 terminal is a programmable handheld terminal with a compact body, well suited for a variety of indoor portable applications. The PHL1700 is equipped with a built-in laserscanner that can scan all popular bar code labels at varying distances. The PHL1700 terminal can be programmed in C-language. The plain keyboard and the large graphic display enable the user to use the terminal in a clear and easy way.

Operating power is supplied by the main battery. A rechargeable battery pack, that can be charged in the cradle, or non-rechargeable penlite batteries can be used.

For communication the PHL1700 is provided with an IrDa interface. Through this interface the terminal is able to communicate with the cradle, or apart from the cradle to all computer devices that use IrDa communication, such as portable computers, notebooks and organizers. The program in the PHL1700 is also compatible with these devices. If the user wants to communicate with a computer system without using IrDa or the cradle, a communication cable between the terminal and the computer system can be obtained.

Features

Benefits

■ Small size and light weight	■ Easy to carry
■ Rechargeable Nickel Metalhydride battery pack	■ Long life batteries
■ Up to 2MB memory available	■ Enables continuous working
■ Backup battery with long backup time	■ Possibility to use the terminal for a long time without charging and without loss of data
■ RS232 data transmission by cradle	■ Easy data storage into the computer system
■ Built-in IrDa interface	■ Ideal to use together with portable computers, like note books.



IRU1600

cradle for terminal and rechargeable battery pack

PHL1700 handheld laser terminal

Electrical specifications

Main battery	Alkaline battery or Ni-MH rechargeable battery
Main battery operating time	☐ Alkaline battery: about 120 hours ☐ Ni-MH battery: about 60 hours (every ten seconds two times bar code reading with buzzer, good read led and LCD on)
Backup battery	Lithium (CR2032)
Backup battery operating time	4 months backup time
Battery management	Indicator with low battery, warning and compulsory off
Charging method	☐ Battery in terminal via cradle ☐ Replacement battery in cradle

Optical specifications

Light source	650 nm visible laser diode
Scan rate	100 scans/sec
Decode rate	100 decodes/sec
Spot velocity	20.000 mm/sec at 100 mm
Reading width	60 mm at 30 mm 98 mm at 100 mm
Resolution at PCS 0,9	0.127 mm (5mil)
Depth of field	0 - 160 mm (at PCS 0.9, density 0.25)

Supported symbologies

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
Laetus
Matrix 2of5
Italian Pharmaceutical
MSI/ Plessey
UK/ Plessey
S-Code
Telepen
UPC-A incl. +2,+5
UPC-E incl. +2,+5

Functionality

Memory	☐ 32 KByte ROM ☐ 256 Kbyte FlashROM ☐ 2 Kbyte fast RAM ☐ battery backed up RAM 1 or 2 Mbyte S-RAM
Microprocessor	16-bit
Real time clock	Quartz RTC, time and date programmable with leap year handling and separate battery
Display	☐ 96x48 dots graphic LCD with backlight ☐ characterfonts: min. 6 x 6 pixels, max. 16 x 16 pixels
Keyboard	☐ 8 function keys ☐ alpha mode
Trigger mode	manual
Configuration	main parameters can be set by setup program
Programming	user applications written in C may be downloaded via cable or com port.
Interfaces supported	☐ RS232 ☐ IrDa
Transmission speed	☐ RS232 Baudrate: 2400 - 38400 ☐ IrDa Baudrate: 2400 - 38400

Environmental specifications

Temperature	☐ 0 - 40 °C in operation ☐ -10 - 60 °C in storage
Humidity (non condensing)	☐ 20 - 80 % in operation ☐ 20 - 90 % in storage
Shock drop:	1.5 m drop onto concrete surface
vibration:	12 - 100 Hz with 2G for 3 hours
Ambient light rejection	☐ fluorescent 3.000 lux max. ☐ direct sun 50.000 lux max.
Emission	According to EN50081, part 1
Immunity	According to EN50082, part 1
Protection against dust and moisture	According to IEC529, IP 42
Safety, Laser class	According to IEC825, Class I laserproduct

Physical specifications

Dimensions (l x w x d)	172 x 62 x 44 mm
Case material	ABS
Weight	body : 180 g
Standard cable (optional)	RS232: DB9 female

IRU-1600 cradle

Electrical specifications

Battery charging time	complete recharge to full capacity: ☐ 4 hours in terminal ☐ 1 hour in spare battery slot
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Functionality

Interfaces supported	☐ RS232 ☐ RS485 ☐ optical
Serial communication	☐ RS232 Baudrate: 1200 - 38400 ☐ RS485 Baudrate: 1200 - 38400
Transmission modes	☐ Full duplex RS232 ☐ Half duplex RS485
Parity	Odd, Even, None

Environmental specifications

Temperature	☐ 0 - 40 °C in operation ☐ -20 - 70 °C in storage
Humidity (non condensing)	☐ 30 - 80 % in operation ☐ 30 - 90 % in storage
Shock: vibration:	12 - 100 Hz with 2G for 3 hours
Emission	According to EN50081, part 1
Immunity	According to EN50082, part 1

Physical specifications

Dimensions (l x w x d)	228 x 116 x 97 mm (desk top type) 228 x 116 x 102 mm (optional: wall mount type)
Case material	ABS
Weight	600 g
Standard connector	RS232 - D Sub 9P Female RS485 - 6 pins modular plug

Specifications are subject to change without notice. Printed 07-1999